Social Stratification in Southern Mesopotamia during the Third Dynasty of Ur (ca. 2100–2000 BCE)

HARVARD UNIVERSITY
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DISSERTATION ACCEPTANCE CERTIFICATE

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presented by **Andrew Richard Pottorf**,

candidate for the degree of Doctor of Philosophy, and hereby certify that it is worthy of acceptance.

Signature Piotr Steinkeller (Apr 25, 2022 21:06 GMT+2)

Typed name: Dr. Piotr Steinkeller (advisor)

Signature _____

Typed name: Dr. Gojko Barjamovic (advisor)

Signature _____

Typed name: Dr. Manuel Molina

Signature Jason Ur (Apr 25, 2022 17:34 EDT)

Typed name: Dr. Jason Ur

Date: April 18, 2022

SOCIAL STRATIFICATION IN SOUTHERN MESOPOTAMIA DURING THE THIRD DYNASTY OF UR (CA. 2100–2000 BCE)

A DISSERTATION PRESENTED

BY

ANDREW RICHARD POTTORF

TO

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ABSTRACT

This dissertation addresses social stratification during the last century of the third millennium BCE when the Third Dynasty of Ur governed southern Mesopotamia and its neighboring regions. With over a hundred thousand administrative texts uncovered from this time, known as the Ur III period, its socioeconomic history can be thoroughly analyzed, including its social stratification. Three strata are proposed in this dissertation: (1) citizens, (2) serflike UN-il$_2$, and (3) slaves. In order to identify and elaborate upon these strata, several features are presented: native terminology, origins, family lives, housing, legal rights, and economic conditions. There is also a history of scholarship focusing on works by Soviet scholars, such as V. V. Struve, A. I. Tyumenev, and I. M. Diakonoff, which are generally challenged in this review, as well as on contributions by Ignace Gelb, Kazuya Maekawa, Marcel Sigrist, Piotr Steinkeller, and Natalia Koslova, which are fundamental to this dissertation. The three strata differ particularly in regard to their legal rights and economic conditions. Citizens were the most prevalent and had the fullest extent of legal rights and economic autonomy, whereas slaves were the least prevalent and had the least extent of legal rights and economic autonomy. UN-il$_2$ were between these two strata, possessing some legal rights and limited economic autonomy. Occupations significantly impacted economic conditions, and they were unequally accessible to the three strata. Textual data are cited throughout, and prosopographical evidence is frequently utilized. Eight appendixes are included, which provide details about prosopography, family and house sizes, conscription, land tenure, and text collations, among other topics.

CONTENTS

To my parents and to Nora

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Thank you all!

FIGURES, GRAPHS, AND TABLES

Figures

Graphs

Tables

ABBREVIATIONS

Texts

AAICAB I/1–4	Jean-Pierre Grégoire, *Les sources*, vol. 1 of *Archives administratives et inscriptions cunéiformes: Ashmolean Museum, Bodleian Collection, Oxford: Contribution à l'histoire sociale, économique, politique et culturelle du Proche-Orient ancien*, 4 parts (Paris: Geuthner, 1996–2001).
AAS	Jean-Pierre Grégoire, *Archives administratives sumériennes* (Paris: Geuthner, 1970).
ABAA	Ernst F. Weidner, *Alter und Bedeutung der babylonischen Astronomie und Astrallehre: Nebst Studien über Fixsternhimmel und Kalender*, Im Kampfe um den Alten Orient: Wehr- und Streitschriften 4 (Leipzig: Hinrichs, 1914).
Aegyptus	*Aegyptus* (Milan: Vita e Pensiero).
AION	*Annali dell'Istituto Universitario Orientale di Napoli* (Naples: Università degli Studi di Napoli "L'orientale").
Akkadica	*Akkadica* (Brussels: Fondation assyriologique Georges Dossin).
Aleppo, Diss.	Maryse Touzalin, "L'administration palatiale à l'époque de la troisième dynastie d'Ur: Textes inédits du Musée d'Alep" (Ph.D. diss., University of Tours, 1982).
Amherst	Theophilus G. Pinches, *Texts of the Period extending to and Including the Reign of Bûr-Sin (about 2500 B.C.)*, part 1 of *The Amherst Tablets, being an Account of the Babylonian Inscriptions in the Collection of the Right Hon. Lord Amherst of Hackney, F.S.A. at Didlington Hall, Norfolk* (London: Quaritch, 1908).
AnOr 1	Nikolaus Schneider, *Die Drehem- und Djoḫa- Urkunden der Strassburger Universitäts- und Landesbibliothek*, Analecta Orientalia 1 (Rome: Pontifical Biblical Institute, 1931).
AnOr 7	Nikolaus Schneider, *Die Drehem- und Djoḫatexte im Kloster Montserrat (Barcelona)*: *In Autographie und mit systematischen Wörterverzeichnissen*, Analecta Orientalia 7 (Rome: Pontifical Biblical Institute, 1932).
AnOr 12	*Miscellanea Orientalia dedicata Antonio Deimel annos LXX complenti*, Analecta Orientalia 12 (Rome: Pontifical Biblical Institute, 1935).

AOAT 25	Edmond Sollberger, "Some Legal Documents of the Third Dynasty of Ur," in *Kramer Anniversary Volume: Cuneiform Studies in Honor of Samuel Noah Kramer*, eds. Barry L. Eichler, Jane W. Heimerdinger, and Åke W. Sjöberg Alter Orient und Altes Testament 25 (Kevelaer: Butzon & Bercker; Neukirchen-Vluyn: Neukirchener Verlag, 1976): 435–50.
AoF	*Altorientalische Forschungen* (Berlin: de Gruyter).
AOS 32	A. Leo Oppenheim, *Catalogue of the Cuneiform Tablets of the Wilberforce Eames Babylonian Collection in the New York Public Library: Tablets of the Time of the Third Dynasty of Ur*, American Oriental Series 32 (New Haven: American Oriental Society, 1948).
ARET 3	Alfonso Archi and Maria Giovanna Biga, *Testi amministrativi di vario contenuto: (Archivio L. 2769: TM.75.G3000-4101)*, Archivi Reali di Ebla: Testi 3 (Rome: Missione Archeologica Italiana in Siria, 1982).
ARRIM	*Annual Review of the Royal Inscriptions of Mesopotamia Project* (Toronto: RIM Project).
ASJ	*Acta Sumerologica* (Hiroshima: Middle Eastern Culture Center).
'Atiqot 4	S. Levy and P. Artzi, *Sumerian and Akkadian Documents from Public and Private Collections in Israel*, 'Atiqot: English Series 4 (Jerusalem: Jerusalem Academic Press, 1965).
AUCT 1	Marcel Sigrist, *Neo-Sumerian Account Texts in the Horn Archaeological Museum*, Andrews University Cuneiform Texts 1 (Berrien Springs: MI: Andrews University Press, 1984).
AUCT 3	Marcel Sigrist, *Neo-Sumerian Account Texts in the Horn Archaeological Museum*, seal impressions by Carney E. S. Gavin, Diana Stein, D., and Constance Menard, Andrews University Cuneiform Texts 3, Institute of Archaeology Publications: Assyriological Series 6 (Berrien Springs, MI: Andrews University Press, 1988).
BAOM	*Bulletin of the Ancient Orient Museum* (Tokyo: The Museum).
BBVO 11	Richard L. Zettler, *The Ur III Temple of Inanna at Nippur: The Operation and Organization of Urban Religious Institutions in Mesopotamia in the Late Third Millennium B.C.*, Berliner Beiträge zum Vorderen Orient 11 (Berlin: Reimer, 1992).
BCT 2	P. J. Watson, *Neo-Sumerian Texts from Umma and Other Sites*, vol. 2 of *Catalogue of Cuneiform Tablets in Birmingham City Museum* (Warminster: Aris & Phillips, 1993).
BE 1/2	H. V. Hilprecht, *Old Babylonian Inscriptions Chiefly from Nippur*, The Babylonian Expedition of the University of Pennsylvania 1/2 (Philadelphia: MacCalla, 1896).
BE 3/1	David W. Myhrman, *Sumerian Administrative Documents Dated in the Reigns of the Kings of the Second Dynasty of Ur from the Temple Archives of Nippur*, The Babylonian Expedition of the University of Pennsylvania

	3/1 (Philadelphia: Department of Archaeology, University of Pennsylvania, 1910).
Berens	Theophilus G. Pinches, *The Babylonian Tablets of the Berens Collection*, Asiatic Society Monographs 16 (London: Royal Asiatic Society, 1915).
BIN 3	Clarence Elwood Keiser, *Neo-Sumerian Account Texts from Drehem*, Babylonian Inscriptions in the Collection of James B. Nies 3 (New Haven: Yale University Press, 1971).
BIN 5	George Gottlob Hackman, *Temple Documents of the Third Dynasty of Ur from Umma*, Babylonian Inscriptions in the Collection of James B. Nies 5 (New Haven: Yale University Press, 1937).
BIN 8	George Gottlob Hackman, *Sumerian and Akkadian Administrative Texts from Predynastic Times to the End of the Akkad Dynasty*, Babylonian Inscriptions in the Collection of James B. Nies 8 (New Haven: Yale University Press, 1958).
BJRL	*Bulletin of the John Rylands University Library* (Manchester: John Rylands University Library of Manchester).
BPOA 1	Tohru Ozaki and Marcel Sigrist, *Ur III Administrative Tablets from the British Museum*, part 1, Biblioteca del Próximo Oriente Antiguo 1 (Madrid: Consejo Superior de Investigaciones Científicas, 2006).
BPOA 2	Tohru Ozaki and Marcel Sigrist with the collaboration of Lorenzo Verderame, *Ur III Administrative Tablets from the British Museum*, part 2, Biblioteca del Próximo Oriente Antiguo 2 (Madrid: Consejo Superior de Investigaciones Científicas, 2006).
BPOA 6	Marcel Sigrist and Tohru Ozaki, *Neo-Sumerian Administrative Tablets from the Yale Babylonian Collection*, part 1, Biblioteca del Próximo Oriente Antiguo 7 (Madrid: Consejo Superior de Investigaciones Científicas, 2009).
BPOA 7	Marcel Sigrist and Tohru Ozaki, *Neo-Sumerian Administrative Tablets from the Yale Babylonian Collection*, part 2, Biblioteca del Próximo Oriente Antiguo 7 (Madrid: Consejo Superior de Investigaciones Científicas, 2009).
BRM 3	Clarence E. Keiser, *Cuneiform Bullae of the Third Millennium B.C.*, Babylonian Records in the Library of J. Pierpont Morgan 3 (New Haven: Yale University Press, 1914).
Cat RSM	Stephanie Dalley, *A Catalogue of the Akkadian Cuneiform Tablets in the Collection of the Royal Scottish Museum, Edinburgh, with Copies of the Texts*, The Royal Scottish Museum Information Series, Art & Archaeology 2 (Edinburgh: Royal Scottish Museum, 1979).
CDLB	*Cuneiform Digital Library Bulletin* (Berlin / Los Angeles / Oxford, Cuneiform Digital Library Initiative).
CDLI	Cuneiform Digital Library Initiative (http://cdli.ucla.edu).
CDLJ	*Cuneiform Digital Library Journal* (Berlin / Los Angeles / Oxford, Cuneiform Digital Library Initiative).

CDLN	*Cuneiform Digital Library Notes* (Berlin / Los Angeles / Oxford, Cuneiform Digital Library Initiative).
CHEU	G. Contenau, *Contribution à l'histoire économique d'Umma*, Bibliothèque de l'École des Hautes Études 219 (Paris: Champion, 1915).
CM 26	Tonia M. Sharlach, *Provincial Taxation and the Ur III State*, CM 26 (Leiden: Brill; Boston: Styx, 2004).
CRRAI 61	Ari Kh. Kamil, "Une nouvelle archive privée d'un marchand de l'époque d'Ur III," in *Text and Image: Proceedings of the 61e Rencontre Assyriologique Internationale, Geneva and Bern, 22–26 June 2015*, eds. Pascal Attinger, Antoine Cavigneaux, Catherine Mittermayer, and Mirko Novák, OBO.SA 40 (Leuven: Peeters, 2018), 207–23.
CST	Thomas Fish, *Catalogue of Sumerian Tablets in the John Rylands Library* (Manchester: Manchester University Press, 1932).
CT 1	L. W. King, *Cuneiform Texts from Babylonian Tablets, &c., in the British Museum*, part 1 (London: Harrison & Sons, 1896).
CT 3	L. W. King, *Cuneiform Texts from Babylonian Tablets, &c., in the British Museum*, part 3 (London: Harrison & Sons, 1898).
CT 5	L. W. King, *Cuneiform Texts from Babylonian Tablets, &c., in the British Museum*, part 5 (London: Harrison & Sons, 1898).
CT 7	L. W. King, *Cuneiform Texts from Babylonian Tablets, &c., in the British Museum*, part 7 (London: Harrison & Sons, 1899).
CT 9	L. W. King, *Cuneiform Texts from Babylonian Tablets, &c., in the British Museum*, part 9 (London: Harrison & Sons, 1900).
CT 10	L. W. King, *Cuneiform Texts from Babylonian Tablets, &c., in the British Museum*, part 9 (London: Harrison & Sons, 1900).
CT 19	R. Campbell Thompson, *Cuneiform Texts from Babylonian Tablets, &c., in the British Museum*, part 19 (London: Harrison & Sons, 1904).
CT 50	E. Sollberger, *Pre-Sargonic and Sargonic Economic Texts*, part 50 of *Cuneiform Texts from Babylonian Tablets in the British Museum* (London: Trustees of the British Museum, 1972).
CTNMC	Thorkild Jacobsen, *Cuneiform Texts in the National Museum Copenhagen: Chiefly of Economical Contents* (Leiden: Brill, 1939).
CTPSM	B. Perlov and Yu. Saveliev, *Administrative Texts from Tello from the Ur III Period*, vol. 1 of *Cuneiform Texts in the Collection of the Pushkin State Museum of Fine Arts*, ed. Natalia Koslova (Moscow: Paleograph Press, 2014).
CUSAS 3	David I. Owen, Rudolf H. Mayr, and Alexandra Kleinerman, *The Garšana Archives*, Cornell University Studies in Assyriology and Sumerology 3 (Bethesda, MD: CDL, 2007).

CUSAS 6	David I. Owen, ed., *Garšana Studies*, Cornell University Studies in Assyriology and Sumerology 6 (Bethesda, MD: CDL, 2011).
CUSAS 11	Giuseppe Visicato and Aage Westenholz, *Early Dynastic and Early Sargonic Tablets from Adab in the Cornell University Collections*, Cornell University Studies in Assyriology and Sumerology 11 (Bethesda, MD: CDL, 2010).
CUSAS 14	Salvatore F. Monaco, *Early Dynastic mu-iti Cereal Texts in the Cornell University Cuneiform Collections*, Cornell University Studies in Assyriology and Sumerology 14 (Bethesda, MD: CDL, 2011).
CUSAS 16	S. Garfinkle, H. Sauren, and M. Van De Mieroop, *Ur III Tablets from the Columbia University Library*. Cornell University Studies in Assyriology and Sumerology 16 (Bethesda, MD: CDL, 2010).
CUSAS 23	Vitali Bartash, *Miscellaneous Early Dynastic and Sargonic Texts in the Cornell University Collections*, Cornell University Studies in Assyriology and Sumerology 23 (Bethesda, MD: CDL, 2013).
CUSAS 26	Aage Westenholz, *A Third-Millennium Miscellany of Cuneiform Texts*, Cornell University Studies in Assyriology and Sumerology 26 (Bethesda, MD: CDL, 2014).
CUSAS 33	Palmiro Notizia and Giuseppe Visicato, *Early Dynastic and Early Sargonic Administrative Texts Mainly from the Umma Region*, Cornell University Studies in Assyriology and Sumerology 33 (Bethesda, MD: CDL, 2016).
CUSAS 35	Vitali Bartash, *Sumerian Administrative and Legal Documents* ca. *2900–2200 BC in the Schøyen Collection*, Cornell University Studies in Assyriology and Sumerology 35 (Bethesda, MD: CDL, 2017).
CUSAS 39	Jacob L. Dahl, *Ur III Texts in the Schøyen Collection*, Manuscripts in the Schøyen Collection: Cuneiform Texts 13, Cornell University Studies in Assyriology and Sumerology 39 (University Park: Eisenbrauns, 2020).
CUSAS 40/2	Marcel Sigrist and Tohru Ozaki, *Tablets from the Irisaĝrig Archive*, part 2, Cornell University Studies in Assyriology and Sumerology 40 (University Park: Eisenbrauns, 2019).
DAS	Bertrand Lafont, *Documents administratifs sumériens: Provenant du site de Tello et conservés au Musée du Louvre*, Mémoire 61 (Paris: Éditions Recherche sur les Civilisations, 1985).
DP	F.-M. Allotte de la Fuÿe, *Documents présargoniques*, 5 vols. (Paris: Leroux, 1908–1920).
FAOS 15/2	Gebhard Selz, *Altsumerische Verwaltungstexte aus Lagaš*, part 2 of *Altsumerische Wirtschaftsurkunden aus amerikanischen Sammlungen*, 2 sections, Freiburger Altorientalische Studien 15/2 (Stuttgart: Steiner, 1993).
Farmer's Instructions	Miguel Civil, *The Farmer's Instructions: A Sumerian Agricultural Manual*, AuOr - Supplementa 5 (Sabadell: Editorial AUSA, 1994).

From the 21st Century BC	Steven Garfinkle and Manuel Molina, eds., *From the 21st Century B.C. to the 21st Century A.D.: Proceedings of the International Conference on Sumerian Studies Held in Madrid, 22–24 July 2010*. Winona Lake, IN: Eisenbrauns, 2013.
Frühe Schrift	Hans J. Nissen, Peter Damerow, and Robert K. Englund, *Frühe Schrift und Techniken der Wirtschaftsverwaltung im alten Vorderen Orient: Informationsspeicherung und -verarbeitung vor 5000 Jahren* (Bad Salzdetfurth: Franzbecker, 1990).
HLC	George Aaron Barton, *The Haverford Library Collection of Cuneiform Texts or Documents from the Temple Archives of Telloh*, 3 vols. (Philadelphia: Winston, 1905–1914).
Hom. Remesal	Manuel Molina Martos, "Textos cuneiformes sumerios de la antigua ciudad de Irisaĝrig," in Ex Baetica Romam*: Homenaje a José Remesal Rodríguez*, eds. Víctor Revilla Calvo, Antonio Aguilera Martín, Lluís Pons Pujol, and Manel García Sánchez, Col·lecció Homenatges 58 (Barcelona: Edicions de la Universitat de Barcelona, 2020), 17–47.
HSS 3	Mary Inda Hussey, *Chiefly from the Reigns of Lugalanda and Urukagina of Lagash: Copied with Introduction and Index of Names of Persons*, part 1 of *Sumerian Tablets in the Harvard Semitic Museum*, Harvard Semitic Series 3 (Cambridge: Harvard University Press, 1912).
HSS 4	Mary Inda Hussey, *From the Time of the Dynasty of Ur: Copied with Synopsis of the Contents of the Tablets and Indexes*, part 2 of *Sumerian Tablets in the Harvard Semitic Museum*, Harvard Semitic Series 4 (Cambridge: Harvard University Press, 1915).
Iraq	*Iraq* (London: British Institute for the Study of Iraq).
ITT 2	Henri de Genouillac, *Textes de l'époque d'Agadé et de l'époque d'Ur (fouilles d'Ernest de Sarzec en 1894)*, vol. 2 of *Inventaire des tablettes de Tello conservées au Musée Impérial Ottoman* (Paris: Leroux, 1910).
ITT 3	Henri de Genouillac, *Textes de l'époque d'Ur*, vol. 3 of *Inventaire des tablettes de Tello conservées au Musée Impérial Ottoman* (Paris: Leroux, 1912).
ITT 4	Louis Delaporte, *Textes de l'époque d'Ur (fouilles d'Ernest de Sarzec en 1898 et 1990)*, vol. 4 of *Inventaire des tablettes de Tello conservées au Musée Impérial Ottoman* (Paris: Leroux, 1912).
ITT 5	Henri de Genouillac, *Époque présargonique, époque d'Agadé, époque d'Ur*, vol. 5 of *Inventaire des tablettes de Tello conservées au Musée Impérial Ottoman* (Paris: Leroux, 1921).
JCEUW	*Journal of the College of Education. University of Wasit* (Wasit; University of Wasit).
JCS	*Journal of Cuneiform Studies* (Chicago: The University of Chicago Press).

JCS SS 5	Benjamin Studevent-Hickman, *Sumerian Texts from Ancient Iraq: From Ur III to 9/11*, Journal of Cuneiform Studies Supplemental Series 5 (Atlanta: Lockwood Press, 2018).
JEOL	*Jaarbericht van het Vooraziatisch-Egyptisch Genootschap "Ex Oriente Lux"* (Leiden: Brill).
KAV	Otto Schroeder, *Keilschrifttexte aus Assur verschiedenen Inhalts: Autographiert, mit Inhaltsübersicht und Namenlisten versehen*, WVDOG 35 (Leipzig: Hinrichs, 1920).
KTI	Claus Wilcke, ed., *Keilschrifttexte aus Isin - Išān Baḥrīyāt: Ergebnisse der Ausgrabungen der Deutschen Forschungsgemeinschaft unter der Schirmherrschaft der Bayerischen Akademie der Wissenschaften*, copies by Dietz Otto Edzard, Christopher B. F. Walker, and Claus Wilcke, ABAW NF 143 (Munich: Bayerische Akademie der Wissenschaften, 2018).
Kyoto	Yomokuro Nakahara, *The Sumerian Tablets in the Imperial University of Kyoto*, Memoirs of the Research Department of the Toyo Bunko 3 (Tokyo: The Toyo Bunko, 1928).
LAOS 1	Hans Neumann, "Ur III-Texte," *Die Keilschrifttexte des Altorientalischen Instituts der Universität Leipzig*, ed. Michael P. Streck, Leipziger Altorientalische Studien 1 (Wiesbaden: Harrassowitz, 2011), 9–34.
LDAS 8	Manuel Molina, "Who watches the watchers?: New evidence on the role of foremen in the Ur III administration," in *Legal Documents in Ancient Societies: Accounts and Bookkeeping in the Ancient World*, ed. Andrea Jördens and Uri Yiftach, Legal Documents in Ancient Societies 8, Philippika - Altertumswissenschaftliche Abhandlungen 55/2 (Wiesbaden: Harrassowitz, 2020), 3–25.
LFBD	T. Fish, *Letters of the first Babylonian dynasty in the John Rylands library, Manchester: transliterated, translated or summarized, with indices of places, personal names, ideograms, an introduction and 18 plates of hand-copies* (Manchester, The Manchester University Press, 1936).
LH	Laws of Hammurabi in Martha Roth, *Law Collections from Mesopotamia and Asia Minor*, ed. Piotr Michalowski, 2nd ed., WAW 6 (Atlanta: Scholars Press, 1997).
Lippmann Coll	Manuel Molina with the collaboration of Maria Elena Milone and Ekaterina Markina, *Sargonic Cuneiform Tablets in the Real Academia de la Historia: The Carl L. Lippmann Collection*, Catálogo del Gabinete de Antigüedades. Antigüedades I.1.6 (Madrid: Real Academia de la Historia, 2014).
LL	Laws of Lipit-Ištar in Roth 1997.
LU	Laws of Ur-Namma in Roth 1997.
L'uomo	Giovanni Pettinato, *L'uomo cominciò a scrivere: Iscrizioni cuneiformi della Collezione Michail* (Milan: Electa, 1997).

Managing the Land, Diss.	Noemi Borrelli, "Managing the Land: Agricultural Administration in the Province of Ĝirsu/Lagaš During the Ur III Period" (PhD diss., Università degli Studi di Napoli "L'orientale," 2013).
MCS	*Manchester Cuneiform Studies* (Manchester: Fish and Donald).
Messenger Texts, Diss.	Robert C. McNeil, "The 'Messenger Texts' of the Third Ur Dynasty" (PhD diss., University of Pennsylvania, 1970).
MSL 12	M. Civil, ed., with the collaboration of R. D. Biggs, H. G. Güterbock, H. J. Nissen, and E. Reiner, *The Series lú* = ša *and Related Texts*, Materials for the Sumerian Lexicon 12 (Rome: Pontifical Biblical Institute, 1969).
MTBM	Marcel Sigrist, *Messenger Texts from the British Museum* (Potomac, MD: Capital Decisions, 1990).
MVN 1	G. Pettinato and H. Waetzoldt, *La collezione Schollmeyer*, Materiali per il Vocabolario Neosumerico 1 (Rome: Multigrafica Editrice, 1974).
MVN 3	David I. Owen, *The John Frederick Lewis Collection*, Materiali per il Vocabolario Neosumerico 3 (Rome: Multigrafica Editrice, 1975).
MVN 4	L. Cagni, *La collezione del Pontificio Istituto Biblico - Roma*; G. Pettinato. *La collezione della Collegiata dei SS. Pietro e Orso - Aosta*, Materiali per il Vocabolario Neosumerico 4 (Rome: Multigrafica Editrice, 1976).
MVN 5	Edmond Sollberger, ed., *The Pinches Manuscript*, Materiali per il Vocabolario Neosumerico 5 (Rome: Multigrafica Editrice, 1978).
MVN 6	G. Pettinato with the collaboration of H. Waetzoldt and F. Pomponio, *La. 7001-7600*, part 1 of *Testi economici di Lagaš del Museo di Istanbul*, Materiali per il Vocabolario Neosumerico 6 (Rome: Multigrafica Editrice, 1977).
MVN 7	G. Pettinato and S. A. Picchioni with the collaboration of H. Waetzoldt, *La. 7601-8200*, part 2 of *Testi economici di Lagaš del Museo di Istanbul*, Materiali per il Vocabolario Neosumerico 7 (Rome: Multigrafica Editrice, 1978).
MVN 8	D. Calvot, *Textes économiques du Ṣelluš-Dagan du Musée du Louvre et du Collège de France*; G. Pettinato, S. A. Picchioni, and F. Reschid with the collaboration of H. Waetzoldt, *Testi economici dell'Iraq Museum - Baghdad*, Materiali per il Vocabolario Neosumerico 8 (Rome: Multigrafica Editrice, 1979).
MVN 9	Daniel C. Snell, *The E. A. Hoffman Collection and Other American Collections*, Materiali per il Vocabolario Neosumerico 9 (Rome: Multigrafica Editrice, 1979).
MVN 10	J.-P. Grégoire, *Inscriptions et archives administratives cunéiformes*, part 1, Materiali per il Vocabolario Neosumerico 10 (Rome: Multigrafica Editrice, 1981).

MVN 11	David Owen, *Selected Ur III Texts from the Harward Semitic Museum*, Materiali per il Vocabolario Neosumerico 11 (Rome: Multigrafica Editrice, 1982).
MVN 12	Tohru Gomi, *Wirtschaftstexte der Ur III-Zeit aus dem British Museum*, Materiali per il Vocabolario Neosumerico 12 (Rome: Multigrafica Editrice, 1982).
MVN 13	Marcel Sigrist, David I. Owen and Gordon D. Young, *The John Frederick Lewis Collection*, part 2, Materiali per il Vocabolario Neosumerico 13 (Rome: Multigrafica Editrice, 1984).
MVN 14	Fatma Yıldız, Hartmut Waetzoldt, and Hubert Renner, eds., *Die Umma-Texte aus den Archäologischen Museen zu Istanbul: Nr. 1-600*, Materiali per il Vocabolario Neosumerico 14 (Rome: Multigrafica Editrice, 1988).
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OBTR	Robert Julius Lau, *Old Babylonian Temple Records*, Columbia University Oriental Studies 3 (New York: Columbia University Press, 1906).
OIP 121	Markus Hilgert with a contribution by Clemens D. Reichel, *Drehem Administrative Documents from the Reign of Amar-Suena*, vol. 2 of *Cuneiform Texts from the Ur III Period in the Oriental Institute*, Oriental Institute Publications 121 (Chicago: The Oriental Institute of the University of Chicago, 2003).
OLP	*Orientalia Lovaniensia Periodica* (Leuven: Instituut voor Oriëntalistiek).
OMRO	*Oudheidkundige Mededelingen nit het Rijksmuseum van Oudheden te Leiden* (Leiden: Rijksmuseum van Oudheden).
Ontario 1	Marcel Sigrist, *The Administration at Drehem*, vol. 1 of *Neo-Sumerian Texts from the Royal Ontario Museum* (Bethesda, MD: CDL, 1995).
Ontario 2	Marcel Sigrist, *Administrative Texts Mainly from Umma*, vol. 2 of *Neo-Sumerian Texts from the Royal Ontario Museum* (Bethesda, MD: CDL, 2004).

OrAnt	*Oriens Antiquus* (Rome: Centro per le antichità e la storia dell'arte del Vicino Oriente).
Orient	*Orient. Report of the Society of Near Eastern Studies in Japan* (Tokyo: The Society for Near Eastern Studies in Japan).
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OrNS	*Orientalia Nova Series* (Rome: Pontifical Biblical Institute).
OrSP	*Orientalia Series Prior* (Rome: Pontifical Biblical Institute).
OrSP 47-49	Nikolaus Schneider, *Die Geschäftsurkunden aus Drehem und Djoḫa in den Staatlichen Museen (VAT) zu Berlin in Autographie und mit systematischen Wörterindices*, Orientalia Series Prior 47–49 (Rome: Pontifical Biblical Institute, 1930).
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RA	*Revue d'Assyriologie et d'Archéologie Orientale* (Paris: Presses Universitaires de France).
RevSem	*Revue sémitique d'épigraphie et d'histoire Ancienne* (Paris: Leroux).
RIAA	Louis Speleers, *Recueil des inscriptions de l'Asie antérieure des Musées Royaux du Cinquantenaire à Bruxelles: Textes sumériens, babyloniens et assyriens* (Brussels: Vanderpoorten, 1925).
RIME 1	Douglas R. Frayne, *Presargonic Period (2700–2350 BC)*, The Royal Inscriptions of Mesopotamia: Early Periods 1 (Toronto: University of Toronto Press, 2008).
Rochester	Marcel Sigrist, M, *Documents from Tablet Collections in Rochester, New York*, (Bethesda, MD: CDL, 1991).
RSO	*Rivista degli Studi Orientali* (Rome: Istituti Editoriali e Poligrafici Internazionali).
RT	*Recueil de travaux relatifs à la philologie et à l'archéologie égyptienne et assyriennes* (Paris: Champion).
RTC	François Thureau-Dangin, *Recueil de tablettes chaldéennes* (Paris: Leroux, 1903).
SA	Charles-F. Jean, *Šumer et Akkad: Contribution à l'histoire de la civilisation dans la Basse-Mésopotamie* (Paris: Geuthner, 1923).
SAA 12	L. Kataja and R. Whiting, eds., *Grants, Decrees and Gifts of the Neo-Assyrian Period*, State Archives of Assyria 12 (Helsinki: Helsinki University Press, 1995).
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SNAT	Tohru Gomi and Susumu Sato, *Selected Neo-Sumerian Administrative Texts from the British Museum* (Abiko: Research Institute, Chuo-Gakuin University, 1990).
STA	Edward Chiera, *Selected Temple Accounts from Telloh, Yokha and Drehem: Cuneiform Tablets in the Library of Princeton University* (Philadelphia: University of Pennsylvania Press, 1922).
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STU	C. L. Bedale, *Sumerian Tablets from Umma in the John Rylands Library, Manchester* (Manchester: Manchester University Press 1915).
Studies Hallo	Mark E. Cohen, Daniel C. Snell, and David B. Weisberg, eds., *The Tablet and the Scroll: Near Eastern Studies in Honor of William W. Hallo* (Bethesda, MD: CDL, 1993).
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TJAMC	Emile Szlechter, *Tablettes juridiques et administratives de la III^{e} Dynastie d'Ur et de la I^{er} Dynastie de Babylone: Conservées au Musée de l'Université de Manchester et à Cambridge, au Musée Fitzwilliam, à l'Institut d'Etudes Orientales et à l'Institut d'Egyptologie*, 2 vols., Publications de l'Institut de droit romain de l'Université de Paris 21 (Paris: Recueil Sirey, 1963).
TMH 5	Alfred Pohl, *Vorsargonische und sargonische wirtschaftstexte: Autographiert und mit inventarverzeichnis und namenlisten versehen*, Texte und Materialien der Frau Professor Hilprecht Collection of Babylonian Antiquities im Eigentum der Universität Jena 5 (Leipzig: Hinrichs 1935).
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Trouvaille	H. de Genouillac, *La trouvaille de Dréhem: Étude avec un choix de textes de Constantinople et Bruxelles* (Paris: Geuthner, 1911).
TRU	Léon Legrain, *Le temps des rois d'Ur*, Bibliothèque de l'École des Hautes Études: Sciences historiques et philologiques 199 (Paris: Champion, 1912).
TSA	H. de Genouillac, *Tablettes sumériennes archaïques: Matériaux pour servir à l'histoire de la société sumérienne; publiés avec introduction, transcription, traduction et tables* (Paris: Geuthner, 1909).
TUT	George Reisner, *Tempelurkunden aus Telloh*, Mittheilungen aus den orientalischen Sammlungen 16 (Berlin: Spemann, 1901).
UCP 9/2	Henry Frederick Lutz, *Sumerian Temple Records of the Late Ur Dynasty*, 2 parts, University of California Publications in Semitic Philology 9/2 (Berkeley: University of California Press, 1928).
UDT	James B. *Nies, Ur Dynasty Tablets: Texts Chiefly from Tello and Drehem Written during the Reigns of Dungi, Bur-Sin, Gimil-Sin and Ibi-Sin* (Leipzig: Hinrichs'sche, 1920).
UET 3	Léon Legrain, *Business Documents of the Third Dynasty of Ur*, Ur Excavations Texts 3 (London: Harrison & Sons, 1937).
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Umma	G. Contenau, *Umma sous la dynastie d'Ur* (Paris: Geuthner, 1916).
UNT	Hartmut Waetzoldt, *Untersuchungen zur neusumerischen Textilindustrie*, Studi economici e tecnologici 1 (Rome: Centro per le antichità e la storia dell'arte del Vicino Oriente, 1972).
USP	Benjamin R. Foster, *Umma in the Sargonic Period*, Memoirs of the Connecticut Academy of Arts & Sciences 20 (Hamden, CT: Archon Books, 1982).

UTI 3	Fatma Yıldız and Tohru Gomi, *(Nr. 1601-2300)*, vol. 3 of *Die Umma-Texte aus den Archäologischen Museen zu Istanbul / İstanbul Arkeoloji Müzelerinde bulunan Umma metinleri* (Bethesda, MD: CDL, 1993).
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VDI	*Vestnik drevney istorii [Journal of Ancient History]* (Moscow: Russian Academy of Sciences).
VS 14	Wilhelm Förtsch, *Altbabylonische Wirtschaftstexte aus der Zeit Lugalunda's und Urukagina's*, Vorderasiatische Schriftdenkmäler der Königlichen Museen zu Berlin 14 (Leipzig: Hinrichs, 1916).
VS 25	Joachim Marzahn, *Altsumerische Verwaltungstexte aus Girsu/Lagaš*, Vorderasiatische Schriftdenkmäler der Königlichen Museen zu Berlin 25 (NF 9) (Berlin: Akademie, 1991).
WMAH	Herbert Sauren, *Umschrift und Übersetzung, Indizes*, vol. 1 of *Wirtschaftsurkunden aus der Zeit der III. Dynastie von Ur im Besitz des Musée d'Art et d'Histoire in Genf*, Pubblicazioni del Seminario di Semitistica: Ricerche 6 (Naples: Istituto Orientale di Napoli, 1969).
WO	*Die Welt des Orients* (Göttingen: Vandenhoeck & Ruprecht).
YOS 4	Clarence Elwood Keiser, *Selected Temple Documents of the Ur Dynasty*, Yale Oriental Series 4 (New Haven: Yale University Press, 1919).
YOS 15	A. Goetze, *Cuneiform Texts from Various Collections*, ed. Benjamin R. Foster, Yale Oriental Series 15 (New Haven: Yale University Press, 2009).
ZA	*Zeitschrift für Assyriologie und vorderasiatische Archäologie* (Berlin: de Gruyter).
Zinbun	*Zinbun* (Kyoto: Institute for Research in the Humanities).

Abbreviations used for publications not listed above follow those given by the CDLI (https://cdli.ox.ac.uk/wiki/doku.php?id=abbreviations_for_assyriology) and *The SBL Handbook of Style* (2nd ed.).

Miscellaneous Selection

DN	divine name
GN	geographic name
PIN	personal identification number
PN	personal name
Š	Šulgi
AS	Amar-Suen
ŠS	Šū-Suen
IS	Ibbi-Suen
coll.	collated
le. ed.	left edge
lit.	literally
lo. ed.	lower edge
obv.	obverse
env.	envelope
rev.	reverse
trans.	translation
translit.	transliteration
X_c	$X_{curviform}$ (X = AŠ, ½, etc.)
----------	(blank line)
==========	(blank space)
{ }	(in-text comment)
---	(indentation)
/	(indicates a continuous line [only used in Appendix 8])
|	(separates alternatives)
\	(separates multiple lines presented continuously)
[ ]	(sign that is damaged completely)
⌜ ⌝	(sign that is damaged partially)
< >	(sign that is omitted)
x	(sign that is unreadable)
#	(specific number in context)
~	(approximate number)

CHAPTER 1. INTRODUCTION

1.1. Thesis

The Third Dynasty of Ur (Ur III period hereafter) is one of the most abundantly documented centuries in ancient history (ca. 2100–2000 BCE). Well over a hundred thousand cuneiform texts illuminate the highly organized administration of the Ur III state and the socioeconomic conditions of its society in mainly southern Mesopotamia. Many of these texts preserve significant data on a personal level, whereas others are concerned with entire cities and their environs. While reconstructing the socioeconomic history of the Ur III period is a perennially daunting and exhaustive task, this dissertation has the benefit of roughly a century of scholarship and digitized text databases that enable complex and comprehensive searches. The fundamental goal of this dissertation is to identify and analyze social stratification during the Ur III period. The sociologist John Scott (2013, 29) describes social stratification as:

> a particular form of social division [that] refers to the idea that individuals are distributed among the levels or layers of a social hierarchy because of their economic relations. These layers or 'social strata' are real social groupings, forged together through both their economic relations and their associated social relations and interactions; they are groups that are able to reproduce themselves over time.

As such, three strata are proposed: (1) citizens, (2) serflike UN-il$_2$, and (3) slaves. Most of the society were citizens, whereas UN-il$_2$ and slaves comprised larger and smaller minorities of the society, respectively. These strata differed with respect to their legal rights and economic autonomy, among other features. Citizens had the fullest extent of legal rights and the most economic autonomy as opposed to slaves, who had the fewest legal rights and generally lacked

economic autonomy. UN-il$_2$ were between these two opposites, having some legal rights and limited economic autonomy. There were likewise broad trends of economic inequality across the strata and within them. In order to demonstrate the existence of these strata and their concomitant inequalities, a variety of features are explored: native terminology, origins, family lives, housing, legal rights, and economic conditions.

1.2. Chapter and Appendix Overviews

There are seven chapters and eight appendixes in this dissertation, including this introduction, which does not require an overview. Before discussing each chapter, it is important to mention that an Excel dataset has been developed for prosopographical analyses. This dataset organizes over 700 texts from mainly Umma, though texts from a wide variety of proveniences are included. Individuals are tabulated according to personal information mainly regarding their names, genders, families, social strata, and employment details, such as their age-bracket designations and other notations, occupations, and incomes. There are over 18,000 disambiguated names, which are considered to be about 14,000 or fewer possible individuals. Further details about this dataset will be provided in a future study.[1]

Chapter 2 reviews the history of scholarship on social stratification in the Ur III period. The contributions of Soviet scholars are given substantial attention due to their influences on the field as well as the difficult accessibilities of several of their works. While many of the arguments proposed by these scholars are challenged here, they nevertheless generated decades of debate and revision on fundamental socioeconomic issues. The "Gelb-Diakonoff

1. For similar prosopographical projects, see Kulikov, Anderson, and Veldhuis 2021; Stępień 1996.

Controversy" was particularly significant, and the issues of this debate are fundamental to the approach here. Important studies on citizens and UN-il$_2$ by Kazuya Maekawa, Marcel Sigrist, Piotr Steinkeller, and Natalia Koslova, among others, are highlighted as well.

Chapter 3 deals with the nature of social stratification during the Ur III period as well as the native terminology and origins of the three social strata. The patrimonial household model is utilized for understanding the vertical relationships between individuals of the same stratum or across the strata, but it does not necessitate the absence of strata. In this chapter the use of specific stratification terms like "caste," "class," or "estate," among others, is rejected. The ambiguity of terms for servants and slaves is also addressed, especially since they have been vital to vastly different interpretations. In terms of the origins of the social strata, it is noted that an individual's social stratum was the same as his or her mother's at birth.

Chapter 4 includes family life, housing, and legal rights. Individuals of all the social strata used the same familial terms and could maintain these relationships, though slaves were generally separated from some, if not all, of their family members. In terms of housing, the privately owned houses of citizens are assessed with regard to their layouts, sizes, and distributions. The housing of UN-il$_2$ and slaves, however, is more complicated, though they were probably housed by those with authority over them. Given the data on family life and housing, an estimate of the intramural population of Ur is presented. The discussion on legal rights focuses on mobility and salability. Individuals from across the strata generally lacked mobility, though citizens were more mobile than UN-il$_2$ and slaves. Whereas citizens and slaves could be sold, depending on context, UN-il$_2$ may not have been salable.

Chapter 5, which addresses economic conditions, is the longest chapter by far. The broad subdivisions of this chapter concentrate on occupations, employment arrangements, and

sustenance. The discussion on occupations establishes broad categories according to a sectoral-structural approach for comparing occupations and explores the main factors that determine an individuals' occupation. Employment arrangements are classified as conscription, hired work, and self-employment, and their respective incomes are allotments, wages, and profits. These various forms of income are combined, where applicable, to determine how various kinds of families sustained themselves.

Chapters 6 and 7 are the briefest. Chapter 6 discusses the Ur III period in its broader historical context, including the Early Dynastic, Sargonic, and Old Babylonian periods. Land-tenure conditions, especially in southern Babylonia, as well as social stratification during these periods are addressed. Chapter 7 presents the conclusions, focusing on an overview of social stratification during the Ur III period and a reflection on topics for further study. The overview of social stratification focuses on one stratum at a time according to the various features given throughout this dissertation. It also highlights common features across the strata in order to clarify broad patterns. The reflection on topics for further study is structured similarly to this section on chapter overviews.

The eight appendixes present many of the textual data utilized throughout this dissertation. Appendix 1 tabulates multiply attested male citizens in Umma that demonstrate several significant phenomena. Appendix 2 identifies the social strata of donated male individuals in Umma. In Appendix 3, the number of sons conscripted with their male citizen and UN-il$_2$ fathers who were generally old enough to have children in Umma inspections and similar texts are counted. Appendix 4 documents virtually all known house sizes according to location in Ur III texts. Appendix 5 offers the counts of male citizens and UN-il$_2$ notated as half-time with ½$_c$ or full-time with AŠ$_c$ according to occupation in Umma. As for Appendix 6, the allotments of

barley or šuku land as well as of garments or wool corresponding to age-bracket designations for male citizens and UN-il$_2$ in Umma are recorded. In Appendix 7, the šuku-land and apin-la$_2$-land sizes for male citizens and UN-il$_2$ in Umma, including according to occupation, are given. Appendix 8 gathers all collations referenced throughout this dissertation.

1.3. Overview of the Ur III Period

Before discussing the Ur III state, it is necessary to establish the context in which it emerged. During the third millennium, southern Mesopotamia, which can also be referred to as Babylonia, was essentially divided into northern (Akkad) and southern (Sumer) regions based on mainly environmental and political distinctions. Toward the beginning of the millennium, northern Babylonia was inhabited predominantly by Akkadians speakers, and the region was under the centralized control of Kish and then Akkade throughout much of the third millennium. Southern Babylonia was composed of several Sumerian city-states, which had border conflicts with one another but otherwise maintained stable boundaries. They often opposed attempts from northern Babylonia to dominate the entire region, though they were largely under the control of the Sargonic dynasty of Akkade. In terms of the environment, the arable land of northern Babylonia was relatively stable from year to year. This permitted the division of the arable land into plots that could be owned by mainly extended families and royal households. In southern Babylonia, however, the arable land frequently fluctuated in response to changes in the Tigris and Euprhates rivers, so plots could not be fixed from one year to the next. Instead, the arable land of each city-state notionally belonged to their deities, which were managed by their temple households. Accordingly, arable land was partitioned into three kinds: (1) land used to directly support temple households and their dependents, known as gan$_2$ gu$_4$ during the Ur III period, (2) land

that was allotted to mainly nuclear families as compensation for conscription, known as gan$_2$ šuku, and (3) land that was rented by those with sufficient means, known mainly as gan$_2$ apin-la$_2$ (see Borrelli 2013, 21–30). Although political control of this region and its subdivisions changed over the millennium, these environmental features remained significant throughout (Steinkeller 1993; 1999b; 2013b).

The Ur III state emerged shortly before the last century of the third millennium in southern Babylonia.[2] Many details of its origins are unknown, though the founder, Ur-Namma, united much of Babylonia, particularly the south, under the control of his dynasty originating from the city of Ur. Šulgi, his son and successor, continued the process of unifying Babylonia and extending its reach, especially northwards and eastwards. Much of the expansion of the Ur III state was to secure trade routes, especially in the Gulf and toward the Iranian Plateau (see Steinkeller 2013e; 2014). Šulgi's role in shaping the Ur III state was fundamental, as he was responsible for broad-sweeping efforts to centralize and standardize the administration of Babylonia. In order to maintain control over southern Babylonia, where arable land was considered to belong to the various city gods, Šulgi deified himself, as Narām-Suen did in the Sargonic period (see Steinkeller 2017b, 107–64). During Šulgi's reign, the Ur III state consisted of a core of provinces across Babylonia and a periphery stretching alongs its northern and eastern regions. Beyond this periphery there were several client states along the northern Tigris as well as across the Zagros mountains. Whereas the provinces were obligated to make bala contributions (see Sharlach 2004), settlements in the periphery were obligated to provide livestock and various goods, known as the gun$_2$ ma-da ("'tax of the provinces'" in Steinkeller

2. For discussions on the history of the Ur III period, see Sallaberger 1999; Steinkeller 1991.

1991, 25). Amar-Suen and then Šū-Suen ruled the Ur III state for about nine years each.[3] Although both rulers had successes in their campaigns in the Iranian Plateau, Šū-Suen had to focus on the defenses of the core of the Ur III state. Šū-Suen's successor, Ibbi-Suen, was the final ruler of the Ur III state, which fell into decline as control over trade routes through the Zagros were lost, and then it collapsed at the end of his reign from attacks by Amorites as well as Elamites under Šimaskian control (see Steinkeller 2007b).

It is important to address the archaeological and textual evidence regarding the Ur III period. There are several challenges to integrating archaeological evidence with textual evidence, especially due to limited excavation at some sites and wide-spread looting (see Molina 2020b). The locations of some ancient sites are also uncertain, such as GARšana and Urusagrig.[4] While there were numerous excavation campaigns at Girsu, many of them were over a century ago (see Borrelli 2013, 14–16). Although only 3 to 5 percent or so of Nippur is excavated, Richard Zettler (1992, 20) remarks:

> In summary, the excavated remains of Ur III Nippur are substantial, and would appear to provide a representative cross-section of the city, e.g., major religious institutions, state organizations, and private houses, as well as substantial numbers of written documents with archaeological contexts.

Unfortunately, many of the administrative texts that would have been useful for this dissertation are fragmentary. As for Umma, whose textual record is relied upon the most here, its archaeological evidence is limited and jeopardized by looting (see Ur 2014). Despite these issues, the textual data are extraordinarily abundant and precise. As such, arguments asserted in

3. The relationships of the Ur III rulers following Šulgi are disputed (see, for example, Dahl 2007; Michalowski 2013; Sallaberger 1999, 167–68), and it is not necessary to clarify these relationships here.

4. For the possible location of GARšana, see Steinkeller 2011. Recent studies on Urusagrig's location are given in Molina 2013; Viano 2019. Maurizio Viano suggests Tell al-Wilayaḫ is Urusagrig's location based partly on its proximity to Keš, located at Tūlūl al-Baqarat according to an earlier study of his (see Viano 2016). He (2019: 36 n. 4) notes, however, that Urusagrig may not have been adjacent to Keš, citing Steinkeller 2015c, 285 n. 34.

this dissertation rely mostly on textual evidence, though archaeological evidence from the Ur III and adjacent periods are utilized in some instances. Note that the provenience of every text is stated unless it can be assumed from the context or its publication.

Manuel Molina (2008b) offers a helpful summary of the textual evidence in terms of the number of texts, which he estimates to be around 120,000, as well as their proveniences and dates, among other details.[5] A little more than two-thirds of the texts originate from mainly Umma and its environs, including GARšana, and Girsu/Lagaš.[6] The next most documented locations include Puzriš-Dagān, Ur, Nippur, and Urusagrig, in descending order. Unfortunately, since most of these texts have been looted, precise details about their proveniences are not known. These texts span most of the Ur III period, but the first roughly forty years and last approximately fifteen years are less attested. While texts from all these locations and others are included in this dissertation, texts from Umma are typically utilized as exemplars of southern Babylonia, given their predominance and the extent to which prosopographical analysis has been conducted (see Appendix 1 for further details). Texts from Urusagrig are likewise treated as exemplars of northern Babylonia. In his discussion of the main genres of administrative and legal texts, Walther Sallaberger (1999, 211–12) offers the following introductory considerations:

> Im folgenden werden die wichtigsten Urkundengattungen vorgestellt. Der erste Abschnitt über Verwaltungsurkunden ist eher allgemein gehalten, da diese eingehender im 3. Teil besprochen werden. Daran lassen sich Tafelkorbetiketten und Briefe anschließen. Als Zeugnisse für Rechtsurkunden werden Darlehen und Kaufurkunden besprochen; andere, ganz seltene Formen wie privatrechtliche Vereinbarungen, Schenkungen, Pacht, Werkverträge oder Miete werden jedoch nicht behandelt. Abschließend wird auf die Gattung der Gerichtsprotokolle hingewiesen.
>
> …
>
> Traditionell unterscheidet man zwischen Rechts- und Verwaltungsurkunden. Rechtsurkunden zeichnen sich äußerlich durch eine Liste von Zeugen aus, die den in der

5. For a recent update, see http://bdtns.filol.csic.es/index.php?p=about&anc=project#project.

6. Although texts from Girsu/Lagaš originated from Girsu specifically, they are considered to be broadly representative of the Girsu/Lagaš province in this dissertation (see Zettler 1992, 2–3 n. 5).

> Urkunde festgehaltenen (neuen) Rechtszustand (Darlehen, bezahlter Kaufpreis, Familienrechtliches) bezeugen und in einem möglichen Prozeß aussagen können.
>
> Verwaltungsurkunden dagegen halten die Vorgänge innerhalb einer meist wirtschaftlichen institutionellen Einheit fest. Sie können damit jedoch genauso wie Rechtsurkunden der Dokumentation von Verpflichtungen, die der einzelne Beamte übernimmt oder weitergibt, dienen. Darüber hinaus ermöglichen sie eine Bilanzierung und Kontrolle der Verwaltungseinheit und damit die Möglichkeit für weitere Planungen.

While Sallaberger also comments that distinguishing between administrative and legal texts can be subjective, his distinctions are maintained here. Several key genres that are referred to throughout this dissertation, such as allotment reports, balanced accounts, expense reports, inspections, sealed receipts, surveys, and work rosters, are detailed just below.

1.4. Key Genres

1.4.1. Allotment Reports

Allotment reports have colophons that feature the allotments of staple items, such as barley (še-ba), garments and wool (tug$_2$|siki-ba), as well as oil (i$_3$-ba), among others (see Gelb 1965). The first line of these texts may specify details about what is allotted and how it is measured, whereas following lines tend to use abbreviated formatting (see Table 5.1). Individuals are often named and otherwise identified with patronymics or matronymics as well as occupations. The colophons often include totals and details about the authorization or funding of these allotments. These texts may overlap in content with inspections, as is clearly seen in the Girsu/Lagaš text *WMAH* 176 rev. vii 9'–11': gurum$_2$ ak še-ba \ geme$_2$ kinkin$_2$-ne \ Ur-^{d}Lamma i$_3$-dab$_5$, which may be described as an inspection of a barley-allotment report.

1.4.2. Balanced Accounts

The Sumerian term for balanced accounts is read as nig$_2$-kas$_7$-aka according to the BDTNS and nig$_2$-ka$_9$-ak according to the CDLI. A small subset of these texts are considered to be merchant accounts, which demonstrate how merchants managed the accumulation and dissemination of various goods on behalf of the state as well as their personal profits (see, for example, Snell 1982; Steinkeller 2004, 97–109). The most important balanced accounts for this dissertation document the amount of work performed, sometimes including named conscripted individuals. These individuals are often notated according to their work rates, which are linked to their social strata and are vital to understanding their conscription rates (see pp. 201–16). Overall, balanced accounts include capital (often summarized as sag-nig$_2$-gur$_{11}$-ra-kam ["it is the capital of the property"]), expenditures (often bookended by the phrases ša$_3$-bi-ta ["out of it"] and zi-ga-am$_3$ ["it is expended"]), balances, which can be either deficits (la$_2$-i$_3$) or surpluses (diri), and colophons (see, for example, Molina 2016).

1.4.3. Expense Reports

Expense reports have colophons that document expenses, described typically as ba-zi ("it was expended") or zi-ga ("expended|expenditure"). Expense reports can be attributed to the king (zi-ga lugal), indicating that they belong to the royal economy (see 3.2.1.4. Royal Citizens vs. Institutional Citizens). Expense reports tend to be brief and can be formatted as sealed receipts, as seen in the Umma texts *AAICAB* I/2 Ashm. 1935-523 rev. 11–12: zi-ga ma$_2$-gur$_8$ ensi$_2$ \ kišib Lu$_2$-sa$_6$-i$_3$-zu and *AAICAB* I/4 Bod. S 542 obv. 1 (CDLI), 2–rev. 1: ½ Ur-^{d}Ištaran sipa \ agar$_4$-nigin$_2$ a-ša$_3$ amar-^{giš}kiši$_{17}$-še$_3$ \ iti še-KIN-ku$_5$-ta \ ba-zi \ kišib Lugal-ku$_3$-zu, which are sealed receipts of expense reports.

1.4.4. Inspections

The Sumerian term for inspections is gurum$_2$ ak.[7] Molina (2020c, 4) distinguishes between two kinds of inspections, as follows:

> a) those apparently made on the ground, carried out to have control over the works and the workforce employed in them; b) those made on workers in service in certain sectors of the provincial economy, establishments or households, which also provided detailed information about the condition of the workers.

The second kind are significant for this dissertation, since they include a variety of details about individual conscripts, such as their age-brackets (see pp. 180–86), familial relationships, social strata, allotments, and occupations, among other details (see 5.2.1.4 Miscellaneous Employment Terminology). Toward the end of these texts, or at the end of major sections of them, the conscripts are counted in totals sections. These totals sections generally differentiate individuals according to their social stratum, age-bracket designations, and allotments, among other details pertaining to their conscription. If a text does not include the term gurum$_2$ ak, but it is otherwise structured like this second kind of inspections, as is the case for the Girsu/Lagaš text *Amherst* 64, it is still considered to be an inspection or at least related to inspections.

1.4.5. Sealed Receipts

The Sumerian term for sealed receipts is kišib in the BDTNS and kišib$_3$ in the CDLI. These are brief texts that document the receipt of tangible goods or intangible work. The latter are often cited here because they use the same work-rate notations used in balanced accounts mentioned just above. Sealed receipts were often compiled in balanced accounts (see Steinkeller 2003). Other genres can be formatted as sealed receipts, as is indicated for expense reports. As is the

7. Lexical details are given in Neumann 1993, 62 n. 289.

case for inspections, if a text is structured like a sealed receipt but lacks the term kišib, it is still considered to be a sealed receipt or at least related to sealed receipts.

1.4.6. Surveys

Surveys provide a variety of details about the use of space in a given area, especially with regard to arable land and housing. Some scholars distinguish between cadasters and surveys on the basis of their contents (see, for example, Borrelli 2013, 35–43), but for simplicity's sake in this dissertation, these texts are all regarded as surveys. Field surveys significant here include details about the locations, sizes, and yields of šuku and apin-la$_2$ lands parceled to various individuals. House surveys list house sizes according to their owners, and they may note the neighborhood or region in which the houses are located. The order of the houses surveyed probably corresponds to their spatial distribution, such that houses in immediate sequences were probably adjacent. They may also indicate house sizes when they were purchased (sa$_{10}$-a) versus when they were surveyed (nig$_2$-gal$_2$-la). When tablets have etchings of field or house plots, which often include labels and other details, they are considered to be plans (see Borrelli 2013, 43–48). If a house plan includes details about its interior structures, then it is a floor plan.

1.4.7. Work Rosters

There is no Sumerian term for work rosters, and scholars refer to them, if at all, by a variety of terms. Work rosters list individuals by name and provide details about their work. These individuals are typically notated according to their work rates, which is why these texts are significant for this dissertation. An ideal example is *ASJ* 14, 101 3, which Englund (1992, 90)

calls a “personnel inventory.” Though this term is understandable, “work roster” is preferred here because an inventory may be expected to provide more background information about workers, whereas a roster emphasizes the amount and kind of work an individual performs.

1.5. Formatting and Metric Equivalents

This discussion on formatting and metric conversions includes text citations, transliterations, normalizations of proper nouns, dates, as well as weights and measures. Text citations generally follow the BDTNS and are formatted similarly to those in Garfinkle and Molina 2013. Authorship is only given if the text is edited in a publication with multiple authors. Pagination is always separated from the preceding abbreviated title or volume by a comma, whereas a text’s assigned number follows these preceding details without an intervening comma, though it may also follow the pagination in journals. Where helpful, the BDTNS, excavation, or museum number follows all other citation details.

All transliterations of Ur III texts follow the BDTNS, including with respect to line and column numberings and sign readings, unless otherwise indicated. Transliterations of Ur III texts from the CDLI are indicated parenthetically, though the numbering still corresponds to the BDTNS. Transliterations of other texts follow the CDLI, unless otherwise indicated. Collations are indicated parenthetically, and they are provided in Appendix 8. On rare occasions there are subtle changes to the use of hyphenation, which are not identified, and all notations, such as ½, 1, AŠ$_c$, etc., are standardized here. For example, 1 PN is considered to have a different meaning than DIŠ PN, since the former could be a work-rate notation and the latter could be an age-bracket notation (see 5.2.1.2. Work-Rate and Age-Bracket Terminology and Notations). If numbers are counted with the DIŠ-sign base, then they are normalized into Arabic numerals, as is

typical for the BDTNS. 1(U) 3(DIŠ) is therefore rendered as 13. If numbers are counted with the AŠ-sign or curviform-sign bases, then their signs are parenthetically indicated. For the formatting of numbers used in metrics, see below in this discussion. Note that UN-ga$_6$ is read throughout as UN-il$_2$ (see 3.2.2. UN-il$_2$).

Proper nouns are normalized according to their language. Sumerian proper nouns are normalized according to how they are transliterated in the BDTNS, which means that Uru-sag-rig$_7^{ki}$, for example, is normalized as Urusagrig, as opposed to Irisaĝrig or other possible normalizations. Consonant doubling between morphemes is not expressed, as seen in Šeškala, though it is expressed if it occurs within a morpheme, as in Abbamu. Hyphens are minimally used to separate any part of the Sumerian proper noun that precedes a proper noun it contains, as in Igi-Šaraše. Apostrophes are used to separate two of the same vowels, though a(-a) may be normalized as /a(ya)/, as in A(ya)kala (A-ka1-1a), Šara'ayamu or Ur-E'e, but note the lack of an apostrophe in Ur-Šulpae. Akkadian and Amorite proper nouns are normalized with precise consonants and vowel lengths. Hyphens are used to separate words within Akkadian and Amorites proper nouns. Proper nouns in ancient languages other than Sumerian, Akkadian, and Amorite are normalized like Sumerian proper nouns. Arabic site names follow the BDTNS, and personal names are given according to how they are typically written in English publications. The names of Russian cities and political leaders are rendered according to common usage in English, whereas other Russian names generally follow the conventions used in the 1969 publication *Ancient Mesopotamia: Socio-Economic History: A Collection of Studies by Soviet Scholars*, edited by I. M. Diakonoff.

Dates are formatted according to regnal year, month, and day, as seen in the following examples:

AS 1/i/1 all elements of the date are written in the colophon
AS 1/i*/1* the regnal year is written in the colophon, but the latest month and day are written in the body of the text
AS 1/-/- the regnal year is written in the colophon, but the month and day are not written anywhere in the text
AS [ ]/[-]/[-] the ruler is known, but the year is lost, and the month and day could have been written but are too damaged to determine

Dates are determined by the latest year, month, and day recorded, whether any of or all these elements are written in the body of the text (indicated with *) or the colophon. When texts are arranged chronologically, those with lost dates precede those without any date information, meaning that the date [-]/[-]/[-] precedes -/-/-.

The formatting and equivalents of various capacity, length, and area units that are used in this dissertation are given in Tables 1.1–3.[8]

Table 1.1. Capacity Units

Transliteration	Equivalent to Preceding Unit	Formatting	Metric-System Equivalent
sila$_3$	—	X (sila$_3$)	ca. 1 L
ban$_2$	10 sila$_3$	0.0.X	ca. 10 L
bariga	0.0.6	0.X.0	ca. 60 L
gur	0.5.0	X.0.0 (gur)	ca. 300 L

Table 1.2. Length Units

Transliteration	Equivalent to Preceding Unit	Formatting	Metric-System Equivalent
še	—	X še	ca. 2.8 mm
šu-si	6 še	X šu-si	ca. 1.67 cm
kuš$_3$	30 šu-si	X kuš$_3$	ca. 0.5 m
nindan	12 kuš$_3$	X nindan	ca. 6 m

8. These units are based on Powell 1989–1990, which are organized well in Huehnergard 2011, 579–84. For a helpful discussion of many of these units during the Ur III period, see Molina 2016. Metric-system equivalents are given in whatever preferred unit (dm are not preferred, for example) would require the fewest digits, thus 0.5 kg is preferred to 500 g. If there are two options, then the smaller number is preferred, thus 0.5 m is preferred to 50 cm.

Table 1.3. Area Units

Transliteration	Equivalent to Preceding Unit	Formatting	Metric-System Equivalent
še	—	X še	ca. 33 cm^2
gin_2	180 še	X gin_2	ca. 0.6 m^2
sar	60 gin_2	X sar	ca. 36 m^2
iku	100 sar	0.0.X gan_2	ca. 0.36 ha
$eše_3$	0.0.6 gan_2	0.X.0 gan_2	ca. 2.16 ha
bur_3	0.3.0 gan_2	X.0.0 gan_2	ca. 6.48 ha

Note that the only weight unit used here is ma-na, which is formatted as X (ma-na) and is ca. 0.5 kg. The formatting of units in Tables 1.1–3 mainly applies to transliterations, whereas these units may be formatted more simply in prose. For example, houses and fields are measured in X sar and X iku, respectively. Fractions are used where possible, with some exceptions, and irrational numbers are given as decimals down to the hundredths place.

CHAPTER 2. HISTORY OF SCHOLARSHIP

2.1. Introduction

The study of social stratification in the Ur III period has divided scholars for nearly a century. The divisions are rooted in complex interactions between and revisions of data and models. Whereas the data have posed enduring challenges with respect to their accessibility, clarity, and limitations, the models have at times been constraining and inapt. Although considerable pioneering efforts have been made, much remains to be examined.

The aim of this chapter is to provide context to the wide array of studies on Ur III social stratification, which are steeped in roughly a century of scholarship. Thorough attention is given to Soviet scholarship, due to its foundational, though often inaccessible, nature as well as its notably political circumstances.[9] Although all scholarship exists in historical, including political, contexts (see, for example, Gibson 2010, 86), it is asserted here that Soviet scholarship has been particularly impacted by political pressure originating from Vladimir Lenin and especially Joseph Stalin, who both sought to generate globalizing narratives of societal development. Nevertheless, Soviet scholarship was not monolithic, and there were various developments and perspectives, both during the Stalinist regime and certainly afterwards (see, for example, Krikh 2021). While the political pressure facing Soviet scholars is emphasized here, the Red Scares in the United States also generated some political pressure, though this is admittedly not detailed

9. Some helpful treatments of this Soviet scholarship include Dunn 1982; Komoróczy 1978; Krikh 2016a, 2019; Liverani 2016, 142–48; Nam 2012, 43–46; Schloen 2001, 189–94; Treadgold 1987.

here. The remainder of this chapter focuses on the approximately half century of scholarship since the 1970 Rencontre Assyriologique Internationale (RAI hereafter) focusing on social strata, particularly on various treatments dealing with the terms arad$_2$, dumu-gir$_{15}$, eren$_2$, geme$_2$, guruš, and UN-il$_2$.

Before proceeding, it is important to note several caveats and points of caution. First, this chapter is not intended to be exhaustive. The works of Karl Polanyi, for example, while significant to broader discussions on the socioeconomic history of the ancient Near East, are not directly examined here.[10] Moreover, no scholar's contributions to the field are fully considered or encapsulated here. Second, this chapter seeks to mainly discuss the numerous viewpoints presented below rather than analyze them critically. However, critiques are offered regarding demonstrably incorrect claims, especially when they significantly impact one's broader interpretation. Third, this chapter's discussion of Soviet works, especially the early ones, has the benefit of decades of removal from the harrowing times of the Stalinist regime in particular, in addition to the accumulated knowledge of the mainly textual data since then. Accordingly, any critiques of those works are intended with careful consideration.

2.2. Soviet Approaches: The Asiatic Mode, Feudalism, or Slaveholding?

2.2.1. Marxism and the Rise of the Soviet Union

In order to understand Soviet scholarship concerning social stratification in the Ur III period overall, it is vital to consider the significance of Marxism for the rise of the Soviet Union. The

10. For discussions on Polanyi's works in relation to the ancient Near East, see Aubet 2013, 17–39; Garfinkle 2012, 5–17; Gledhill and Larsen 1982; Jursa 2005; Lafont 2005; Liverani 2016, 154–59; Michel 2005; Nam 2012, 51–65; Powell 1999; Rede 2005; Renger 1994, 2005; Snell 1991. Some recent treatments on the Ur III economy include Pomponio and Verderame. 2015; Wilcke 2006.

most pertinent aspects of Marxism addressed here are historical materialism and the modes of production. As a theoretical approach, Friedrich Engels (1990, 416) discusses several tenets of historical materialism in the *Manifesto of the Communist Party* accordingly:

> The *Manifesto* being our joint production, I consider myself bound to state that the fundamental proposition which forms the nucleus belongs to Marx. That proposition is: That in every historical epoch, the prevailing mode of economic production and exchange, and the social organization necessarily following from it, form the basis upon which it is built up, and from which alone can be explained, the political and intellectual history of that epoch; that, consequently, the whole history of mankind (since the dissolution of primitive tribal society, holding land in common ownership) has been a history of class struggles, contests between exploiting and exploited, ruling and oppressed classes; that the history of these class struggles forms a series of evolutions in which, nowadays, a stage has been reached where the exploited and oppressed class—the proletariat—cannot attain its emancipation from the sway of the exploiting and ruling class—the bourgeoisie—without at the same time, and once and for all, emancipating society at large from all exploitation, oppression, class distinctions and class struggles.

Although this passage gives the impression that a Marxist historical materialist approach necessitates a linear and unidirectional evolutionary progression of societies on a global scale, Marx himself challenged the concept of a strict universalist approach to history in his 1877 letter to the editor of the St. Petersburg journal *Otechestvennye Zapiski*, which was later disseminated by Engels, including in a Russian translation by the late 1880s (see Wittfogel 1962, xxx–xxxii).[11]

As for the modes of production, specifically the antagonistic ones, Marx (1987, 263) asserts: "In broad outline, the Asiatic, ancient, feudal and modern bourgeois modes of production may be designated as epochs marking progress in the economic development of society."[12] For this discussion the most pertinent modes of production are the Asiatic, ancient (hereafter slaveholding based on Soviet usage), and feudal modes, which are defined by William Mandel (1969, 34–35) and succinctly reproduced by Stephen Dunn (1982, 6 [italics his]) as follows:

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11. For an extensive treatment of historical materialism and its significance to the Soviet Union, see De George 1966.

12. For more on the modes of production, see Jessop 1990. Note that Marx also limitedly developed the "Germanic and Slavonic forms of tribalism" (Jessop 1990, 293) that scholars sometimes considered to be modes.

> 2 *Asiatic or Asian*: a 'system … in which these communal groups remain [from the aforementioned "*primitive-communal*" mode], but chieftains, ruling clans, or priest-kings emerge, who perform trading or military or irrigation-directing functions for the whole, and who obtain the material means of life through taxes exacted more or less voluntarily from the communes. At this stage the members of the communes no longer share equally in [their] products, but hold the land more or less jointly, so that the individual on the one hand has the protection of the communal entity and on the other has nothing to gain by seriously improving the parcel he happens to be working for a given season or a group of years.'
>
> 3 *'Ancient' or 'Classical' or* (in current Russian usage) *'slaveholding'*: 'in which the world's work is done by slaves, and the slave-owners may philosophize or fight or whatever at leisure.'
>
> 4 *Feudal* 'in which the ultimate producer is, in the classical sense, a serf, part of whose time must be given to work for his lord and part … remains to him to till his own soil. This division of time applies even if it appears in the somewhat concealed form of quitrent in kind or cash or both.'[13]

As helpful as Mandel's definitions are, Dunn (1982, 126–27) adds the following features to the definition of the Asiatic mode:

> (1) the absence of private *ownership* – as distinct from mere possession or tenure for use – of the basic means of production, namely land; (2) the identity between rent and taxes, or, to put it differently, the fact that rents took the form of taxes; and (3) the fact that the ruling class was corporately organized and was coextensive with the administrative apparatus of the state.

Though the first two additions are reasonably critiqued by Donald Treadgold (1987, 8), the third is a valuable contribution.[14] In any case, the Asiatic mode is difficult to define, especially

13. David Schloen (2001, 190) offers the following clarification on feudalism in Marxism:
> Marxist historians of the ancient Near East regard feudalism as a stage in the development of human society—a total mode of production with broad social and ideological consequences—and not simply as a particular method of government or a form of land tenure. They assign special meanings to feudal terminology, giving it greater theoretical weight and applying it more broadly than do non-Marxist scholars, who use it (admittedly) rather casually. In Marxist thought, for example, feudal vassals and serfs, unlike slaves, do own the means of production, even though they are personally dependent on a feudal lord and collectively form (at the lowest levels) an exploited class of producers.

14. For a summary of Marx's views on private land tenure in the Asiatic mode, which differ in his various works, see Wittfogel 1967, 376.

because Marx and Engels, whose works largely centered on the study of Europe, did not develop it consistently or substantially (see Nam 2012, 35–36).[15]

As such, there have been numerous debates about whether the Asiatic mode was chronologically prior to the slaveholding mode within a universal progression, whether it was a stagnant mode that persisted contemporaneously alongside subsequent modes primarily in Europe, or whether it even existed. As for Soviet scholars, these debates were particularly motivated by political considerations, which is demonstrated for many of their works concerning social stratification in the Ur III period. Additional complications arose from disagreements about whether a mode of production describes a society as a whole, as is assumed by many Soviet scholars, among others, or whether multiple modes of production can coexist in varying proportions in a given society, as is defended by Carlo Zaccagnini and Mario Liverani (see Zaccagnini 1989, 17–21).[16] Even though Soviet scholars have tended to take the former position, they do not necessarily deny the coexistence of varying elements of multiple modes since such elements do not sufficiently constitute multiple modes (see Diakonoff and Kohl 1991, 10–12).

Prior to the rise of the Soviet Union, the Asiatic mode gained some support from both Russian Marxists and non-Marxists alike. A notable example is one of the first Russian Marxists, G. V. Plekhanov, who applied this mode to "old Russia" in the early 1880s, thus seeing the Asiatic mode as stagnant (see Treadgold 1987, 7). Despite their political differences, Lenin agreed with Plekhanov about Russia's Asiatic qualities. Both were influenced by the *Zapiski* letter and likewise critiqued a universalist approach in the mid-1890s. Lenin's support of the

15. For further discussion on the origins and characteristics of the Asiatic mode, see Brentjes 1988; Zaccagnini 1989, 1–27.

16. A helpful treatment of this discrepancy is offered in Harnecker 1980.

Asiatic mode receded, however, after 1914 under the influence of World War I, and he later supported a moderately universalist approach (see Wittfogel 1967, l n. 48, 389–400).

With regard to ancient Near Eastern societies, including ancient Egypt, the feudal mode was initially applied. Considering the developing state of Egyptology in Russia during the 1880s and 1890s, the earliest Russian Egyptologists, such as B. A. Turayev, generally accepted the non-Marxist analyses of Gaston Maspero and Eduard Meyer concerning ancient Egypt as feudal. Although both Maspero and Meyer established several feudal elements in ancient Egypt, such as the granting of fiefs by the pharaohs to the nobility for their usufruct, Turayev was more hesitant about such details, though he acknowledged the essentially serflike nature of the general population (see Ladynin 2019a, 251–56; 2019b, 777, 781–82).

Not only was Meyer's analysis of ancient Egypt as feudal significant for Russian and European scholarship at the time, but his methodology was influential as well. Instrumental to Meyer's position was his cyclical view of history, such that ancient Egypt could be feudal prior to the feudalism of medieval Europe (see Diakonoff and Kohl 1991, 6–7). His approach to history, however, was in opposition to Karl Bücher, who, though not being a Marxist, considered societies to evolve through rigid stages. As such, his evolutionary scheme can be understood, as Marc Van De Mieroop (1999, 108) summarizes, to be a "unilinear development from closed household economy to city economy to national economy, which more or less coincided with the ancient, medieval, and modern periodization of European history." According to this scheme ancient Egypt was characterized by Bücher as a closed-household economy, which emphasized the household, whether individual or institutional, as the basic economic unit. His understanding of Egypt's closed-household economy built upon Johann Karl Rodbertus's concept of the *oikos* economy and later influenced Max Weber's patrimonial ideal type (see Jursa 2005, 172–73;

Renger 2007, 190–91).[17] These opposing views of historical economic developments have since become known as the "Bücher-Meyer controversy," resulting in a general divide between scholars who view ancient economies as fundamentally different than modern ones ("primitivists") and those who consider such differences to be more quantitative than qualitative ("modernists" [see Aubet 2013, 9–12; Van De Mieroop 1999, 108–9; 2004, 58]). In the case of Soviet scholars with respect to the social stratification of ancient Near Eastern societies, some of them have tended toward modernist approaches, though not necessarily according to Meyer's cyclical conception (see Krikh 2016a, 203; Ladynin 2016, 11–12).

Besides the reliance on Western European scholars for understanding the socioeconomic development of ancient Near Eastern societies, Turayev, among others, was also dependent on such scholarship for how he conceived of ancient Near Eastern societies as belonging to the "ancient Orient" as it was understood by German scholars going back to Georg Hegel. As such, according to Hegel the "ancient Orient" was a stage of world history that preceded classical antiquity and included the ancient Near East, Achaemenid Persia, India, and China. However, by the late nineteenth century, German scholars were more prone to limit the "ancient Orient" to the ancient Near East and Achaemenid Persia, partly due to their lack of understanding of the early histories of India and China. As for Turayev, I. A. Ladynin (2019b, 772–83) identifies two phases regarding his usage of "ancient Orient." During the first phase in the 1890s, Turayev used "ancient Orient" in much the same way it was used by contemporary German scholarship. During the second phase in the early 1910s, he acknowledged that India and China, though not belonging to the "ancient Orient," should be closely related based on possible shared roots. This broadening of the concept of the "ancient Orient" in the years preceding the rise of the Soviet

17. For an extensive study on patrimonialism in the ancient Near East, see Schloen 2001.

Union was perhaps mostly due to a growing understanding of the early histories of India and China, but Soviet scholars tended to broaden the term to fully include India and China based at least partly on political motives.

Having provided some background on Marxism and its reception by Russian scholars in the late nineteenth century, it is important to consider the foundational and authoritative role of the Russian Academy of Sciences (the academy hereafter) in shaping Soviet scholarship. Although the academy was able to retain much of its autonomy and character throughout the early 1900s, the rise of the Marxist Bolsheviks under Lenin and others threatened its status quo (see Tolz 1997, 12–32). Under Lenin the "Sovietization" (Tolz 1997, 26) of the academy and Soviet scholarship in general was underway. His principle of partisanship or party commitment (*partiinost'*), which he articulated back in 1895 in a critique of the Marxist economist and philosopher P. B. Struve, was certainly influential.[18] Lenin's articulation of this principle in his critique of Struve are thoroughly considered by Richard Pipes (1970, 138–39) below:

> Lenin directed the brunt of his critique at Struve's "objectivism," by which he meant his habit of testing the validity of any idea against objective reality.… To Lenin, confronting ideas with reality was a waste of time: it was a "professorial" occupation. What really mattered was the relationship of ideas to class structure. Laying bare the class content of any idea was the quintessence of Marxism: "Materialism involves, so to say, a party commitment (*partiinost'*) which demands that every evaluation be accompanied directly and explicitly by reference to a definite social group."… Lenin here articulated an interesting conception, the implications of which seem to have escaped his contemporaries. Although Marxists acknowledged that ideas were bound up with class interests, it never occurred to any of them before Lenin to interpret this relationship as meaning that what really mattered was not whether a given idea was true but whom it benefited. One of the several corollaries of this notion was the readiness to transform every intellectual disagreement into a personal one, and to insert every personal quarrel into an ideological framework. The basic ingredient of thought control and a great deal of totalitarianism besides was clearly implied in it.

18. For its influence on the academy, see Tolz 1997, 39. An extensive background on P. B Struve and his relationship with Lenin is given in Pipes 1970, 121–43.

As such, when Lenin came to power, this principle was important for party control of the academy and its broader research agenda. Another impact Lenin made was his 1919 lecture "The State" at a party-oriented university in Moscow. In this lecture, Lenin (1971) describes the overthrow of capitalism by the Communist Party (the Bolsheviks after 1917), noting that nearly all states have progressed from primitive communism to slaveholding to feudalism and then to capitalism (followed by eventual communism), with the exception of Asiatic states that were still feudal but not classified according to the Asiatic mode (see Wittfogel 1967, 397–98). In so doing, he delineated the development of states into five modes (known as the *pyatichlenka* or "'the big five'" [Krikh 2016a, 191]), which was foundational for Soviet scholarship, especially during the Stalinist regime (see Krikh 2014, 128; Ladynin 2016, 13–14; Nam 2012, 35–37).

In the midst of the dramatic end of tsarist Russia and the rise of the Soviet Union, the foundational Soviet scholar V. V. Struve, nephew of P. B. Struve,[19] emerged. Prior to the rise of the Soviet Union, V. V. Struve (simply Struve hereafter) studied Egyptian under Turayev at St. Petersburg University then briefly under Meyer at the University of Berlin (see Ladynin 2019a, 256). Following his education, he worked at the State Hermitage Museum, which he essentially managed after the death of Turayev in 1920 (see Kramer 1986, 174; Krikh 2016a, 195; Loktionov 2017, 133–34). Despite his lack of formal instruction in Sumerian and Akkadian, Struve started to publish Sumerian tablets from the Hermitage in the early 1920s (see Krikh 2018a, 422–23). In instances throughout the 1920s where he discussed socioeconomic developments in ancient Egypt and the broader Near East, he considered feudalism (eclectically agreeing about different aspects with Maspero, Meyer, and Turayev) to be appropriate (see Krikh 2016a, 192; Ladynin 2016, 11–12; 2019a, 256–59). His understanding of and preoccupation with

19. Sergey Krikh (2016a, 195) notes that due to P. B. Struve's conflict with Lenin, V. V. Struve denied their relationship years after the revolution.

such socioeconomic developments evolved rather abruptly, however, in response to the rise of Stalin.

2.2.2. The Stalinist Regime

Stalin's regime profoundly shaped the course of Soviet scholarship. His rise to power was at first somewhat gradual until it accelerated by 1929. By that time, his cult of personality took form upon his fiftieth birthday, his policies of collective farming were initiated, and the academy experienced further interference from the party. Such interference included the manipulation of the rules of the 1929 election in favor of Communist academicians as well as purges of dissenters both inside and outside the academy. With this transformation, an anti-bourgeois attitude began to set in, and the academy's independence was essentially lost to the state. Moreover, the Communist members were keen on unifying their studies across various fields according to their Marxian foundation of historical materialism, such that many non-Marxists risked arrest or unemployment unless they significantly confined their research topics to avoid confrontations (see Tolz 1997, 42–81). Whereas the Russian intelligentsia were known for their oppositional and critical natures prior to the revolution, they were since characterized as subservient to the state (see Malia 1960). As such, under Stalin's regime, Soviet scholars experienced significant political pressure and often challenged prerevolutionary Russian Marxism (see Krikh 2019, 1305; Stein 1951).

Stalin's grip on Soviet scholarship is particularly apparent in the debate about the existence and character of the Asiatic mode. During the 1920s this debate developed significant political burdens when the Soviet Union sought to use the Comintern to ally itself with the Chinese Nationalist Party, though this strategy proved to be unsuccessful, and the debate on the

Asiatic mode essentially stalled in the early 1930s. In 1931 at a conference in Leningrad, Karl Wittfogel (1967, xxxiv–xxxvi) ardently defended the existence of the Asiatic mode with respect to China, demonstrating that such societies did not develop like Western European ones. In response, party-minded critics asserted that it should be challenged according to its political consequences rather than its scholastic merits (see Krikh 2018b, 15; Treadgold 1987, 8–10). A few years later in early 1933, Stalin gave an address at the First Congress of Collective Farmers about the progression from the slaveholding to the feudal to the capitalist to the socialist modes of production, thus hearkening back to but also streamlining Lenin's fivefold development by excluding any notion of the Asiatic mode. Under pressure to adhere to Stalin's dogmatic and rigid conception of the *pyatichlenka*, the Asiatic mode was abandoned by Soviet scholars until after his regime had ended (see Krikh 2014, 128; 2016a, 194–97; Tolz 1997, 80).

As for Struve, the late 1920s and early 1930s was a transformative time for his work. According to a later account, he officially assumed a Marxist approach in 1929 (see Krikh 2016a, 195), which was the year that the Sovietization of the academy began. Whereas he formerly tended to consider ancient Egypt and the broader Near East to be feudal, he saw such a position in 1931 as inappropriately blurring geographical and historical distinctions from the ancient Near East to medieval Europe and beyond (see Dunn 1982, 43–45). Instead, for a brief time he considered the Asiatic mode to be plausible (see Krikh 2016a, 192; Ladynin 2019a, 259–62). In the same year, S. F. Oldenburg, a scholar of Buddhism, claimed that Western and Eastern societies experienced the same socioeconomic developments, which Struve later credited as influential in his subsequent work (see Krikh 2016a, 196; 2017a, 783). Considering his shift away from the feudal mode and Stalin's omission of the Asiatic mode in 1933, Struve's work

from that same year on plotted a new course that could conform to Stalin's broader agenda—the slaveholding mode.

Struve's foundational work dealing with social stratification in the ancient Near East, which followed his expressed assumption of Marxism, was a paper presented in Leningrad at a session of the State Academy of the History of Material Culture (GAIMK) in the summer of 1933 (see Krikh 2016a, 192–97).[20] In his (1969b) published version, according to the later English translation, "The Problem of the Genesis, Development and Disintegration of the Slave Societies in the Ancient Orient," he articulates how agricultural developments led to stratified societies in the ancient Near East, which became dependent on slaves procured from warfare. The use of such slaves was predominantly for irrigation, which, though originally based on community-wide cooperation, led to mass, corporate enslavement that altered these societies, as Struve (1969b, 21) describes accordingly:

> It should, however, be borne in mind that both the Sumerian and the Egyptian territorial communities were later transformed into antagonistic state structures; for when the subjugation of slaves to the domination of freemen became their main function, the gentilic community was replaced by rudimentary forms of a slaveowners' state.

He continues by addressing the despotic power of the emerging slaveowners' states, focusing especially on Sumer from Early Dynastic Lagaš to the Ur III dynasty. Given the role of Sumerian temples in land tenure and resource management, Struve (1969b, 25–26) considers the majority of their workforces to be "slaves collectively owned by the communities," who were physically distinguished by hairstyles and brands, housed in barracks-like workhouses. They were supported with minimal rations, as opposed to more substantial wages for hired workers, and forced to work all year round. Having established his case for the significance of slavery, Struve

20. Ladynin (2016, 13–14) notes that the GAIMK played a significant role in the early 1930s in shaping Soviet research agendas according to Stalin's interpretation of the *pyatichlenka*.

(1969b, 28) challenges his formerly esteemed teacher Meyer's "bourgeois" view that "economically slavery in the East never played a role of any importance," though, at the same time, it can be argued that Struve was likewise assuming a modernist perspective similar to his teacher's (see Krikh 2016a, 203). With regard to the Sargonic period, he (1969b, 41) identifies a substantial amount of voluntary hired work but adds that they "were alienated from means of production." In terms of the Ur III period, Struve (1969b, 43) observes the rise of "real slave latifundia" managed by governors. Based on his understanding of administrative tablets, he reads kal (now guruš) as referring to male slaves and its administrative counterpart, $geme_2$, as identifying female slaves, though these terms neutrally refer to working male and female adults and older children (see pp. 180–86). Despite his knowledge of M. V. Nikolsky's work on hired guruš, Struve (1969b, 44–48) insists that few were hired, whereas the majority were conscripted full-time as slaves. As for the term UN-il_2, he (1969b, 47) briefly acknowledges it as referring to a separate category of unskilled workers known as "carriers." He (1969b, 67) then discusses how natives of Ur III society could also be enslaved due to debts and how the slave system continued into the Old Babylonian period and beyond, offering the following conclusion: "I hope a sufficient amount of concrete evidence has been submitted to justify the definition of the Ancient Oriental societies as slave societies in the broad sense of the word (though not identical with those of classical antiquity), and not as feudal ones."

Considering that this paper was given in the summer of 1933, just months after Stalin's address that affirmed a dogmatic and rigid interpretation of the fivefold progression without the Asiatic mode, Struve's application of the slaveholding mode to ancient Near Eastern societies was surely not coincidental. Rather, it was formulated to some extent, at least, according to Stalin's influences and broader designs (see Krikh 2016a, 194–97) if not in response to Stalin's

explicit demands, as Diakonoff has recounted.[21] By classifying societies that other prerevolutionary Russian Marxists and Soviet scholars formerly considered Asiatic or especially feudal, including Struve himself before the 1930s, as slaveholding, Struve demonstrated that ancient Near Eastern societies did not substantially differ from Western ones in their socioeconomic development.[22] This is particularly poignant in his comparison of Ur III households with Roman latifundia. He also considered the use of the slaveholding mode in his paper to be a groundbreaking moment for Soviet historiography, and he was thereafter elected a full member of the academy in 1935 (see Krikh 2018a, 422; Ladynin 2016, 14; Tolz 1997, 79).

Struve's foundational work on the slaveholding mode in the ancient Near East, however, had several issues. About two decades after his paper was published, he admitts in an unpublished letter to the editor of the *Vestnik drevney istorii* (*Journal of Ancient History*) that "at the time I realized that I could not prove my thesis of the slave status of the masses in ancient societies using Egyptian materials" (Krikh 2016a, 197).[23] Moreover, he misunderstands the term u_4 duh-(h)a, meaning "day(s) off" (i.e., days released from conscription [see pp. 195–96]), which he (1969a, 137) translates as "'a day of detachment.'" Whereas Struve (1969a, 140) considers these to be days off for $geme_2$ who were "impure" for six days a month, he (1969b, 142) proposes the following for guruš:

> Thus the expression "days of detachment in the capacity of sons" [translation of *TCL* 5 5675 rev. v 21: u_4 duh-a dumu-gir_{15}] should be understood as conveying the idea that the men were appointed to do some work during a certain period, labouring half a day instead of a full day. In this they were like the "sons", i.e., boys whose labour force was considered to be half of that of a grown-up workman.

21. I am indebted to Piotr Steinkeller for Diakonoff's account.

22. Following his 1933 paper, Struve noted that he formerly considered ancient Egypt to be feudal or Asiatic due to his bourgeois teachers, especially Meyer (see Dunn 1982, 50–51), though he seems to not mention Turayev explicitly.

23. For the publication of this letter in Russian, see Krikh 2017a.

Not only does he consider such days to be workdays rather than days off, but he also reads dumu-gir$_{15}$, which refers to citizens (see pp. 89–90), as dumu-še$_3$. Though understandable at the time, this demonstrates how critical terminology was missed.

While Struve's work was ambitious and addressed important Ur III socioeconomic material, it emerged at a time when few scholars attempted such overarching analyses of this material. Many substantial monographs on Ur III socioeconomic texts produced in the first few decades of the twentieth century consisted mainly of copies, with introductions and perhaps catalogs of the texts' contents as well as some transliterations and translations of select texts. Works like these were produced even decades later, such as A. Leo Oppenheim's 1948 (1978 reprint) commentary on Ur III texts. In contrast to Struve, Oppenheim (1978, 17) observes that "Guruš (and gemé for the female) denotes a worker of a certain but unknown legal and social status." With regard to guruš, he (1978, 17–18) noticed that they were often hired, sometimes overlapped with eren$_2$, and referred to individuals with a wide variety of occupations, including priests and high-ranking positions. Even by the early 1960s, the historians Tom Jones and John Snyder (1961, viii–ix) were hesitant to produce an overarching analysis, as seen in their introduction to a commentary on Sumerian economic texts:

> The major problem in dealing with the Ur III texts is not linguistic; it is rather a problem of organization, of bringing order out of chaos by restoring the archives as nearly as possible to their original form. One begins by sorting and arranging and making endless lists; much of the work that has been done on the Ur III material has never advanced beyond this stage. The second step in the process is the study of limited phases of the Ur III economy in order to determine the nature of agricultural, commercial, or craft activities and the manner in which they were organized and directed principally by the temple or the state. A third stage, once the work on the second has been largely completed, will be the synthesis of the research as a whole to produce a composite picture of the Ur III period.
>
> The Commentary which forms a part of this volume contains several studies representing the second stage above.…
>
> Many more small studies will have to be made before it will be possible to generalize about the Ur III period, and many hundreds of unpublished texts will have to be made available.

Despite their compelling arguments about the slow process toward synthesizing Ur III material, it is reasonable to expect that scholars from earlier decades would produce broad analyses, of course.

As for other early broad analyses, some of the most important works on the socioeconomic history of mainly early third-millennium Babylonia were produced by the German economic historian Anna Schneider in 1920 and the German Sumerologist Anton Deimel in 1931. Both addressed the same administrative texts from the temple of Bau in Early Dynastic IIIb Lagaš, though Schneider, who was dependent on translations, integrated Old Babylonian texts as well. Although she was a student of Bücher, she challenged his evolutionist perspective, upon which Mario Liverani (2016, 106) elaborates as follows:

> The central result of Schneider's work however – theoretically more important – was that the Sumerian city could not fit into any of Bücher's evolutionary stages. There were elements of centralization and redistribution, similar to those of ancient Egypt; there was an urban synoecism, similar to that of ancient Greece; there was feudal servitude (*Fronwesen*), similar to the mediaeval; and finally there was a system of exchange based on credit, which in some ways was a precursor of capitalist mechanisms.

Deimel, however, argued that all arable land was owned and managed by the temples, which he described as a *Tempelwirtschaft* ("temple economy").[24] Since the population worked under the control of these temples year round, they were slavelike. Though Struve relied upon both these scholars in his 1933 paper, he utilized Deimel's perspective to describe the population as slaves, and he (1969b, 49 n. 115) noted that Deimel likewise regarded guruš as a term for slaves.

Despite initial criticism at the 1933 session, Struve's position endured. The Egyptologist I. M. Lurie, for example, denounced Struve's conclusions as built on theory rather than evidence and dependent on a haphazard definition of slavery. Another critic was the historian A. I.

24. Helpful discussions of Deimel's "temple economy" are available in Falkenstein 1974; Gibson 2010; Liverani 2016, 105–7; Maekawa 1973–1974; Nissen 1982; Renger 1995, 288–90; Schrakamp 2013; Steinkeller 1999b, 290–98.

Tyumenev, a prerevolutionary Marxist (see Dunn 1982, 139 n. 3]), who read a paper on ancient Egypt, classifying it as a feudal society with quitrent (*obrok*) and corvée work (*barshchina*) similar to Russian serfdom.[25] He found Struve's description of mass slavery supported by barracks-style housing to be untenable (see Krikh 2016a, 198–99; 2017a, 783, 787–882). Struve's omission of individual subsistence plots was also challenged (see Dunn 1982, 47–48). As these examples illustrate, many Soviet scholars at the session did not immediately accept Struve's position, even though it offered a way to fit ancient Near Eastern societies into Stalin's historical progression outlined in the preceding months of the session. Whereas these critics mentioned so far could not directly engage with the Sumerian material, Struve's position also faced challenges and emendations from Assyriologists, though minimally at first.

Initial challenges from Assyriologists were lacking, except for N. M. Nikolsky, son of the Assyriologist M. V. Nikolsky, who was already a Marxist prior to the rise of the Soviet Union. In 1933, N. M. Nikolsky (simply Nikolsky hereafter) drafted the first Soviet textbook on ancient history in which he classified Greece and Rome as slaveholding, as opposed to China, Egypt, and Mesopotamia, which were feudal (in agreement with Tyumenev), but the textbook was thoroughly revised by other scholars (see Krikh 2016a, 198–201; 2019). Moreover, in 1934, Nikolsky accused Struve of misunderstanding Engels's distinctions between productive slavery in ancient Greece or Rome versus domestic slavery in ancient Eastern societies. Nikolsky also challenged Struve's calculations of the size of the Ur III households and the amount of their full-time versus part-time conscripts, that latter of which he (1934, 210) describes as free "peasants" (*krest'yan* [trans. mine]) belonging to communities and engaged in corvée work (see Krikh 2016a, 199–200; 2018b, 16). Part of Nikolsky's (1934, 209) calculation concerning part-time

25. For a thorough treatment on Russian serfdom, see Kolchin 1987.

conscripts is based, though, on his misunderstanding of the formula X guruš u_4 1-$še_3$ ("X guruš for one day"), which he read literally, therefore assuming that many individuals were only conscripted for one day at a time. Struve (1969b, 47 n. 111), however, already understood this formula and credited its discovery to Anton Deimel. Overall, Struve considered Nikolsky's critiques to be based on reanalyzing his own work without understanding the evidence or introducing new texts to dispute him. Additionally, Struve (1934, 221) acknowledges that while these guruš were not slaves in a strictly legal sense (like slaves on Roman or Carthagian latifundia, for example), they were slaves from an economic perspective. Nevertheless, due to Struve's numerous rebuttals, Nikolsky's critiques did not gain much support until significantly later when scholars such as Diakonoff considered Struve's underestimation of free communal peasants as simply mistaken (see Krikh 2014, 128–29; 2016a, 200; 2018a, 423–26; 2018b, 18).

In the late 1930s, Struve's position on the slaveholding mode gained support among Assyriologists as it was affirmed by A. P. Riftin in 1937 with regard to the Old Babylonian period and by Diakonoff, who attended Struve's 1933 lecture early in his studies, in 1939 in terms of the Ur III period (see Krikh 2017a, 786).[26] On a state-wide scale, the emergence of Stalin's textbook, *Short Course of the History of the CPSU*, in 1938 offered further justification in its treatment of the sequentially rigid development of the modes of production, the *pyatichlenka*, which is thoroughly discussed by the historian Pavel Kolář (2012, 403–4) below:

> Even though the composition of communist identity changed during the course of the twentieth century, three crucial elements continued to be present. First, it was based on a particular system of inclusion and exclusion, which divided the world between those who belong and those who do not belong. This aspect culminated in the Stalinist period with its Manichean cosmology, uncompromisingly splitting the world into the forces of good and the forces of evil. It never completely disappeared from the communist outlook, however, even after the demise of Stalinism. Second, communist identity relied on a specific understanding of history as irreversible, the working through of developmental laws. The most telling expression of this conception was the five-stage model of historical

26. For biographical details, see Dandamayev et al. 1982; Hosking 1999; Sheynin 2011, 112–15.

> materialism, the notorious '*pyatichlenka*' according to which every society had to pass through the unalterable sequence of 'societal orders' from 'primitive communism' through 'slavery', 'feudalism' and 'capitalism' to the universal end of history, the classless communist society. *Pyatichlenka* became an effective tool of narrative hierarchization, enabling communist ideologues to distinguish 'quicker' and 'progressive' nations from 'delayed' and 'backward' ones. Finally, a third pillar of communist identity was the Leninist belief that the communist future could be achieved only under the guidance of a perfectly organized collective of the like-minded – the party, the vanguard of the working class and the avant-garde of history.
>
> A perfect symbiosis of these three aspects – the system of exclusion, the notion of history as a lawful process, and the leading role of the revolutionary party – was represented in Stalin's notorious *Short Course of the History of the CPSU* from 1938.

Although Stalin did not explicitly deny the existence of the Asiatic mode, it was not included among the *pyatichlenka*, probably for political reasons, as mentioned above (see Nam 2012, 36–37). Due to his sequential rigidity of the modes of production, ancient Eastern societies could not linger in stagnant feudalism as some Marxists formerly conceived. Moreover, he portrayed the slaveholding mode with sharp contrasts between a minority slaveholding class and a majority slave class, which Struve considered a validation of his analysis of Sumer, including his position that formerly free natives could be enslaved collectively just as prisoners of war. As such, further challenges to Struve's work, including Nikolsky's, often conceded that Struve's positions were principally aligned with orthodox Soviet Marxism, though they sought to identify nuances among ancient slaveholding societies (see Krikh 2015a, 270; 2016a, 201–2; 2017a, 787; 2017b, 17–18).

Quickly, and perhaps purposefully, following the dissemination of Stalin's textbook, Struve (1967 [later French translation]) explicitly relates Marx's works to his analysis of Sumer, noting that Egypt and Sumer were both originally partially slaveholding and tribal in that only nonagricultural workers were enslaved, though Sumer became a fully fledged slaveholding society as both agricultural and nonagricultural workers were merged into one class of slaves (see Krikh 2016a, 203). He also asserts that Marx considered the Asiatic mode to belong to the

universal slaveholding mode (see Dunn 1982, 56–57). Moreover, Struve produced a textbook in 1941 on "ancient Oriental" history more broadly, which at this stage included India and China, thus further disseminating his positions (see Krikh 2017a, 787; Ladynin 2019b, 784–87). Further support of Struve's position, if only to a certain extent, is evident in Tyumenev's acknowledgment in 1944 that ancient Egypt and Mesopotamia relied on "general slavery" (Krikh 2017a, 788: "pogolovnogo rabstva" [trans. mine]), a concept developed by Marx with regard to the despotism of the Asiatic mode (see Wittfogel 1967, 378), on which Tyumenev based the economic conditions of their general populations.

During the mid- to late 1940s, there were several studies on the term guruš, beginning with Tyumenev, who like Struve learned cuneiform later in his career in the late 1930s (see Krikh 2017a, 787). As such, Tyumenev (1946) notes that kal should be read as guruš in this context and generally supports Nikolsky's position on feudalism (see Krikh 2016a, 197 n. 26; 2017a, 788–89). Tyumenev emphasizes that the term guruš has nothing to do with slavery or servitude but rather distinguishes male individuals according to age as adults able to be conscripted versus young boys and elderly men. Moreover, he (1946, 19) describes these individuals as free, native "community members" (*obshchinniki* [trans. Tyumenev 1969a, 77]) rather than enslaved, foreign prisoners of war, even if they were conscripted full-time. As for those that were conscripted part-time, Tyumenev (1946, 17 n. 5) observes that they were sometimes referred to as eren_2. He also challenges Struve's strict dichotomy between guruš receiving scanty rations and hired workers receiving more substantial wages with regard to both the terminology and amounts of their compensation, concluding that the distinctions were not always consistent or based on social-class divisions. In 1948, Diakonoff addresses the meaning of guruš, agreeing with Tyumenev that the term does not explicitly designate a male slave,

though Diakonoff (1948, 33) further stresses that guruš was not a social term. He acknowledges in agreement with Struve, however, that if a guruš was conscripted full-time, he was a slave since he did not own his means of production. As for the term geme$_2$, he considers it to refer to female slaves, noting that free women were not conscripted. In the same year, Tyumenev (1948a) responds to Diakonoff's treatment with a brief article stressing that there was some social significance to the term guruš—namely, that it referred to natives of the society. These back-and-forth studies ended with another brief article by Diakonoff (1949) reiterating his point about how the term guruš does not define people according to their social class, which is determined by their ownership of the means of production.

Besides these studies on the term guruš, there were other significant developments by Struve and Nikolsky in the final years of Stalin's regime. In 1949, Struve produced a substantial work titled (according to his 1969a translation) "Some New Data on the Organization of Labour and on Social Structure in Sumer During the Reign of the IIIrd Dynasty of Ur." He begins with a recapitulation of his views, noting that the Asiatic and feudal modes of production have been rejected in lieu of the slaveholding mode. Struve (1969a, 127–44) then addresses his various critiques and discusses additional texts to support his positions. He (1969a, 136) again stresses that the guruš and geme$_2$ individuals were slaves in that they "were alienated from ownership in means of production." He (1969a, 144–53) supports this claim by arguing that such individuals were conscripted full-time on predominantly royal households, which left little room for individual subsistence plots. In instances where people had access to such plots, he (1969a, 164–71) claims that those who could not sustain themselves had to hire themselves out, which still amounted to significant exploitation. Additionally, Struve (1969a, 141) identifies the term eren$_2$ as simply "gang of workmen," which he assumes to be a collective term for guruš. He

(1969a, 161) also notes that the term guruš "was a term of so general a kind that we find it applied even to 'carriers' [UN-il$_2$]."

As for Nikolsky, he produced another textbook with others in 1952 that took a critical stance toward Struve's 1941 textbook, which Nikolsky considered to be outdated. Due to the publishers, the final version was edited to limit overt critiques of Struve. Still, the textbook articulated Nikolsky's rather unchanged positions on the importance of free communal peasants and the prevalence of domestic rather than productive slavery in ancient Near Eastern societies. It did, however, resonate with Tyumenev's prior admission of a sort of "general slavery" and brutal exploitation of legally free individuals. While the textbook was edited to soften its polemics against Struve, it still received harsh reviews about its minimization of productive slavery and use of feudal language for societies that could not be in the feudal mode. Although Nikolsky was nearing the end of his career, Krikh (2017b, 19–21) asserts that this textbook and Nikolsky's scholarship in general aided in the revival of the Asiatic mode after the end of the Stalinist regime.

2.2.3. De-Stalinization in the Post-Stalin Era

Significant changes to Soviet scholarship developed after 1953 when Stalin's reign of terror ended with his death, which alleviated much of the pressure to fit the Ur III period into the slaveholding mode. This pressure was especially alleviated by the First Secretary (formerly General Secretary) Nikita Khruschev's de-Stalinization policy, which he inaugurated at a Communist party meeting in 1956 (see Kenez 2006, 190–94). The impact of this policy on historiography is well treated by Kolář (2012, 410) as follows:

> Given the central place party history occupied in the system of communist myths and beliefs, it was the historical representation of the party in the first place that was regarded as the most expressive embodiment of 'ideological deformation' under Stalinism. De-Stalinization, in this sense, can be understood as a 'return of history'. The past was increasingly freeing itself from the yoke of the future, which had previously determined the Stalinist concept of history. Martin Sabrow has described this mode of historical narration as a dominance of futurity [*Futurität*] over historicity [*Historizität*] in which representations of the past were strictly subordinated to the ultimate utopian 'end of history'. Thus history, be it of the world, of the nation or of the party, was narrowed to 'progressive' future-oriented historical forces while reducing the entire historical continuum to a mere prologue to the radiant future. As Reinhard Koselleck put it, in the communist vision of history, 'experience was entirely swallowed by expectation'. In this respect, 'de-Stalinization' signified a cautious attempt at restoring the balance between all three components of history – past, present and future.
>
> In contrast with the *Short Course* paradigm, in which history was downgraded to a fulfilment of the laws of historical materialism, the emphasis placed on 'errors' and 'false conduct' in Khrushchev's revision opened up room for historical contingence, unexpected turns and irregular developments.

As such, whereas historians were formerly influenced by Stalin's "concept of history," they were thereafter freer to study the past from broader Marxist perspectives, sometimes characterized by returns to Lenin's works (see Kolář 2012, 407–8). In terms of the study of the ancient Near East in general, the Asiatic mode was revived, especially since the early 1960s (see Nam 2012, 37).

In the mid- to late 1950s, Tyumenev completed his final studies, including a 1954 article on producers in the royal economy of the Ur III period, a 1956 comprehensive book on the state economy from the late Uruk period to the Ur III period, and a 1957 two-part article on the ancient Near East more broadly. As for his 1956 book, two chapters are translated into English in *Ancient Mesopotamia: Socio-Economic History: A Collection of Studies by Soviet Scholars*, which was edited by Diakonoff and which made such Soviet scholarship that was formerly little known outside of the Soviet Union available in 1969 (see Kramer 1986, 176–77; Krikh 2015b,

384).[27] In Tyumenev's chapter (based on Tyumenev 1948b)[28] dealing with the workforce of the temple of Bau under the control of Lugalanda and UruKAgena, he (1969b, 97) distinguishes three groups of personnel according to their allotments: "(1) gìm dumu, 'slave-women and (their) children'; (2) igi-nu-du$_8$ (íl) šà-dub-didli, 'the igi-nu-du$_8$, (the carriers), and (people receiving rations) according to separate tablets'; (3) lú-kur$_6$-dab$_5$-ba 'men getting subsistence.'" Whereas he identifies geme$_2$ as slaves, employed mainly for weaving and processing cereals, he (1969b, 99, 105) regards the terminology for the latter two categories to be ambiguous about their social status. With regard to the second category, he considers the terms to be based mainly on professions, such that the igi-nu-du$_8$ ("(one) not raising his eyes" or "blind" [Tyumenev 1969b, 99]) worked in gardens as water-bearers (but not exclusively), the il$_2$ ("carriers") were unskilled male and female workers that mainly carried barley or other objects, and the ša$_3$ dub didli were a variety of skilled male and female workers, such as household personnel, herdsmen, and craftsmen, among others. In opposition to Struve, who sees all individuals of this secondary category as slaves, he argues that only some of them were slaves based on evidence that they were purchased. Nevertheless, he concedes that whether they were slaves or not, their economic conditions were all virtually indistinguishable. Compared to the first two categories, he highlights that the individuals of the third category received subsistence plots and were not conscripted full-time. Overall, he notes that slaves were mostly used for

27. Prior to this publication, some of the earliest Soviet scholarship on this subject available in English included presentations at the Twenty-Third International Congress of Orientalists in 1954 (see Diakonoff 1954; Struve 1954) as well as several article and book summaries, such as those given in Diakonoff 1958, 1963, for example. Moreover, due to political tensions, Soviet scholars were altogether absent from the Twenty-First and Twenty-Seventh International Congresses of Orientalists in 1948 and 1967 (see Dandekar 1948, vii; Shaw 1968, 15). Although Diakonoff (1959) provides an English review of Soviet scholarship, it is rather limited in its scope. A few years later in an article addressing the state of Assyriology, he (1961, 390) comments on how Western scholars have lagged behind and been largely unaware of the Soviets in terms of socioeconomic history.

28. Tyumenev 1969b is mistakenly attributed to Tyumenev 1954.

domestic work rather than productive work in contrast to Struve's position and that the local population provided most of the work, though there is some evidence for the use of prisoners of war. Moreover, Tyumenev (1969b, 99–124) raises some interesting questions in his concluding pages about the family structures of the personnel, postulating that some of the geme$_2$ may have had children with men of the second category, and he calculates the total workforce of the temple households of Lagash to be a third of the population, noting that the remainder were still compelled to provide some amount of work to the state. His (1969a, 84–86) other chapter summarizes this material, though there is more emphasis on the brutally unsustainable exploitation of all such workers, especially in the Ur III period.

In his two-part article, Tyumenev (1957, 55–56) presents his final summary of the socioeconomic developments of the ancient Near East, which is translated by Dunn (1982, 142–43 n. 44) as follows:

> Comparison of the characteristics of the basic and superstructural phenomena in Egypt and the Fertile Crescent on the one hand and of the countries of classical culture on the other, shows clearly, in our opinion, that in the history of the ancient and Eastern classical slaveholding societies we have, not two successive stages of the development of slaveholding (as is supposed by the prevailing theory in Soviet scholarship), but two different types of slaveholding society. The special character of the base – which was precisely the broadest exploitation, along with slave labour proper, of the labour of the local population as well – conditioned not only the distinct character of the superstructural phenomena (the despotic character of the political superstructure, the prevalence of religious doctrines in the field of ideology), but also an entirely different path of development distinct from that of the classical world. Whereas the system of slavery in pure form which existed in the classical countries led their entire economic and social life into a blind alley from which it was necessary to seek an escape in various directions, in the East in the countries of riverine culture, the development proceeded in the direction of a gradual softening of the forms of exploitation – from exploitation not differing in any way from slavery, to a milder form of transference of particular land parcels to dependent tenants. This evolution was observed both in the Fertile Crescent and in Egypt.

As can be seen in this summary, Tyumenev still challenges Struve's position that the ancient Near East should be categorized as slaveholding according to the Marxist mode that was based on Greece and Rome, even if it is only seen as a precursory form of that mode. Instead, he

describes it as an entirely distinct "slaveholding society" characterized by despotism and the more general exploitation of the local population, existing as "dependent tenants" rather than true slaves. Recognizing the unusual Marxist approach presented in this work, Dunn (1982, 143 n. 44) refers to Tyumenev's emphasis on "dependent tenants" as "quasi-serfdom," though Dunn (1982, 71–72) highlights how this is the first explicit work among the Soviets to posit two separate kinds of slaveholding societies, which helped pave the way for the revival of the Asiatic mode.[29] A similar analysis is offered by Liverani (2016, 145–45), who suggests that although Tyumenev had preferred the concept of feudalism in his works, his position was essentially in defense of the Asiatic mode, which was avoided during the Stalinist regime.

In the same year as Tyumenev's 1957 article, Wittfogel offers a similar portrayal of a despotic state exploiting an oppressed population in order to irrigate massive river systems in his work *Oriental Despotism: A Comparative Study of Total Power*. Whereas Wittfogel (1967, xxxiv) considers himself to be "a good Communist and a good Marxist" when he defended the Asiatic mode back in 1931, he thereafter became critical of Marx's inconsistency concerning the Asiatic mode as well as the rise of totalitarian communist regimes. In terms of Marx, Wittfogel (1967, xxvii–xxix, 369–89) asserts in his foreword that Marx situated the Asiatic mode in an

29. Note that Dunn mistakenly dates this article to 1967 in his discussion here, though it is correct in his note. On the notion of two distinct kinds of slaveholding societies, he (1982, 72) offers the following insights:

> It is traditional in Marxist discourse to limit the concept of 'fully developed slaveholding society' to situations where the bulk of the exploited persons are members of ethnically alien groups and/or prisoners of war and their children. It was precisely on this basis that Eastern society was declared (by Struve and a number of other authors of standard Soviet textbooks on ancient history) to be characterized by an immature form of slaveholding. This limitation of the concept of slaveholding of course flows out of – or, to put it another way, presupposes – a sharp conceptual distinction between slave and free status, such as actually existed, for example, in Periclean Athens or the Roman Republic. Tiumenev mounts a frontal attack on this idea, in the course of which he extends the category of 'slave' to almost the entire population of the despotic states of the ancient East. The corollary of this is of course that, where everyone is a slave (except perhaps the ruler) no one is a slave in any real sense. A critic, working at twenty years' temporal distance, and at a spatial distance of half the circumference of the world from the original author, is tempted to conclude that Tiumenev was here striving to retain the verbal form of the concept of slaveholding society, while completely changing its content. There seems to be no doubt that this was the actual effect of his article.

apparently unilinear chronological progression prior to the slaveholding mode, despite his own recognition elsewhere that it was a developmentally separate and stagnant mode. Rather than utilize Marx's Asiatic mode as his own classification, Wittfogel prefers instead "hydraulic society," "Oriental society," or "Oriental despotism" (Aubet 2013, 14; Eisenstadt 1958:435). As for the emerging regimes, he (1967, xxxiv–xxxvii, 377–411) is critical of how Lenin and particularly Stalin challenged and stifled the debate on the Asiatic mode. Moreover, Wittfogel (1967, xxii–xxvii) discusses the Soviet Union in particular as an "Asiatic restoration"—that is, a return to the despotism of the historic Asiatic societies. Since its publication, this work has sharply divided critics and followers, and it played a crucial role in reigniting the debate about the Asiatic mode in the 1960s (see Treadgold 1987, 10). For Struve and Diakonoff, direct interaction with this text was largely avoided, though they were nevertheless impacted by it to some extent. For example, Krikh (2015a, 272–76) makes the case that Diakonoff's vivid descriptions of the despotic rule Ur III often hint at his suppressed views of the Soviet Union.

During the mid-1950s to early 1960s, Struve was polemical with Tyumenev and especially Diakonoff. [30] His polemics with Diakonoff carried on for several years, and their contentious relationship played a significant role in Diakonoff's denials of membership in the academy.[31] While it has been demonstrated that Diakonoff shared Struve's method of defining slaves according to their economic conditions, he sharply disagreed with Struve about the Mesopotamian land-tenure system, particularly in the south, both with regard to understanding terminology and large-scale divisions of ownership (see Krikh 2015a, 263; 2015b, 384; 2016b,

30. See, for example, Struve's review of Tyumenev's 1954 article, which is discussed in Krikh 2017a, 781–93.

31. Krikh (2016b, 1016–17, 1023) notes that their conflict was more severe than that which Struve ever had with Nikolsky or Tyumenev, though Struve formerly thought well of Diakonoff.

1017–18). Although Struve and Tyumenev both followed Deimel's "temple economy" position, Diakonoff proposed what is sometimes referred to as the "two-sector model" (Schloen 2001, 189), meaning that arable land was mainly owned by two sectors: (1) the temple and royal household versus (2) self-governed communities.

Diakonoff's two-sector model, which he developed over roughly two decades and which builds on Nikolsky's understanding of free communal peasants (see Diakonoff 1964, 35), is presented in his 1959 book on society and the state in ancient Mesopotamia. In his 1969 English summary of this book,[32] Diakonoff challenges Deimel's assertion that temple households managed all the arable land before contrasting the two sectors. In terms of the self-governed communities, their lands were individually owned or "alienable" (Diakonoff 1969c, 178) by "extended patriarchal families" organized as "family communes," which together formed "patriarchal clans and rural communities" that belonged to larger "'nomes', or city states, the latter being the primary cells within which the state was created" (Diakonoff 1969c, 179). These communes and nomes were governed by popular and elder assemblies, which exercised broad authority over the communal lands as a whole, though families, especially the patriarchs, could generally use or dispose of their lands (see Diakonoff 1969c, 177–79).[33] Such communities

32. An additional and expanded summary is available in Diakonoff 1974b.

33. It is admittedly difficult to understand Diakonoff's system of land tenure, considering that at times he seems to suggest that land was communally owned versus individually owned by families and individuals. In his collaborative work *Early Antiquity*, he (1991, 35) states: "At the time when the earliest class society was born, the role of the tribal union passed to the territorial community (village or city), which was a group of neighboring household communes that had the land and water more or less at their common disposal." This "common disposal" seems to diminish over time: "The supreme proprietor of the lands of the second sector was the territorial community, but the lands were held by extended-family households; that is, communes headed by their patriarchs" (Diakonoff 1991, 38). Such communal ownership seems to have declined more so by the Old Babylonian period, concerning which Diakonoff (1969c, 198) elaborates:

> Outside the royal estates land belonged unconditionally to community members, being virtually in their private ownership (*eqlum dūrum*, "eternal land"); neither the community nor the royal administration interfered with a community member's right to possess, use and dispose of his "eternal land", including his right to sell it, as long as he paid his taxes and performed his duties to the king and the community. But it was only within the bounds of the patriarchal family that he could exercise his right to bequeath.

existed alongside the development of temple households and even managed temple lands at the beginning of the Early Dynastic period, according to Tyumenev, before the formation of the numerous dependent temple personnel.[34] As for the temple households, Diakonoff (1969c, 179) explains that their personnel were governed by a few administrators that parceled out land "by an arbitrary decision" to some, whereas others received just rations—similar dynamics also obtained for royal households in certain periods. Based on this bifurcation of land tenure, he (1969c, 173–80) posits that everyone in the society throughout its history either were dependent on a temple or the ruler for land and resources or were free citizens with a share in communal land. Beyond this simple bifurcation he (1969c, 180) outlines the following categories of the population:

> Thus, the population of a Sumerian "city-state" consisted of (l) the aristocracy of the communities (members of the administration, including the prince and the more important priests) owning large estates partly in private, partly in family possession, and probably using the labour of clients and slaves; the temple land was also under their control, although in time it passed under the individual control of the prince and later became his property; it was probably this aristocracy whom the Council of Elders, whose existence is confirmed by documents, represented; (2) rank-and-file members of the communities (probably not less than half of the population) having plots of community land in family possession; they were probably represented by the Popular Assembly, which will be dwelt upon below; (3) clients, including (a) well-to-do clients of the temple (the temple administration, the more important of the artisans, etc.); (b) other clients of the temple — the great mass of the temple personnel; they got small plots of temple land and rations in kind for their service; some of them got only food and wool rations; probably also (c) clients of the aristocracy. Clients were former community members (refugees from other communities, junior kinsmen, etc.); (4) slaves, including (a) slaves of the temple, whose position differed but slightly from that of the lower categories of clients; (b) privately-owned slaves; both categories were not yet numerous.

Nevertheless, the territorial community remains the supreme proprietor, such that private ownership can be overridden in certain cases (see Diakonoff 1972, 45; 1974a, 51).

34. Diakonoff (1964, 35) clarifies that these communes were not remnants of the primitive communes but rather developed as "a consequence of the laws of the economics of slaveholding society itself or, to be more exact, of those of a subsistence economy."

The rest of his summary focuses on the rise of despotism based on the argument that Sumer was not originally despotic due to its self-governing communities. Instead, despotism emerged first to some extent under the Sargonic dynasty and then to a fuller degree under the Ur III dynasty.

Over the course of this development, he traces the evolution of productive work. At the beginning of the Early Dynastic period, productive work was largely carried out by free citizens and household personnel, but wealth disparity and slavery were also increasing. Under the Sargonic dynasty, in response to the numerous revolts, he states that household personnel only received rations rather than land parcels and were essentially equivalent to slaves. During the Ur III period, given the king's "absolute property right to all temple and state land," Diakonoff (1969c, 194) acknowledges the absence of evidence for the sale of "private plots inside the communities," though he considers them to still be existent. At this point, he (1969c, 194–95) elaborates on the productive workforce, referring to previous work on the meanings of guruš and geme$_2$. Although many of the guruš were descendants of temple personnel, they were essentially slaves and had to be repopulated by prisoners of war in order to sustain the inefficient and strained "enormous slave-holding estates of a pseudo-latifundium type" (Diakonoff 1969c, 196).[35] The last period he considers in detail is the Old Babylonian, concerning which he (1969c, 197–202) identifies *awīlum* as free individuals and *muškēnum* as household dependents, before concluding that throughout all these periods the predominantly exploited class was the slaves, including household dependents.[36]

During the 1960s there were several impactful, mainly Soviet, conferences that contributed to the revival of the Asiatic mode as well as to the emerging international debate

35. For a further discussion on the inefficiency of slaveholding households, see Diakonoff 1964, 32–33.

36. A similar position acknowledging Diakonoff's perspective is given in Speiser 1958. For reviews of scholarship on the *muškēnum*, including Diakonoff's position, see Klíma 1974; von Dassow 2014.

about social stratification in the Ur III period. In 1960, the Twenty-Fifth International Congress of Orientalists was held in Moscow. Due to growing political tensions between the Chinese and the Soviets, the Chinese delegation was notably absent (see MacFarquhar 1960).[37] As these tensions remained for years, the political significance of the Asiatic mode once again played a vital role in its debate. Whereas the Chinese delegation was absent at this 1960 conference, Ignace Gelb was in attendance and gave a presentation titled "Social Stratification in the Old Akkadian Period." In his presentation, he defended a patrimonial model and, like Diakonoff, challenged Deimel's "temple economy."[38] As such, Gelb (1962) delineated three classes of individuals, including free household owners and their relatives, semi-free household dependents likened to serfs due to their ration-based provision, and slaves defined by their salability. Following this presentation, Gelb developed a more personal and friendly relationship with Diakonoff, especially due to the latter's time at the University of Chicago in 1963, though they would proceed to thoroughly dispute the natures of serfdom and slavery in the Ur III period (see 2.2.4. The Gelb-Diakonoff Controversy). About twenty years later, Gelb (1980, 29) reflects on how this paper was the catalyst in his shift toward socioeconomic history. At his AOS presidential address in 1966, this shift is readily apparent in his (1967, 1) opening words: "History is not simply the history of kings or political history. There is a tremendous, untapped field—the social and economic history of ancient times. There is no reason why the field should be considered the reserved domain of Marxist scholars." His emerging interest in socioeconomic

37. For some background on Sino-Soviet relations under Khrushchev, see Kenez 2006, 207–8.

38. On Diakonoff and Gelb's agreement, Lamberg-Karlovsky (1976, 65) comments: "independently, and almost simultaneously, the Leningrad orientalist Diakonoff, and the Chicago Assyriologist Gelb, showed that the Sumerian economy was not entirely controlled by the temple or state sector of the economy." The near-simultaneous publications (in English, at least) Lamberg-Karlovsky is describing are probably Diakonoff 1954 and Gelb 1957 (see Goddeeris 2002, 355). Other related references are given in Diakonoff 1971, 15 n. 1. Whereas a brief mention of communally or privately owned land is made in Gelb 1957, 94, a fuller treatment is provided in Gelb 1971.

history probably developed to some extent in the context of the growing scholarly interest in social history in the 1960s (see Fleming 2014).

Additional Soviet conferences that revived the Asiatic mode include one held in Leningrad in 1962, during which the Asiatic mode was preferred over the slaveholding mode for the ancient Near East (see Liverani 2016, 145), and the Seventh International Congress of Anthropology and Ethnography in 1964 for which Struve wrote but did not present one of his final publications, "The Concept of the 'Asian Mode of Production'" (see Treadgold 1987, 10–11). The paper begins with an acknowledgement that Soviet scholars have rejected this mode for decades, without drawing attention to his own past work, though its Marxian origin is finally receiving due attention thanks to French Marxists at the conference, who also did not present their papers.[39] Based on his understanding of Marx, Struve (1965, 42) then argues that the Asiatic mode is a "transitional stage from primitive communism to class society" based on "the presence of particular conditions," such as the need for communal irrigation of river systems like those throughout Asia. As a transitional stage, the mode does not indicate stagnation but rather development from primitive communism to a class society. In the case of Sumer, which he considers here to be demonstrative of the Asiatic mode, collective slavery is substantial, though privately owned slaves are limited. In order to reconcile the presence of collective slavery prior to the slaveholding mode, he (1965, 44) then claims that Lenin built upon Marx in his "The State" by combining the Asiatic and slaveholding modes into one "period of slavery" as "the first stage in class history," which does not appear to reflect Lenin's lecture carefully. Ironically, Struve seems to include Lenin's "The State" as authoritative even though Lenin (1971, 267) based his concept of slavery in it on Roman law rather than on economic conditions. Following

39. Several French Marxist articles published in 1964 in the journal *La Pensée* were also a turning point for the revival of the Asiatic mode in the Soviet Union (see Diakonoff and Kohl 1991, 9).

this, Struve (1965, 44) proceeds to argue that Marx considered the Asiatic, slaveholding, and feudal modes to "not appear simultaneously, but during successive stages." In this move, Struve (1965, 41–45) seems to conflate Lenin and Marx, such that the Asiatic mode precedes the slaveholding mode, which together form one broader historic period. Accordingly, ancient Egypt and Sumer emerge as the earliest class societies based on the Asiatic mode and from which Greece and Rome evolved as slaveholding societies. This evolution is also the case for Sumer, which became an "advanced slaveholding society" (Struve 1965, 45) by the Ur III period. In so doing, Struve manages to connect his work to the reemergence of the Asiatic mode despite his past rejection of it. Moreover, his view that the Asiatic mode occurred between the primitive communism and slaveholding modes was essentially adopted more broadly by Soviet scholars in subsequent conferences in 1964 and 1965, though it remained disputed for decades (see Treadgold 1987, 11–17).[40]

Whereas the Asiatic mode was heavily featured in these Soviet conferences, Diakonoff's two-sector model gained further international attention in 1965 at the Third International Conference of Economic History in Munich. Although he covers a much broader scope in his paper, he presents essentially the same arguments as his 1959 book summarized above.[41] The most important features reiterated here are his arguments concerning serfdom versus slavery. First, he (1969b, 18–19) argues against classifying dependent workers that were legally free as serfs, because of their distinctions from medieval serfs who owned some of their means of production. Second, given his (1969b, 19) understanding that the guruš were "economically indistinguishable from slaves," or "quasi-slaves," he concludes that the slaveholding mode is

40. For an Assyriological refutation of the Asiatic mode, see Komoróczy 1978.

41. A summary is given in Desrochers 1974, 4.

applicable. Although he considers the free population to be "the quantitatively dominating type of producer," Diakonoff (1969b, 20) also maintains that "the existence of an antagonism between the class of slave-owners and the class of slaves left its impact upon the whole structure of society and the entire social life," as exemplified in the pledging or forfeiting of wives and children. While his paper received some minor challenges from Oppenheim (1969), Diakonoff's positions on serfdom versus slavery later became the center of his decade-long debate with Gelb.

2.2.4. The Gelb-Diakonoff Controversy

Over the course of a decade or so, the distinctions between serfdom and slavery, especially with regard to the Ur III period, were rigorously contested by Diakonoff and Gelb (known as the "Gelb-Diakonoff controversy" [Steinkeller 1987, 74]). While Diakonoff's understanding of these distinctions up to the 1960s has been thoroughly treated, his (1971, 20) description of the despotic nature of the Ur III dynasty and the working conditions of the guruš is particularly vivid and perhaps revealing of his suppressed views of the Stalinist regime:

> During the reign of the IIIrd Dynasty of Ur the activities of the city community and the private sector of the country's economy were greatly hampered by the royal sector. The existing conditions were at the time those of complete domination of the state by a despotic bureaucratic machinery under whose supervision the guruš worked incessantly from sunrise to sunset, without holidays or feastdays, receiving scanty rations, with a resulting high mortality rate. This system was extended not only to agriculture but also to handicrafts, not excluding the stone-cutter's art, cf. the standardized glyptics of the time, with cylinder-seals looking as if machine-made on a conveyor belt: under such conditions no producers for the market outside of the state sector could exist who were in a position to compete with the huge royal handicraft shops and the gigantic royal pseudo-latifundia; the excess produce of the royal estate was, of course, exported and sold by the royal dam-gàr; thus, both industry and trade, except perhaps those catering for the immediate small household needs, were the monopoly of the despotic state. It is curious to note that the state of the IIIrd Dynasty of Ur, one of the worst totalitarian régimes known to history, is so often idealized by some scholars; perhaps they are fascinated by the exemplarily [*sic*] police order which was prevalent under the kings of Ur.

As for the start of the frequent back-and-forth between Diakonoff and Gelb, it can be seen in the 1972 proceedings of the 1970 RAI focusing on social classes.

Gelb's paper "From Freedom to Slavery," read just prior to Diakonoff's, begins with the position that serfs and slaves both performed dependent work.[42] He then argues for distinguishing between serfs and slaves according to their functions rather than the terminology, noting that serfs, being native and semi-free,[43] conscripted for part-time or full-time productive work, which was the main source of work, and that slaves, being foreign and unfree, were conscripted for full-time service work, which was mainly limited domestic work. Besides serfs and slaves, there were also an insignificant number of free peasants, generally "small landholders, craftsmen, and hired labor," (Gelb 1972a, 83)[44] engaged in independent work as well as a small and unproductive upper class, the "so-called 'leisure classes'" (Gelb 1972a, 83), including merchants, the nobility, and priests. Following this, he (1972a, 84) outlines five general sources of dependent work: "1. Subject *ethnos*, 2. foreign piracy slavery, 3. houseborn slavery, 4. native impoverished classes, and 5. foreign prisoners of war." In terms of Mesopotamia, slaves either originated from piracy or impoverishment—in the latter case, such enslavement was temporary and included more legal protections because impoverished natives

42. Gelb (1979a, 293) later acknowledges that the term "serf" was used "for convenience rather than from persuasion." For example, in his treatment on the "ration system," he (1965, 240) writes: "Standard rations were issued mainly to a social class which I have called 'serfs' for a number of years, but prefer now to call 'the *guruš* class.' The term 'serfs' should be avoided because of its definite connotation in connection with medieval feudal systems."

43. Concerning an essential difference between free and semi-free individuals, Gelb (1965, 230) states: The fact is that there is as much difference in meaning between rations and wages as there is between *še-ba* and *á*, and between the semi-free class of workers, forced to perform labor for which they receive rations, and the free class of workers offering their services in hire. And the fact is that the only system dominating the picture of early Mesopotamian economic history is that of a semi-free class of laborers receiving *še-ba* "rations," and it was not until the later stage of the Ur III period, but mainly from the Old Babylonian on, that the rise of free laborers, offering their services as *lú-ḫun-gá*, "hirelings," brought about a radical change in the economic and social system of the country, and with it the institution of *á*, "wages."

44. Gelb (1965, 241), for example, translates engar as such free "'peasants.'"

could not be permanently enslaved. As for Mesopotamian serfs, they stemmed from impoverishment and prisoners of war, since temples provided protection for the impoverished in exchange for work and since prisoners of war could not be managed by the state long-term as slaves—many captive men were killed accordingly.[45] Much of his argument is summarized in a table comparing serfs and slaves according to a variety of economic, legal, and personal features (see Table 2.1). He is challenged, though, by the "so-called 'gemé-dumu texts,'" which he (1972a, 88) thinks list either women (with unmentioned serf husbands) and their children or independent (prisoners of war or impoverished) women and their children.[46] His (1972a, 84) paper ends with an analysis of the development of various kinds of communities and economic systems, concluding that Ur III society was an "*oikos* community" in which there were either two or three classes, depending on economic and legal distinctions. In economic terms, there were ruling and dependent classes, whereas legally there were free, semi-free, and unfree classes (see Gelb 1972a, 84–92).

In his paper "Socio-Economic Classes in Babylonia and the Babylonian Concept of Social Stratification," Diakonoff (1972, 41) starts with acknowledging the following approaches to establishing social classes:

> We may either establish the groups into which the ancients themselves subdivided their own society, or else we may find out how it was structured according to modern notions, by applying to it our own definition of what socio-economic classes are as conceived by modern historico-economic science. Both approaches are entirely lawful; but the first elucidates mainly the ideational situation in the society under discussion, while the second makes clear the objective group relations in the socio-economic sphere. Both approaches

45. For a detailed study of prisoners of war, see Gelb 1973. To the credit of the early socioeconomic studies by Soviet scholars, Gelb (1973, 90) comments: "With the exception of some Marxist scholars, such as Struve 1934 in Diakonoff 1969, p. 52, the demographic information which can be derived from the texts listing the living, dead, sick, and fugitive personnel of a household has hardly been utilized by Western scholars." Although Gelb (1973, 90–96; 1979b, 11–12) considers the main workforce of temple households to be impoverished natives and that of the royal household to be foreign prisoners of war, he acknowledges that both kinds of public households had diverse workforces.

46. For further discussion of these texts, see Gelb 1972b.

> are thus necessary for a complete evaluation of the social situation which, of course, is in any case shaped also by the predominating ideas, although the determining background is the conditions of material existence.[47]

As for categorizing social classes according to a Marxist approach, Diakonoff (1972, 42) considers access to property with regard to means of production, roles in organized work, and the ability to accumulate a portion of "public wealth." Following this he (1972, 43) proceeds to differentiate the state as well as "'communal-and-private'" sectors. In the state sector, the work was extracted "by extra-economic means of coercion" (by ideology and physical force) from slavelike individuals "devoid of property in means of production (at least in that particular economy)" (Diakonoff 1972, 43). He (1972, 43) adds, however, that these individuals still possessed some legal rights and that they were "under the patriarchal authority of the king or the temple" due to impoverishment or to commitment by their community to "fulfill the necessary public work of maintaining the temple estate." Overall, he (1972, 45) bifurcates Babylonian society during the third and early second millennia according to "persons devoid of property in means of production (which was the case with the royal and temple servants — and also with slaves), and persons partaking in property in means of production, namely the citizens, i.e. members of communities outside of the state sector." In terms of slaves, he argues that they were generally prisoners of war, particularly women, whereas the men were mostly executed, and the children were treated like other dependents of the state sector. Diakonoff (1972, 46) then proceeds to highlight terminological dichotomies: *bēlum* ("'person in possession of patriarchal authority'") versus *wardum* ("'person under the patriarchal authority of another'") as well as (*mār*) *awīlum* ("'person partaking in communal property (= citizen in possession of all civil rights)'") versus *muškēnum* ("'person under perpetual patriarchal authority and thus not having

47. A helpful summary of this paper is provided in Desrochers 1974, 4–5.

property of his own, except conditional holdings etc. (= royal servants or labourers)'"). He (1972, 48) proceeds to identify three social classes: (1) a class coercing the work of others, including both sectors, known as the "slave-owners, or the ancient upper class,"[48] (2) a class subsisting on its own work, primarily in the communal-and-private sector, considered to be "the ancient labouring freemen," and (3) a class whose work is coerced in both sectors, designated as "the ancient slave-type dependent person."

Although Diakonoff was absent, his paper was read on his behalf, and some of the reactions were recorded (see Diakonoff 1972, 49–52), including Gelb's. Some of his critiques involve his (1965, 241) assertion that many of the state-sector dependents were only conscripted for four to five months a year, that there was no appreciable communal sector during the Ur III period,[49] and that Diakonoff's third class should be subdivided into serfs and slaves. In response, Diakonoff notes that while some state-sector dependents received land allocations, they were conditional, being another form of rations. Moreover, he disagrees with this argument in terms of the Early Dynastic evidence based on Tyumenev's work. As for Gelb's use of serfs, Diakonoff (1972, 52) proposes "helots" since they "belonged to the state." He also defends the existence of the communal sector in the Ur III period, claiming that while the sale of such lands was not permitted, they persisted into the Old Babylonian period and beyond.

A few years later in his 1974 article "Slaves, Helots and Serfs in Early Antiquity," Diakonoff addresses differing conceptions of property held by himself and Gelb. According to the Russian language, originating from Roman law via German, Diakonoff (1974a, 51 n. 18)

48. In terms of such individuals, Diakonoff (1991, 35) notes that they are not necessarily the most successful and rational managers of cooperative work for the common benefit of society but rather militarily or ideologically capable of controlling society for their own benefits.

49. For rebuttals, see Diakonoff 1985, 1996.

conceives of property as "an absolute (economic and legal) possibility of the proprietor to exclude, at his own will and in his own interest, any non-proprietor from possession, use and disposal of the object." Diakonoff (1974a, 51 n. 18) considers Gelb to be operating from the English sense of property described as "«possibility, ensured by the state, to exclude the non-proprietor from any kind of use or enjoyment of the object otherwise than with the consent of the proprietor, which may be withheld except at a price».… including also «leasehold», which since the 16th century is regarded as «personal property», although not as «real property»." According to these differences, he asserts that individuals he classifies as slaves and helots, "Type I" and "Type II" (Diakonoff 1974a, 55), respectively, did not own any "real property" and that "without conditions of tenure being stipulated by any formal agreement" the helots cannot even be considered to have "personal property" (Diakonoff 1974a, 51 n. 18). Instead, any land use permitted to such individuals is comparable to a Roman *peculium*, defined by the Classicist Moses Finley (1985, 64) as "property (in whatever form) assigned for use, management, and, within limits, disposal to someone who in law lacked the right of property, either a slave or someone in *patria potestas*." Following this line of argumentation, Diakonoff acknowledges that while Gelb is right about legal distinctions between slaves and "serfs," the use of the feudal term "serf" is fraught with issues. As such, Diakonoff asserts that while the slaveholder class coerced helots and slaves by extra-economic means, feudal serfs are otherwise economically independent to some extent. Thus, he states that a slave was "the optimal object of exploitation in ancient societies" (Diakonoff 1974a, 55), though they could not be managed on a large scale in ancient Mesopotamia. Since it was more feasible to exploit helots with marginally better living conditions at times, Diakonoff (1974a, 67 [italics his]) concludes that they "*are the equivalent to patriarchal slaves in the framework of state property*."

In order to compare these two categories of slavelike individuals, Diakonoff presents a table based on Gelb's paper "From Freedom to Slavery," which is consolidated with his in Table 2.1.[50]

Table 2.1. Overview of the Gelb-Diakonoff Controversy

	Diakonoff (1974a, 58–59)			**Gelb (1972a, 87)**		
	Features	**Type I (Slaves)**	**Type II (Helots)**	**Features**	**Slaves**	**Serfs**
Economic features	1. Character of exploitation	extra-economic*	extra-economic*	N/A	N/A	N/A
	2. Property in means of production	no	no*	16. Means of Production	no	yes
	3. Sources	"piracy"	impoverishment and "piracy"*	7. Sources	piracy	impoverished classes
	4. Utilization	in domestic production*	in production	14. Utilization	domestic service	production
	5. Ways of supplying subsistence and lodging	supplied by the master (food – in the form of rations)	supplied by the master* (food – in the form of rations or conditional tenure of allotted parcels)	11. Subsistence	yes	yes, when employed
				13. Lodging	yes	yes, when employed
	6. Duration of service for the master	full time	full time (or part-time)*	15. Duration of Service	full-time	part- (or full-)time
	7. Place of labour	mainly in small private economies, and in a minor percentage also on palace and temple estates	on palace and temple estates*	12. Place of Labor	in the city	in the country
	8. [Number	minor	major]*	19. Number[51]	minor	major
	9. [Professional Designation	no	yes]*	5. Professions	no	yes

50. Note that the table is arranged according to Diaknoff's scheme, thereby rearranging Gelb's, which is explicitly organized according to broader themes. Nearly every detail of the original tables is reproduced here, including Diakonoff's asterisks, which refer to his subsequent comments, though Diakonoff's section on terminology is shortened to include only Akkadian and Sumerian. Gelb's categories "2. Special Names" and "20. Miscellaneous" are also omitted because they lack any details or corresponding treatment by Diakonoff.

51. For a later study on textual evidence for the prevalence of slavery versus serfdom, see Gelb 1976.

Diakonoff (1974a, 58–59)					Gelb (1972a, 87)		
Features		**Type I (Slaves)**		**Type II (Helots)**	**Features**	**Slaves**	**Serfs**
Legal features	10. [Alienability	yes		no or seldom]*	8. Salability	yes	no
	11. Freedom of movement	no		[no (they are bound to the soil)]*	10. Immobility	yes	yes (*glebae adscripti*)
	12. Emancipation	rare, Sumerian term duḫ, du$_8$*		rare; Sumerian term šu-bar	17. Manumission (Freeing)	du$_8$, ama-ar-gi$_4$	šu-bar
	13. Legal rights	limited		subject change(?)*	18. Legal rights	minor	major
Features relating to mores	14. Ethnic origin	foreigners		partly foreigners	6. Ethnic Origin	foreign	native
	15. Branding	yes		no or seldom	9. Marking, Branding	yes	no
	16. Family life	no		yes (not always)*	4. Family Life	no	yes
	17. Patronymics	no		seldom used*	3. Patronymics	no	yes
	18. Designated by the terms	Sum.	m. urdu (also saĝ «head»), f. ĝemé	m. lú-si etc. (Šuruppak), igi-nu-duḫ, šub-lugal, etc. (Lagaš), guruš (IIIrd Dyn. Ur) f. ĝemé	1. Special Terms	arád, gemé, sag, etc.	guruš, gemé, erín, etc.
		Akkad.	m. *wardum* f. *amtum*	*muškēnum*, *nāši biltim*			

From these consolidated tables, it is apparent that there are both significant qualitative and quantitative discrepancies between Diakonoff and Gelb. In terms of a few qualitative differences, they disagree about whether extra-economic exploitation is relevant or not, whether the serfs or helots could own or possess means of production, and whether "domestic production" is any different than "domestic service" (see Diakonoff 1974a, 61). Additionally, they do not equally define the sources of such individuals, since Diakonoff (1974a, 60) uses "piracy" when he means prisoners of war and since Gelb's table indicates that serfs are impoverished natives despite his view that prisoners of war could become serfs after they are initially treated as slaves (see Gelb 1973, 95–96; 1976, 195). As for some of the quantitative differences, Diakonoff considers most helots to have been conscripted full-time for the state, whereas Gelb considers the serfs'

conscription to be mainly part-time. Moreover, while Diakonoff accounts for possible exceptions, Gelb tends to be more binary, as seen in their categories concerning alienability or salability, branding, family life, and patronymics, for example.

Following this extensive treatment, both Diakonoff and especially Gelb offered further insights and clarifications to buttress their positions in the mid- to late 1970s. In 1974, Diakonoff summarizes many of his prevailing views on the two-sector model at the sixth International Congress on Economic History in Copenhagen. One notable innovation in that summary is his (1975, 124) succinct discussion on freedom as follows:

> What is to be termed 'liberties', or 'freedom' in the framework of the different ancient Oriental societies, is a moot question, and it would be useful to dwell upon it in our discussion. It seems to me that, as regards ancient Western Asia, a freeman was 1) a man not liable to slave-type exploitation (the latter meaning, as a minimum, deprivation of property in all means of production), 2) a man able, under favourable conditions, to avail himself of the labour of other persons; and 3) a man who had the opportunity to wield economic power over means of production and, first of all, over land, this economic power being based on one of two legal titles: i.e., allowing him either to take part in the communal proprietorship in land, or to hold an of an allotment of state land on condition of service; 4) a fully free citizen had also the right to take part in the self-government of the community.

A further criterion Diakonoff (1975, 124) adds thereafter is the tax liability, "in kind and in work, and also a 'tax in blood', i.e. military service," incumbent upon free individuals but not the slavelike class, though they nevertheless could be exploited to ease such taxes.

Gelb's 1979 article offers a broad survey on the many challenges of strictly defining slaves and serfs. In his treatment of Marxist approaches, including the use of the Asiatic mode, he (1979a, 290) notes that exploitation of the general population is often described as "patriarchal slavery," among other classifications, such as "'*Kollektivsklaverei*' … 'underdeveloped slavery' … '*esclavage généralisé*,'" to which he strongly objects. Considering that he (1979a, 290) relates patriarchal slavery to "'household slavery,'" it cannot be used to

describe the productive work of the general population, which he characterizes as serfdom. As such, he (1979a, 291) offers the following proposal:

> Since I know that the term "serf", which I have been using with some hesitation for the productive labor of the Ancient Near East, etc., is objectionable to some Marxist scholars because of its obvious association with the medieval, feudal world, I would welcome almost any other term as more appropriate than the outdated "patriarchal."

In his final pages, Gelb (1979a, 294) emphasizes his distinctions between the kinds of work in which serfs and slaves engaged, as seen below:

> Unfree chattel *slaves*, foreign born, without family life, without means of production, employed full-time mainly in *service type of labor* in "primitive societies" and, mainly in private sector, in Ancient Near East, Mycenaean and Homeric Gree, later Spart, etc. India, China, etc., but mainly in *productive type of labor* in Athens, Rome, and Americas.
>
> Semi-free *serfs* (Mesopotamian *guruš*, Spartan helots, etc.), native born, with family life and with means of production or without family life and without means of production, employed part-time or full time mainly in *productive type of labor*, mainly in public sector, in Ancient Near East, Mycenaean and Homeric Greece, later Spart, etc., India, China, etc., but not in Athens, Rome, and Americas.

Gelb's emphasis on work distinctions, however, did not resolve his differences with Diakonoff, especially since Diakonoff had already insisted that slaves were likewise productive, albeit in domestic contexts.

In the same year Gelb's extensive paper "Household and Family in Early Mesopotamia" was published, which outlines his understanding of private versus public households and their personnel. In terms of the latter, such as the royal household and especially temple households, Gelb (1979b, 22) divides the personnel into four classes (not strictly social classes):

> 1) ab-ba-ab-ba, "elders", who constitute the official class, the hierarchy of the household,
>
> 2) engar nu-banda gud, "chiefs of plow teams and overseers of plow animals", who are supervisors of agricultural activities,
>
> 3) erín, "workers/soldiers", the settlers or colonists, who are involved in agricultural activities in time of peace and in military operations in time of war,
>
> 4) miscellaneous personnel, who are involved primarily in various crafts, professions, and occupations that are extraneous to agriculture.

In terms of the miscellaneous personnel, he adds that many of the men were likely married and provided for their unmentioned wives and children. As for women and children, in addition to certain men without familial support, that are counted among such personnel, he (1979b, 23) recognizes them as various "rejects of the society," such as "widows, old people, especially old women, sterile and childless women, cripples, especially the blind and the deaf, beggars and vagabonds, prostitutes, fatherless children, orphans, bastards, foundlings, and the ex-voto personnel." Following this, Gelb (1979b, 23–24) presents a more general outline of a public household's personnel with summaries of their social conditions:

1) Officials and supervisors
   - lead a full family life
   - work full-time for the household
   - have means of production in land
   - may receive additional rations.
2) Craftsmen and persons with various occupations
   - lead a full family life
   - if they have means of production in land, they work only part-time for the household, during which time they receive rations
   - if they have no means of production in land, they work full-time for the household and receive rations throughout the year.
3) Workers/soldiers (settlers, colonists)
   - lead a full family life
   - have means of production in land
   - work part-time for the household, during which time they receive rations.
4) Women and children without family and other "rejects of the society"
   - have no family life
   - work full-time for the household
   - have no means of production
   - receive rations throughout the year.

Despite Gelb's recognition here that eren$_2$ were mainly conscripted part-time and otherwise possessed land parcels, he does not view them as a distinct social class.[52] Moreover, he does not

52. A few years later, with regard to the allotment of land parcels, Gelb (1980, 32) explicates accordingly: Deimel gathered and transliterated a number of Pre-Sargonic texts from Lagash which bear upon the yearly allotment of land for prebend and rent purposes. What Deimel did not explain, and I did not understand, was the reason why not one large plot of land, but several small plots of land lying in different areas were allotted to one and the same individual. The explanation occurred to me only when I read that in medieval England, fields were allotted in such a way that each individual received a just apportionment of 1) dry land on the

count them as the part-time conscription subset of the second category, though they seem otherwise quite fitting.

In the 1980s, the back-and-forth between Diakonoff and Gelb came to an end with a few final treatments. In Diakonoff's 1982 *Festschrift*, Gelb contributes a detailed lexical discussion on slave terminology. While his chapter is rather unpolemical, Gelb (1982, 93) utilizes his standard serf-versus-slave distinctions, noting that geme$_2$ is used for both, which he supports with the "medieval Latin *servus* meaning both 'slave' and 'serf'." Moreover, he (1982, 92) offers the following understanding of dependent versus independent women:

> The term gemé denotes not women, generally, but women of dependent classes, specifically, as gemé is usually sharply distinguished from the term SAL used for women of independent classes. Note especially the crucial difference between é-SAL, the household of free, independent women, such as the household of the wife of the ruler of Lagaš, on the one hand, and é-gemé; "women's quarters", frequently serving as an *ergasterion*, a workshop of dependent labor.

He also addresses the fluidity of the terms arad$_2$ and geme$_2$, demonstrating that even high-ranking individuals, or the king himself with respect to his personal deity, could be called slaves. As such, Gelb (1982, 93) offers the following noteworthy analysis:

> Two similar texts, UET III 1047 and 1049, are ration lists for large numbers of gemé-arád in the household of Karzida (part of Ur), including guruš "men", gemé "women", and dumu "children"; some of the men are qualified as šà-gud "oxen-driver", uku-uš "gendarme", and NUN.ME.TAG "artisan", some of the women appear as gemé šu-gi$_4$ "old woman", gemé sag-dub-ba "head women", gemé á-½ "woman working half-time", gemé ḪAR.ḪAR "woman miller". All these qualifications are never used with chattel slaves, but are normal for serfs. The only conclusions possible for the use of gemé-arád at Ur are therefore: 1) That the gemé-arád of Ur are not chattel slaves, but serfs, and 2) that the serfs of Ur were called slaves because they were under the controlling agency of the crown.

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heath for his stock, 2) tillable land at the foot of the heath, and 3) wet grassland by the river for hay and summer grazing. It was nothing but icing to learn that among the Incas as well the allotted parcels were often scattered …. In later years, I found much new evidence for similar practices in allotting land in several plots classified as good, bad, and middling in other areas where cooperative or village economy flourished.

As is seen in this last work of Gelb discussed here, his positions remained unchanged overall, though furnished with more evidence and reflection. The same entrenchment is apparent in Diakonoff's brief 1987 reflection on this ongoing dispute, which stresses the differing economic and legal frameworks, such as Diakonoff's Roman versus Gelb's Anglo-Saxon, within which they operate. As such, the Gelb-Diakonoff controversy prompted several rigorous defenses of the opposing approaches but without any resolution. Instead, both approaches have gained further support over the course of the following decades.

2.2.5. The Final Years of the Soviet Union and the Aftermath

In the final years of the Soviet Union, Diakonoff retained the slaveholding mode, despite his polemics with Struve. Though he (1988, 2) questions the utility of the term "slaveholding" (using sometimes "ancient" instead), he certainly renounces the applicability of the Asiatic and feudal modes. This is largely due to his underlying motivation to situate the socioeconomic developments of Mesopotamia and its neighboring regions into a unified "universal historical process" (Diakonoff and Kohl 1991, 8), which he presents in a mature form in the collaborative work *Early Antiquity*, a 1991 English translation of a volume on ancient history mainly according to the "Leningrad School."[53] As the title suggests, he is not aiming to isolate the developments of the "ancient Orient" as *sui generis*. Instead, he (1991, 54) considers the history of all the earliest class societies to belong to a broader historical stage, spanning several

53. Earlier presentations of this universal process are given in Diakonoff 1964, 1975, 1988. For a helpful background to development and goals of *Early Antiquity*, see Kohl 1991. A helpful summary of this work in the context of Diakonoff's two-sector model is given in Bedford 2005, 64–68. In terms of the "Leningrad School," see Van De Mieroop 1999, 112–13. As Philip Kohl (1991, xv–xvi) notes, not all scholars connected to Leningrad agree about the predominance of slavery in Mesopotamia, as is the case for Muhammad Dandamayev, who considers it less significant than Diakonoff, especially in the later periods.

millennia across the world, known as "early antiquity." during which they develop according to "general common laws" along one of several possible trajectories according to their environmental and social particularities. Although such varying trajectories exist, the earliest class societies are all characterized by "two antagonistic classes," which he (1991, 54) details accordingly:

> one of them having property in the means of production or, at least, the possibility to dispose of this property; the other being exploited by the first and being devoid of property in the means of production. Some of the people belonging to the latter class may themselves have been the property of the ruling class or of the state; others could have had certain means of production in their possession but not property.

While these are not the only two classes in these earliest class societies, their antagonism is predominant and pervasive. Despite the various ways in which this antagonism manifests itself among the earliest class societies, Diakonoff argues for viewing them holistically in opposition to the feudalism of the Middle Ages. As such, he distinguishes himself from the Soviet historian G. A. Melikishvili, who considers the slaveholding mode to be limited to Phoenicia and the Classical world, while the feudal mode is otherwise pervasive, including a "'protofeudal'" Asiatic mode variant (see Diakonoff and Kohl 1991, 11).[54]

In addition to a unified historical process, Diakonoff presents a developed form of his understanding of social stratification in *Early Antiquity*. Concerning third-millennium southern Mesopotamia, he (1991, 39–40) identifies three social estates based on land tenure, including (1) those who can own land in the communal sector, (2) those who can either use but not own land in the temple and state sector or are supported by rations in the same sector, and (3) slaves who are themselves a form of property and limited in their legal rights. Diakonoff proceeds to note that such divisions were perceived by the Mesopotamians themselves and that there were also

54. This coexistence of various modes of production among societies at essentially the same developmental stage in Diakonoff's (1964, 43 n. 19) estimation violates what he regards as an "immutable law."

three social classes (not correlating directly with the social estates), which largely align with his previous class distinctions.[55] Following this overview of the social classes, he provides a thorough discussion on the origin and treatment of slaves in Mesopotamia, noting that community members could not be permanently enslaved like foreign prisoners of war, though they could be temporarily enslaved to fulfill debts. Considering the challenges of managing a large slave population, Diakonoff notes that either slaves were kept in individual households as patriarchal slaves[56] or managed by the temple and state sector according to their gender. Whereas female prisoners were retained as slaves, male prisoners of war were not legally enslaved but instead given rations and sometimes land allocations. In addition to the male prisoners of war in the temple and state sector, he proposes that their work forces included impoverished and unfortunate individuals needing temple or state protection or allocated to such work by their communities. Overall, Diakonoff (1991, 42) argues for comparing such "slavelike dependents" to helots rather than serfs, concluding that these individuals are essentially state slaves.

By the end of 1991, however, the Soviet Union was dissolved. Following its collapse, the subsequent changes in Diakonoff's work are readily apparent. In his 1999 *The Paths of History* (first published in Russian in 1994), Diakonoff follows Marx's historical materialist approach, as usual, but with several emendations, especially with regard to the modes of production. Although there is much overlap in this work with *Early Antiquity*, his (1999, 1–9, 21–35) reservations about the utility of the slaveholding mode are outwardly articulated, preferring instead "early

55. Diakonoff's distinctions between social estates and classes needs to be addressed in a future treatment.

56. Regarding their conditions, Diakonoff (1991, 41) comments as follows:
The slaves' labor around the house was extremely productive, not only because they were under the constant supervision of their owners but also because they participated in one common production process with the masters. No less important was often the actual kinship of many slaves with their owners, as well as the insignificant difference between the living conditions of the master and the slave. The nourishment of the masters was equally meagre and their clothing unpretentious.

antiquity" as a universal phase. Whereas he formerly operated out of some deference for Struve and the foundational Soviet position, this was no longer the case, and he was finally elected a member with distinguished titles to the academy in 1992 (see Sheynin 2011, 112). Having now considered the breadth of this Soviet scholarship at length, the next section returns to the 1970 RAI to address the resulting half century of discussions among Assyriologists more broadly.

2.3. Studies Since the 1970 RAI

While the papers by Gelb and Diakonoff at the 1970 RAI are catalytic for their own debate on social classes in the Ur III period, the papers by Edmond Sollberger and Gerd Steiner at that rencontre also comment on the Ur III period. Sollberger's (1972) paper raises several significant questions about the terms guruš, eren$_2$, and lu$_2$ hun-ga$_2$. Although he considers the lu$_2$ hun-ga$_2$ to be free, he is uncertain about the guruš. As for the term eren$_2$, he notes its range of contexts (military and civil) and occasional equivalence to guruš and lu$_2$ hun-ga$_2$. He also highlights its correspondence to dumu dab$_5$-ba and dumu da-ba,[57] which he (1972, 189) views as a dynamic term referring to slavelike individuals generally but also to others with "some social standing."

Steiner's paper is thoroughly linguistic and deals with the challenges of identifying terminology pertinent to social strata. Although he acknowledges that such a concept is foreign to some extent in ancient Mesopotamia, he (1972, 205–6) proposes three "rechtlich und damit auch sozial relevante ‚Stände'" during the Ur III and Old Babylonian periods:

> für die Ur-III-Zeit
> (I) nam.dumu „Bürgerstand",

57. Note that while Sollberger considers dumu da-ba to be a syllabic writing of dumu dab$_5$-ba, the former is an unrelated occupational term (see n. 89).

(II) nam.erén „‹Truppen›-Stand“,
(III) nam.arad bzw. nam.gemé „Sklavenstand“;

und ähnlich für die altbabylonische Zeit

(I) *awīlūtum* „Bürgerstand“,
(II) *muškēnūtum* „*muškēnum*-Stand“,
(III) *wardūtum* „Sklavenstand“.

Though he does not describe the $eren_2$ and *muškēnum* strata in significant detail, he (1972, 205 n. 91) makes a passing comparison between the *muškēnum* and the “‚proletaire(?)‘” Despite his limited discussion on this terminology, his proposal that the $eren_2$ can describe a social stratum is notable, though he does not equate the term with citizens.

A few years later Maekawa produced a detailed study of the economic circumstances of the $eren_2$ in Ur III Girsu/Lagaš. His (1976, 11) study first demonstrates that $eren_2$ generally received subsistence plots and can be either dependent on temple households or on “secular officials (ensí, etc.) of the king of Ur.” He then proceeds to discuss their organization into groups and address the terms $eren_2$ bala gub-ba and $eren_2$ bala tuš-a, noting that scholars were formerly incorrect in reading tuš as dab_5 or dib_2. In his treatment of these terms, he asserts that the same $eren_2$ individuals can be conscripted for work projects one month, during which time they receive rations, and then exempted the next, during which time they can be compensated with barley wages for hired work on the ongoing work projects. According to this pattern of rotating shifts of $eren_2$ groups, Maekawa (1976, 35) explains the term $eren_2$ bala tuš-a as “‘erín-people who have remained at the (place of the) bal-work consecutively (since the month before).’” After examining other features of the $eren_2$, such as their similarity to the RU-lugal, which was already proposed by Deimel (see Maekawa 1976, 36–37), Maekawa’s

study ends with a few questions about the eren$_2$, focusing on how many of them received subsistence plots and what such plots might yield.[58]

Sigrist's 1979–1980 articles focus on comparing the eren$_2$ and UN-il$_2$, which he argues are terms that describe social conditions rather than professions. With regard to UN-il$_2$, he notes that it can refer to male and female individuals of any age engaged in a wide variety of professions or particularly agricultural work. He also offers a thorough lexical analysis, arguing that the term should be read as "un-íl" (Sigrist 1979, 103) and that it may describe people engaged in service or corvée work. Based on the line ugula e$_2$ UN-il$_2$ (Proto-Lu 158 [*MSL* 12, 38]) and its broader context, Sigrist (1979, 104) proposes that such individuals were housed collectively as "une entité distincte dans la population." Moreover, he adds that the UN-il$_2$ status was permanent but not always transferrable. He also compares them with the eren$_2$, observing that guruš refers to both and that both are given allotments based on their age, gender, and work output. As such, he (1979, 110) tabulates these allotments according to the four possible wedge configurations preceding any given individual, which are transliterated mainly according to their shapes as: "D: [AŠ$_c$] … I: [DIŠ] … ⊢: [AŠ] … ½: [½$_c$]."[59] Although there are four configurations, Sigrist (1980, 26–27) identifies three groups: (1) the D:- and ½:-groups (full- and half-time, respectively, geme$_2$ and guruš; (2) the ⊢:-group (majority of dumu nita$_2$, among others, such as šeš-tab-ba, ab-il$_2$, etc.); (3) and the I:-group (infants, the elderly, and the ill).

58. This study on eren$_2$ was significantly extended in Maekawa 1988. The following year Maekawa (1989) also provides a discussion on social distinctions between those receiving monthly allotments versus those receiving subsistence plots as well as the rise of hired work in the Ur III period.

59. Snell (1989, 182–97), for example, uses Sigrist's system (replacing "⊢:" with "H"). For a similar study on these various configurations, see Monaco 1985, 1986. Note that Monaco (1985, 24) reads AŠ$_c$ as "DIL" and ½$_c$ as "MAŠ."

Substantial contributions were made in a 1987 volume on work edited by Marvin Powell, including chapters by Maekawa, Steinkeller and Hartmut Waetzoldt,[60] in addition to Diakonoff's previously mentioned reflection on his back-and-forth with Gelb. As for Steinkeller (1987, 74), he first assesses the discrepancies between Diakonoff and Gelb:

> The Gelb-Diakonoff controversy has now reached an impasse, and classification of this or that group of people as slave or non-slave will continue to be a matter of personal preference until the discussion is brought down to a more specific level. This objective, I believe, can only be achieved through detailed monographic studies of "serfs" which provide a sound factual basis for determining, one by one, the exact characteristics of their status. Several such studies are already available, but a great deal of work remains to be done. Prosopography is especially promising for reconstructing life-histories of individuals, and these histories may then provide us with specific facts about the social and economic position of "serfs." Such investigations are entirely feasible with present documentation, especially with the sources from Lagaš and Umma.

Having identified the need for more in-depth study, Steinkeller proceeds to examine distinctions between the eren$_2$ and UN-il$_2$, using Umma foresters as a test case. In so doing, he (1987, 78–80) delineates fourteen worker classifications ("A-class" through "N-class") similar to but expanding upon Sigrist's. Following these classifications, he demonstrates that workers were usually organized into family-based groups supervised often by fathers or elder brothers. Toward the end of his discussion, he compares the eren$_2$ and UN-il$_2$. In terms of work obligations, the eren$_2$ were generally conscripted part-time, except for full-time supervisors, whereas the UN-il$_2$ were perhaps exclusively conscripted full-time. As for their forms of sustenance, both received allotments when conscripted, though eren$_2$ could receive more. eren$_2$ also received šuku land, though UN-il$_2$ received such land less often. He also agrees with Gelb generally over Diakonoff

60. Although Maekawa's and Waetzoldt's chapters are not discussed here at length, a few highlights are mentioned. Maekawa (1987a, 68–69) builds on his previous study of the eren$_2$, postulating that in some cases these individuals received barley in lieu of subsistence plots, though such barley may have been commensurate with the plots' expected yields. Waetzoldt (1987, 119–20) addresses the various forms of compensation, noting that individuals' social statuses cannot be determined necessarily on the basis of whether they receive barley allotments (še-ba) or wages (a$_2$). He (1987, 130) also discusses possible net yields of subsistence plots (approximately 1,000 sila$_3$ from 6 iku) and the mutual advantages they may have provided to the recipients who receive more than the usual barley allotments as well as to the state and temple households that reduce their micromanagement costs.

concerning such disputes about patronymics, family life, and means of production. Despite such differences between the two terms, he notes possible social mobility and blurred distinctions between those engaged in productive versus managerial work. As such, Steinkeller (1987, 100) concludes:

> if it can be demonstrated that in the Ur III period no meaningful social barriers separated the *whole* category of people involved in productive labor (excluding slaves) from the *whole* managerial group, it may become necessary to include both in one broad *class of state dependents* which would be sharply contrasted with the *class of unfree slaves*.

Although he groups the eren$_2$ and UN-il$_2$ into one broader class here, his following treatments further explore their similarities and differences.

In the late 1980s and early 1990s, Robert K. Englund produced various treatments on the organization of work during the Ur III period as well as preceding periods more broadly. In his article on administrative practices, he (1988, 168–69) estimates that a full workday was "on average, 12 hours (sunrise to sunset)," though workers were permitted various amounts of days off.[61] In his 1990 book on the management of Ur III fisheries, he provides discussions on various key terms, such as dumu-gir$_{15}$, eren$_2$, geme$_2$, guruš, lu$_2$ hun-ga$_2$, and UN-il$_2$, as well as on his position on the exploitative nature of the Ur III dynasty.[62] His treatment of geme$_2$ and guruš is overall complex. In his textual translations, he (1988, 170) regards them rather neutrally as "male" and "female workers," but he also compares them to slaves, noting that whereas arad$_2$ and geme$_2$ can refer to privately owned slaves, geme$_2$ and guruš can be understood as

61. Further discussion on these days off is provided in Englund 1991, 275–78. A more recent treatment on administrative practices, including equivalency values, is provided in Englund 2012.

62. Much of this is also examined in Englund 1991; Nissen, Damerow, and Englund 1993, 70–88.

“‚(Betriebs)sklav(inn)en‘” (Englund 1990, 47) or “corporate slaves” (Englund 2012, 432).[63] He (1990, 47 n. 161) qualifies this distinction further accordingly:

> Die arbeitshypothetische Verteilung „Haus/Betriebssklav(inn)en“ verwende ich natürlich mit Vorbehalt, zumal die Bezeichnung guruš, die normalerweise mit „Arbeiter“ übersetzt wird, in der vertikalen Terminologie der Ur III-Verwaltung offensichtlich nicht nur die „bei Arbeitseinheiten tätigen abhängigen Arbeiter“, sondern auch érin und ugula/nubanda qualifizierte.

Although he does not discuss the dumu-gir$_{15}$ in much detail, he states (1990, 75–76) that they were probably “‘apprentices’” (Englund 2003, 6) required to provide half the work of an adult.[64] As for the eren$_2$, he (1990, 78 n. 261) considers them difficult to understand but distinctive in that they formed mobile work groups, especially for military and bala work, and generally received šuku land as opposed to monthly allotments. As opposed to the others described here, who were generally organized in work groups, Englund (1990, 70 n. 236) considers lu$_2$ hun-ga$_2$ to be “Tagelöhner” separate from the guruš.[65] In terms of the UN-il$_2$, he (1988, 128) reads the term as “ug$_3$.ga$_6$” and translates it as “porter,” and he (1990, 29 n. 103) notes that it does not refer to a social class but a crucial and prevalent occupation.[66]

With regard to his position on the exploitative nature of the Ur III dynasty, Englund (1990, 205) asserts that it is rooted in the state’s extensive control over productive land, which it managed for the benefit of the elite few over the general population. Based on this control, the state organized the population into various work groups as described above, which were

63. Selz (2007, 282) similarly contrasts the majority of those dependent on temples for yearly allotments as “a kind of temple-slaves” versus “so-called house-born slaves.”

64. While Englund (2003, 4 n. 10) acknowledges that some consider the dumu-gir$_{15}$ to be “a privileged class of ‘native’ workers,” he regards this as uncertain and perhaps insignificant in light of their dependency and strenuous obligations.

65. Concerning this separation, Englund (1991, 257 n. 12) comments: “Although the term guruš.ḫun.gá is occasionally seen (see H. Waetzoldt, *Welt des Orients* 11 [1980]: 137), guruš were, as a rule, never confused with the lú.ḫun.gá, ‘day-laborers.’”

66. Englund’s evidence for his reading is discussed on p. 98.

obligated to engage in work that often exceeded their capacities, resulting at times in the flight, illness, and death of various workers. He also indicates that individuals could be fined, imprisoned, or assigned arduous tasks, such as milling cereals, for not fulfilling their obligations, though his evidence is not pervasive. As such, he generally agrees with Struve's and Diakonoff's views on the slavelike conditions of the geme$_2$ and guruš.[67]

Following his study of the foresters of Umma, Steinkeller addresses a cluster of named potters from the Ur III period. Before his analysis of these potters, he (1996, 235) notes that "the Pre-Sargonic Lagash potters, rather than working permanently for the state, owed to it only a specific contributory service." He (1996, 236) then proceeds to distinguish potters from Umma and Girsu/Lagaš that were managed by their local governors and temple households versus those that were managed by the "royal / crown organization." Regardless of this distinction, he (1996, 237–38) identifies them as mainly "full-fledged state dependents (éren)" who received allotments during the time of their obligatory service as well as šuku-land sizes of 6 iku for full-output work—fulfilling "a complete (prescribed) term of service" (Steinkeller 1996, 239 n. 40)—and 3 iku for half-output work. In his discussion on certain balanced accounts of their work, he notes that the potters could receive wages for hired work during their free time. He also highlights their relative autonomy in producing and disbursing their wares. Considering also how potters often trained their sons, Steinkeller (1996, 249) concludes that the "pottery industry was a home-based activity, which was carried out in individual, family-owned and family-operated workshops." As for the potters' work obligations, which were probably less than eight to nine months a year, he (1996, 249–50) elaborates as such:

> The Ur III potter owed yearly a specific number of workdays to the state. In return, the state supplied him with a land allotment and, for the duration of his service, with rations of barley, wool, and fat. In this arrangement, each potter was affiliated with a specific

67. See, for example, Englund 1990, 47 n. 162, 67, 90, 160, 202; 1991, 267–68, 279–80; 2012, 428–33.

> institution, to which he rendered services year after year. For the work he did as part of his service, he was entitled to fuel and other pertinent materials, which he obtained from the state. The state would also provide him with unskilled labor, in the instances when, it appears, work-orders exceeded his and his family's production capabilities. Although the service exacted from the potter by the state took primarily the form of pot-making, much of the labor he owed was used for completely unrelated projects. This was done at the state's discretion, and depending on current economic needs.

He considers this arrangement to be mutually beneficial to the potters and the state, noting that others working with similarly accessible raw materials (such as leather and reeds, among others) were probably also relatively autonomous. His conclusion is that many basic goods must have been acquired through undocumented market exchanges since it appears that such goods were otherwise not distributed by the state or any temple households.[68]

Over the course of a decade or so Steinkeller further detailed his understanding of the land-tenure system and its relationship to social stratification. In his 1999b chapter on regional land-tenure systems, he identifies crucial environmental and political factors that shaped land use in Babylonia. Due to the complications of irrigating, plowing, and fallowing the alluvium in southern Babylonian, he highlights the efficiencies of large-scale land management. While the deities notionally owned all the arable land, it was managed by the temple households and city-state rulers during Early Dynastic Sumer in particular as well as by the deified kings during the Ur III period.[69] As such, Steinkeller (1999b, 294–97) challenges Gelb's and especially Diakonoff's views on communally or privately owned arable land in support of a nuanced

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68. For further discussion on such limitedly attested economic activity, see Steinkeller 2004.

69. A helpful summary on the balance between the all-encompassing ownership of the Ur III kings and the preexisting temple households is provided in Gelb, Steinkeller, and Whiting Jr. 1991, 26:

> The picture of land tenure conditions changed considerably in Ur III times. It appears that the kings of Ur became the de facto owners of the southern temple estates and possibly of all other categories of arable land as well. Although the temple estates continued to function, at least in theory, as the domains of individual gods, they were now managed and exploited directly by the state, through the medium of provincial governments. The category of crown land, first introduced by the Sargonic kings, was greatly expanded in the Ur III period, to support the vast numbers of state dependents, and equally, to provide the king with a strong power base.

A lengthy treatment on the deification of Sargonic and Ur III kings is provided in Steinkeller 2017b.

"temple economy" position (see p. 32).[70] Given the large-scale land management under the temple households and city-state rulers, which constitute a "'temple community'" (Steinkeller 1999b, 293) conforming to a patrimonial model, he illustrates how the resources of various ecological niches could be distributed along what he (2007a, 201) later describes as a "continuum" of interconnected settlements within a city-state.[71] While this continuum within a "temple community" was present in the Ur III period, Steinkeller (2002, 115–16) elaborates on the Ur III system in a subsequent publication accordingly:

> all arable land available in the Ur III state took the form of either "temple estates" (the so-called demesne land) or subsistence land, the latter category also including the holdings of the royal family. Concentrating our attention on subsistence land, called šuku in Sumerian, it is important to note the basic distinction between the way such land was managed within the environments controlled by the "great organizations," and the way it was handled outside of such environments. In the former case, the šuku plots held by the dependents of a given institution (= temple estate) were tilled *en masse* by that institution itself, through the use of its own plow-teams and conscripted labor-force. After deductions for seed-grain, draft animals, labor, and irrigation taxes, the income from such fields was subsequently divided among the individual šuku holders based on their designated lot size and the average yield per iku from the overall cultivated area (Steinkeller 1999:303 and n. 52). This is the situation we find at places such as Lagaš and Umma, within the economic sphere controlled by the governor and his administration.

Additionally, in a discussion on archival practices, he (2003, 45) reiterates his distinctions between the UN-il_2 and $eren_2$, also referred to as $dumu\text{-}gir_{15}$, meaning "'natives' or 'free citizens,'" identifying them as two classes or strata. Whereas the UN-il_2 had "partial citizen rights, worked for the state all the year round, were provided with food throughout the year, and allocated three days of free time per month," the $eren_2$ had "full citizen rights, worked for the state only fifteen days per month, and, accordingly, were granted provisions for only half of the year" (Steinkeller 2003, 45). He then notes that only the well-to-do and more-skilled $eren_2$

70. For discussions on the debate concerning private land tenure, see Neumann 1988; Renger 1995.

71. Steinkeller's (2007a, 202) description of this settlement pattern as a continuum is partly intended to challenge a broader "alleged urban–rural dichotomy," which is seen, for example, in Adams 1982.

received šuku land, whereas the less-skilled eren$_2$ hired themselves out for wages usually three times greater per day than their allotments.

In the years following Steinkeller's further distinctions of these classes, N. V. Koslova (2005, 2006, 2008, 2013a, 2013b), Bertrand Lafont (2016), Francesco Pomponio (2013), Benjamin Studevent-Hickman (2006, 2008), and Nicolas Vanderroost (2013), among others, have produced several treatments on the organization of work that have generally confirmed these distinctions, though with revisions and unanswered questions. Koslova's work has been especially fundamental to distinguishing between dumu-gir$_{15}$ and eren$_2$ as citizens conscripted mainly half-time or part-time versus UN-il$_2$ conscripted full-time. While her work is not summarized here, it is thoroughly referenced in the following chapters, particularly in the discussion on conscription in Umma. The prosopographical tables in her 2008 study are also inspirational for the prosopographical table given in Appendix 2.

Whereas Steinkeller distinguishes classes partly according to whether an individual receives šuku land or not, Jacob Dahl (2002, 333) asserts that "the value of a land allotment did not impact the social mobility of the recipient: that the recipient of rations, i.e., the dependent worker, and the recipient of land allotments, i.e., the semi-free worker, were both confined by socioeconomics to the lower levels of the social hierarchy." He thus compares estimates of the various barley allotments an adult male would receive as a daily allotment (2 sila$_3$), as a daily wage (ca. 6 sila$_3$),[72] or from šuku land. In terms of šuku land yields, he assumes an average

72. Dahl (2002, 333–34) appears to agree with Englund about the distinctions between the guruš and lu$_2$ hun-ga$_2$:

> The familial and social status of the dependent worker as well as that of the hireling are not explicated in the sources, but it seems likely that a ration equivalent to 2 liters of barley supported one adult person at most. The uncertainties connected with the position of a hireling might account for his relatively large daily wage, on the other hand, the position as hireling during Ur III might as well have been rather comfortable, considering the possibility that the hireling was in possession of other means of production than his work, i.e., the possibility that he held private land not visible in the extant sources.

He also upholds Englund's views on the dumu-gir$_{15}$ and UN-il$_2$ (Dahl 2002, 334 n. 21).

size of 6 iku that generates perhaps 2,000 sila$_3$ a year, or a little more than 5 ½ sila$_3$ a day, without deducting any expenses. Besides these calculations, he offers an analysis of *TCL* 5 5675, noting that the cultivators and their sons or assistants received an average of 4 ½ iku each. Moreover, he (2002, 335) observes that "the work on their own land allotments is recorded together with the work on the regular domain land of Umma," which perhaps supports Steinkeller's description of *en masse* tillage. Following his analysis of this text, Dahl discusses the substantially larger šuku-land sizes given to managerial occupations, noting how such sizes could function to support them and their dependents while also benefiting the state. In his conclusion, he (Dahl 2002, 338) states the "small land allotments granted to specific workers of the Ur III society (ca. 6 iku) would only yield slightly more barley than the rations paid to a dependent worker." Whereas Steinkeller considers the eren$_2$ to receive various combinations of barley allotments, šuku land, and wages, Dahl views the šuku land as the primary income for their recipients separate from those who earned wages, though he suggests that the latter may have had undocumented private land.

Dahl (2010) also challenges Steinkeller's 1996 analysis of the potters, providing some corrections to his restorations of *MVN* 1 231 and 232 and their related calculations while also utilizing *MVN* 21 203 and *SAT* 3 1597, which were published in 2000. To start, he (2010, 275) discusses Struve's "claim that the workers of the Ur III period toiled all year for the state, with little or no time of their own, while depending completely on the favors of the state." While Dahl addresses the challenges in confirming this claim, he seeks to provide further evidence. Based on *MVN* 21 203 and *SAT* 3 1597, he (2010, 297) traces a "work-crew of potters working for the household of the governor of Umma." Concerning their allotments, he (2010, 286) notes that the majority of them received around 3 or more sila$_3$ a day for the entire year as opposed to šuku

land and were thus "marginally better served than the workers of regular crews doing manual field labor."[73] Nevertheless, Dahl (2010, 290) agrees with Steinkeller that some potters did receive šuku land, though he highlights that Steinkeller's examples mostly "belonged to special groups such as the **gir$_3$-se$_3$-ga** of the king, or a temple." He also observes that several of the members of the crew belonged to the same family but did not work from home, and that one member in particular is identified as a dumu-gir$_{15}$, regarding whom he (2010, 289) adds, "it can be suggested that the **dumu-gi$_7$** was a dependent worker of a slightly higher standing than the ordinary workers, and that he served as the daily leader of a team to which he himself belonged." Moreover, he provides evidence that fugitive potters could be imprisoned before being returned to work. While acknowledging that not all potters or work crews were probably treated the same way and that the state did not dominate the entire population, he considers Struve's position to be at least partly validated. Dahl's study, however, relies on *MVN* 21 203, which is an unusually formatted text that does not clearly designate UN-il$_2$, though it is likely that several potters listed in it were UN-il$_2$, especially since only one was designated as a dumu-gir$_{15}$. The omission of the typical days off for UN-il$_2$ in balanced accounts he utilizes is also exceptional (see pp. 201–8). In a subsequent collaborative work, Dahl, along with Laura Hawkins and Kate Kelley (2018, 28 n. 16) note that eren$_2$ refers to individuals conscripted part-time work, though Dahl's 2010 study is cited as possible counterevidence.

More recently, Steinkeller (2013c, 2015a, 2015b, 2017a) has developed his model of social stratification with regard to conscription and demographics. Concerning the eren$_2$, he

73. Dahl (2010, 290) notes: "The two additional workers listed after the regular crew in C [*MVN* 21 203] were perhaps allotment holders (see BCT 2, 58 (AS 7–6) and Rochester 158 (ŠS 3–8))." Whereas the two additional workers in *MVN* 21 203 obv. i 25–26, namely Emahkidug and Lu-Ibgal, are granted subsistence plots of 3 iku each in *BCT* 2 58 obv. 1–4, the same individuals are listed alongside Lu-Šara (probably present in *MVN* 21 203 obv. i 1 or 19 and *SAT* 3 1597 obv. 13) as recipients of 90 sila$_3$ of še šuku-ra in Rochester 158 obv. i 10–12.

(2013c, 350–51) reiterates much of his past position, though with some modifications, as seen below:

> The free, who formed by far the largest segment of the Ur III society, possessed full social, economic, and legal rights. In the Ur III sources, they are called éren or dumu-gir$_{15}$, the two terms being largely synonymous. The term éren means "royal dependent," while the sense of dumu-gir$_{15}$ is "native son / citizen." This vast social group included everybody from craftsmen, shepherds, and ordinary farmers to the top administrative and priestly officials and members of the king's extended family. Since the éren were, both numerically and economically, the dominant social group, it will not be inappropriate to describe the Ur III society as an "erenage" system. The éren owed services – primarily labor – to the king. In exchange for those services, the éren received various benefits from the crown. Most important, the king granted them the *usu fructo* rights to royal land. The size of the éren allotment depended on the grantee's social and professional position – the lowest-ranking éren would usually receive 4 *iku* (= 1.44 ha) of land. A provincial governor (énsi), who also classed as an éren, but stood at the top of the pecking order, was entitled to some 1,000 *iku* (360 ha).[74]

He (2013c, 358) further notes that the eren$_2$ could be either directly dependent upon the "royal sector," namely the king's household, or upon the "institutional economy," specifically a local gubernatorial or temple household. Regardless of their dependency, they typically owed 180 workdays per 360-day administrative year, including 100 workdays for the bala, but could generally hire themselves out otherwise. There is evidence, however, that some eren$_2$, particularly high-ranking individuals, owed 200 workdays a year for the bala, but they likely appointed substitutes in their places (see Steinkeller 2013c, 351, 366–69; 2015a, 19–24; 2015b, 171–76).

As for the full-time "dependent laborers," Steinkeller (2017a, 547) notes that the UN-il$_2$ probably had family lives, whereas many of the geme$_2$ did not, though they had children often. They could have been former prisoners of war or more often "destitute natives (impoverished free men, widows, orphans, foundlings, etc.) who had been compelled by their circumstances to put themselves at the mercy of temples or private households" (Steinkeller 2015a, 24). While

74. The "erenage" system is also articulated in Steinkeller 2004, 94.

they probably had certain rights like the citizens, he (2015a, 25) adds that due to "their total dependence on their home institutions for their livelihood, the status of these individuals was not much different from that of domestic slaves."

With regard to slavery, Steinkeller (2015a, 7–9) highlightes important distinctions between chattel slaves and debt slaves. Whereas the former were were generally foreign prisoners of war or purchased from interregional slave markets, the latter were natives of Ur III society that were temporarily enslaved to fulfill debts but retained certain legal rights, such as the prohibition against sale abroad.[75] Additionally, he (2015a, 7 n. 12) challenges Wolfgang Heimpel's (2009b, 2) translation of arad$_2$ in reference to personnel of the royal household in GARšana "indiscriminately as 'slave,'" when the term has a range of meanings, including "a more general sense of 'servant,' particularly in the context of private and royal households." Instead, Steinkeller (2015a, 7 n. 12) argues for a nuanced position that takes the context into account:

> Thus, while some of the dependents of Simat-Ištaran and Šu-Kabta may indeed have been slaves (this point needs further study), the majority of them, as shown by various data pertaining to their professional status and activities, definitely were free individuals. See, *e.g.*, CUSAS 3 16, 30, and 33, in which árad é-a-me-éš, "household servants," together with lú-hun-gá-me-éš, "hirelings," are summarized as éren, "free royal dependents" (courtesy of M. Molina).

Steinkeller then further supports his critique by highlighting how even individuals involved in management were included among the arad$_2$ of the GARšana household.

In his discussion on the allotments given to the part- and full-time conscripts, Steinkeller (2015a, 27) challenges Gelb's use of the term "rations," proposing instead that the allotments were "a salary (monthly or yearly) that a given employee received from his home institution as a

75. Steinkeller (2015a, 8–9) also demonstrates that prisoners of war could become eren$_2$ and be "made part of the royal economy." For a recent study on the treatment of prisoners of war and imported work during the Sargonic period in particular, see Bartash 2018b.

payment for services rendered, and not a form of organized alimentation."[76] The significance of this critique is bolstered by his (2015a, 28 n. 68) explanation for why allotments were also provided to unproductive infants:

> the concept of an autonomous "worker," who was abstracted from his kinship relations, did not exist in ancient Mesopotamia. It was taken for granted, therefore, that the workers had dependents, and that the presence of such dependents necessitated supplementary increases in the worker's compensation, depending on their number and age. This was in agreement with the spirit of the third millennium socio-economic order, which viewed temple households and other "great organizations" as essentially communal organizations, in which the resources of the household and its income were proportionally shared by all its members, in accordance with their rank and particular contributions. Thus, even though the babies did not, by virtue of being *bona fide* members of the community, they deserved full economic support.

Moreover, he (2015a, 30) identifies other issues with the term, such as its implications of scarcity and restrictiveness, and instead recommends the term "'allotment.'"[77]

During the past decade or so, there have been several studies on the nature of slavery,[78] especially in the 2011 OIS volume *Slaves and Households in the Near East*. In the introduction, Laura Culbertson (2011b) addresses the many challenges scholars face with defining slavery, whether in Mesopotamia or elsewhere. Different approaches usually favor or blend economic, legal, and social considerations. Moreover, Culbertson (2011b, 8) highlights the issues of gradation and translation: "In Near Eastern contexts, historians and linguists debate about the differences between servitude, bondage, slavery, and other expressions of oppression, subjugation, or unfreedom, even if these terms do not have exact correspondences in native terminologies." She also addresses various extensive studies on slavery, such as those by Finley and Orlando Patterson. Though she appreciate's Patterson's (1982) description of slavery as

76. This critique is also given about a decade earlier in Steinkeller 2004, 96.

77. For similar positions, see Jursa 2015, 355–64; Prentice 2010, 91–95, 210–11; Stone 2007, 223–24.

78. A recent and thorough review of past scholarship on slavery is given in Verderame 2018.

"social death," she finds this position to be limited for understanding slavery in the ancient Near East. Instead of offering a succinct definition, she lays out several agreed-upon qualities, such as a slave's low hierarchical ranking, the existence of gradations of enslavement,[79] the limitation of legal rights in comparison to others, the lack of a slave population's self-perpetuation, the potential of conditionality, and the relativity of autonomy.

In the same volume, Culbertson (2011a, 34) identifies a "synthetic approach" to the study of slavery, which "involves identifying attestations of the terminology associated with slavery in the documents and compiling the attestations into surveys." Noting this approach's shortcomings, however, she (2011a, 35) employs an alternative method:

> I propose to experiment with a life-course approach to household slavery. A life-course approach (taking inspiration from Manning 1990: 133) focuses on the transitional moments in a person's life and involves compiling series of transitions into larger chronologies. Using the approach, we can highlight the varieties of slavery, leaving a bit more room to notice mutable aspects as well as the permanent.

Although the data have limits, she demonstrates the approach's value in tracing the pledging or selling of unmarried children, especially daughters into slavery.

The challenges of defining slavery are also considered by John Reid (2014). His (2014, 16–22) treatment reviews a variety of factors, such as gradations of enslavement, economic conditions, hierarchical status, and salability, among others. In addition to these factors, he (2015, 578 n. 2) addresses certain terminological ambiguities, following Heimpel's (2009b, 63) observation that an eren_2 can be described as an arad_2, though arad_2 is itself a dynamic term in this context, as is recognized by Steinkeller above. As such, Reid (2004, 29) focuses on "historicising slavery rather than reifying the concept."

79. For a helpful treatment on gradations of freedom, see von Dassow 2011.

2.4. Conclusions

The study of social stratification in the Ur III period has presented scholars with perennial challenges, though much progress has been made. While scholars are indebted to the founding works, particularly from the Soviet era, such works were developed under externally significant pressures. Moreover, the use of various Marxist and Weberian models, among others, has accounted for the data in often contrasting manners. Such models have largely influenced the assumptions scholars have made and the patterns they have observed. The increasing availability and searchability of the data have also advanced scholars' reconstructions, often requiring revisions to past conceptions. Despite the many disagreements, however, there is a consensus that the Ur III population overall was dependent on a minority of high-ranking individuals and rulers for their sustenance, though the character of this dependency varies in gradations. Recent scholarship has been cautious about these gradations, recognizing the various elements that factor into understanding and articulating data that are often distant, limited, and nuanced. As such, much remains to be considered in order to illuminate the socioeconomic history of the Ur III period.

CHAPTER 3. STRATIFICATION TYPE, TERMINOLOGY, AND ORIGINS

3.1. Stratification Type: Strata of Varying Dependence and Servitude Integrated with a Patrimonial Household Model

Social stratification during the Ur III period was tripartite, consisting of citizens, serflike UN-il$_2$, and slaves. The concepts of citizenship and enslavement utilized here align well with Eva von Dassow's (2011, 206–7) positions based on her three propositions:

1. Freedom, defined as having power over oneself and the capacity for independent action, was essential to membership in a community in its aspect as a polity. In other words, being the subject of a state required being free; membership in the polity was citizenship.
2. The rights and duties of subjects in relation to the state were graduated along the scale from unencumbered freedom, with attendant rights and duties, to full enslavement, with no duties to the state and minimal rights.
3. Freedom entailed political as well as legal rights, including, at the extreme, the right to withhold or grant allegiance.[80]

In addition to von Dassow's comparison of enslavement with freedom, slaves are identified in this dissertation based on whether they were owned as a form of property. Broadly speaking, they were not able to actively maintain close familial relationships, could not reside in their own private homes, possessed few legal rights, and were forced to work by their owners.

While Ur III society was clearly stratified, it is difficult to situate this kind of stratification into a specific ideal type. Von Dassow (2008, 112–30) offers a lengthy discussion on social stratification types that may be applicable to Alalaḫ. Before considering particular ideal types, she (2008, 123) reflects on several issues with the term class:

80. For other helpful discussions on citizenship in ancient Mesopotamian societies, see Barjamovic 2004; ; Richardson 2012, 25–26; Steinkeller 2013c, 350–51.

> The term "class" in particular is laden with connotations, and dipping into the literature of sociology does not encourage the idea that the concept of class has much relevance to the study of ancient society. Neither the Marxist concept of class, predicated on a dichotomy between ownership of the means of production and expropriation therefrom, nor the more flexible Weberian concept, according to which class situation is determined by market situation, is directly applicable in the absence of "ownership" and "market" as conceptualized and structured in modern society. More discouragingly, Giddens emphasizes, in developing his theory of class, that "a class has no publicly sanctioned identity" (1973: 106), from which it would follow that any group or category identified and labeled as such within the society of which it is part cannot be a "class" (and in that case none of the categories explicitly identified in the Alalaḫ tablets—or in any sources—may be classes). Furthermore, in a recent book on class and stratification, Crompton declares that class "is primarily a characteristic of modern stratification systems, of 'industrial' societies," though she does add that "this does not mean that 'classes' did not exist prior to modernity" (1993: 4). In summarizing the meanings of the term, Crompton notes that "'class' may be used to describe groups ranked in a hierarchical order," but in Weberian terms these would be "status groups," not "classes" (ibid.: 10).

Von Dassow (2008, 124–26) utilizes the anthropologist Gerald Berreman's (1981) understanding of various status and class strata, including castes, ethnic groups, estates, and classes. Whereas the former two are status strata mainly established by intrinsic characteristics, the latter are class strata mostly based on extrinsic characteristics. The characteristics of citizens, UN-il_2, and slaves, however, are both intrinsic and extrinsic, so they do not fit well into any of these four ideal types. Children are intrinsically born into the stratum of their mothers, though the origins of slaves and perhaps UN-il_2 were extrinsically determined (see 3.3 Origins). The origins of slaves, for example, were mainly due to impoverishment or violent capture rather than any innate qualities they may have possessed. In order to avoid preconceived notions linked with various stratification types identified above, the more neutral term "social stratum" is used in this dissertation.

Despite these typological challenges, which do not need to be resolved here, Ur III society can be understood both natively and externally as a patrimonial household to some extent. This conception, however, benefits from some flexibility to account for the data. For

example, Schloen (2001, 304) criticizes von Dassow's use of "social stratification" with regard to Alalaḫ as follows:

> Her detailed study of the sociological terminology used at Alalaḫ contains much useful information, but her emphasis on the metaphor of "social stratification," implying a layer-cake of self-contained social classes, tends to neglect the "vertical" ties between persons of varying social ranks. What seem to be discrete social groups ("strata") from an external perspective may have been held together by quite complex personal interrelations based on patronage and clientage at various levels of the social hierarchy.

While there were significant "'vertical' ties" in Ur III society, the strata proposed here were generally distinct and self-contained. This verticality is emphasized in Steinkeller's (2013c, 350) description of Ur III society as patrimonial:

> In such a [patrimonial] system, all of the resources of the state are integrated into a single socio-economic body, shaped as a pyramid, at whose top stands the king, who is the sole master and owner of this entire body. In spite of its monolithic appearance, the patrimonial state actually has a highly complex internal structure, in that it is a hierarchically organized collective of individual households, with smaller households being embedded into larger ones, and so on, all the way to the very top of the pyramid. All of these households are linked to each other by a network of mutual rights and obligations. In this way, inferior households not only contribute materially to the superior ones but also receive from the latter in return, be it material goods, prestige, or protection. When viewed from the outside, this pyramid of interconnected and interdependent households forms one vast vessel, which looks and very much operates like the king's private household or domain.

As for the strata, they had boundaries that do not appear to be typically permeated. Citizens and UN-il$_2$ were often differentiated, especially when helpful for administrative purposes. However, citizens could become temporary debt slaves and possibly even UN-il$_2$. Yet, there is little to no clear evidence that UN-il$_2$ could ever become citizens, but that does not mean it was not possible (see 3.3. Origins). It is admittedly difficult to distinguish between female UN-il$_2$ and slaves in some contexts due to administrative ambiguity (see p. 105). As such, there was probably an integration of vertical connections with distinct albeit permeable strata, resulting in a complex social hierarchy. This blending of vertical connections, as emphasized by Schloen, with social strata is also supported by von Dassow (2008, 116–22) in her response to his critique.

Some of the most substantial distinctions across the strata are the varying legal rights and economic autonomies they each entailed. Whereas citizens possessed the fullest extent of legal rights and some economic autonomy, UN-il_2 and especially slaves possessed fewer legal rights and limited economic autonomy. Overall, economic conditions significantly varied across the strata as well as within the strata. The most important factor in determining an individual's economic conditions, especially for citizens and UN-il_2, was generally occupation, which was closely linked to gender, parentage, and social stratum (see Chapter 5).

It is important to note here that the UN-il_2 are described as serflike in broad terms. The Gelb-Diakonoff Controversy demonstrates that the term serf is closely associated with Medieval Europe. Nevertheless, the term serflike is intended to indicate that UN-il_2 were neither citizens nor slaves but in between them with respect to legal rights and economic autonomy, among other features. In his study on coerced mobility, Vitali Bartash (2020, 44) refers to these individuals and similar predecessors as "temple serfs" and "serflike." *širku*'s during the Neo-Babylonian period are likewise called "serfs" by Michael Jursa (2010, 27) and "institutional dependents" by Kristin Kleber (2011, 101). In her introduction, Kleber (2011, 101) describes them accordingly:

> *Širku*s are often characterized as temple slaves, and it is generally held that their fate was better than that of other kinds of slaves because the temple gods, as owners, did not directly exercise rights of ownership. I argue that *širku*s were not slaves, in fact, but are better understood as institutional dependents whose limited freedom, in comparison with free citizens of a Babylonian town, was a result of their social subordination to an institutional temple household.

It may be helpful to compare UN-il_2 and *širku*'s, with regard to certain features, but it is not certain exactly how they were similar or different.

3.2. Native Terminology

3.2.1. Citizens

3.2.1.1. eren$_2$

The terminology for citizens varies, particularly with regard to provenience and other contextual details. The most common term for citizens is eren$_2$ ("royal dependent" according to Steinkeller 2013, 350), which is attested well over 4,000 times across a wide array of proveniences, including mainly GARšana, Girsu/Lagaš, Nippur, Puzriš-Dagān, Umma, Ur, and Urusagrig.[81] The meaning of this term, however, is dynamic, as it can refer to conscripted soldiers or workers without respect to stratum, though the vast majority of such individuals were citizens.[82] In many

81. Concerning terminology for citizens, Lafont and Raymond Westbrook (2003, 197) write "A free citizen is most commonly referred to in Sumerian simply as lú ('man, householder'), a term which assumes rather than asserts the status." The use of lu$_2$ clearly for citizens, however, is mainly in the Laws of Ur-Namma, whereas in administrative texts it is more generic for any person of a given category (see, for example, pp. 92–93).

82. Pomponio 2013, 222, for example, provides the following observation:
> We should also note, in connection with the article cited above by Koslova (2008) that the debits section (sag-níg-gur$_{11}$-ra-kam) of the balanced accounts of personnel at Umma registered the work-days both of the UN-íl and of the dumu-gi$_7$, a term which as rule is considered a variant of éren in the Umma tablets. In five texts the work of the dumu-gi$_7$ is calculated as full time for a year and in six texts they work for only half of the time. Now, the sum of the workdays of the UN-íl may be higher, lower, or equal with regard to that of the éren, but all the texts in question are labelled as níg-kas$_7$-ak á éren-na-ka. So, if the personnel belonging to the categories of the UN-íl and of the dumu-gi$_7$ must be kept distinct, then the term éren includes the UN-íl. Likewise, in the ambit of the military service, as pointed out by B. Lafont (2008: 31-32), éren describes the conscripts, in contrast with the professional soldiers, indicated as àga-ús, but in all probability the àga-ús also belonged to the category of éren.

Note that of the five texts "labelled as níg-kas$_7$-ak á éren-na-ka" (see Koslova 2008, 175), *AAICAB* I/1 Ashm. 1924-665 and *AnOr* 1 85 do not include any variation of this phrase, though Koslova (2008, 180 [italics hers]) describes *AnOr* 1 85 as "*eine unvollständige Abrechnung für 2 Jahre mit falschen(?) Summierungen; der Aufseher ist nicht genannt*." Besides this collection of accounts, the use of eren$_2$ without regard to stratum can be demonstrated in the Umma texts *OrSP* 47-49 382 (see Studevent-Hickman 2008, 145 and n. 27), which is an inspection, as well as *AnOr* 1 88 (see p. 210 for eren$_2$), *Nisaba* 23 53, and *TCL* 5 6038, which all list male workers going to perform their bala work as eren$_2$. However, prosopographical data can be used to identify several UN-il$_2$ among these lists. As for *AnOr* 1 88, the kinkin$_2$ Ur-Zabalam (rev. i 10–11) is explicitly an UN-il$_2$ in *CUSAS* 39 134 obv. ii 6, rev. ii 2, 9 (these attestations of Ur-Zabalam can be established as the same individual based on several shared features among these two texts in addition to his mention in *YOS* 15 115 obv. i 18). In *Nisaba* 23 53 obv. i 4, Ur-E'e's UN-il$_2$ stratum is established based on his father's UN-il$_2$ stratum in *Nisaba* 11 15 obv. ii 4 (the close proximity of Šes-kal-la dumu Inim-ma-ni-zi in *Nisaba* 11 15 obv. ii 3 and *Nisaba* 23 53 obv. i 7 aids in confirming both Ur-E'e's to be the same individual). With regard to *TCL* 5 6038, Lugipar (obv. iv 9), Urmes (rev. iii 22), and Lugalbad (rev. iii 26) can be identified as UN-il$_2$. Whereas Urmes can be simply identified as an UN-il$_2$ in *CUSAS* 39 127 rev. ii 7, Lugipar's UN-il$_2$ stratum is confirmed in *BPOA* 7 2457 rev. 7 and can be inferred from his son Lugalamarku's UN-il$_2$ stratum in *Torino* 2 706 B rev. iii' 5' (coll.). As for Lugalbad, his UN-il$_2$ stratum is evident in *CUSAS* 39 127 rev. ii 8 and can be inferred from his son Abbagena's UN-il$_2$ stratum in *BPOA* 7 2457

instances though, the term eren$_2$ is clearly used to distinguish citizens from UN-il$_2$ and slaves, particularly through the juxtaposition of the phrases eren$_2$-me and UN-il$_2$-me.[83] As is noted on p. 78, however, citizens, including governors, various high-ranking individuals, and priests, can also be referred to as arad$_2$ when their subordinate statuses to other individuals or deities are emphasized, perhaps according to etiquette (see Westbrook 1995, 1634), or when they were functioning as servants, often, though not exclusively, for large private and especially royal households.[84] Whereas the former situation is evident in seal legends, the latter is particularly apparent at the household of Šū-Kabtā and Simat-Ištaran in GARšana. In that context, citizens

obv. 5, 10 and his son Lu-Šara's UN-il$_2$ stratum in Englund, *CDLJ* 2003, 1 1 Erlenmeyer 152 obv. ii 19. Another example may be *HLC* 2 104 pl. 94 rev. 6–7: šu-nigin$_2$ 10 la$_2$ 1 eren$_2$ šu-nigin$_2$ 10 la$_2$ 2 arad$_2$ \ eren$_2$ bala gub-ba. Unless arad$_2$ here does not refer to literal slaves (see the discussion on this page), then the second mention of eren$_2$ refers to conscripts without respect to stratum.

83. For textual studies on the explicit juxtaposition of the terms eren$_2$ and UN-il$_2$ as distinct social strata, see Koslova 2004, 24–25, 58–60; 2006; 2008, 151–52, 188–94; Sigrist 1979–1980; Steinkeller 1987, 78–80, 97–102. Some further evidence not highlighted in the above-mentioned discussions includes texts from Girsu/Lagaš (*DAS* 323; 324; Fish, *MCS* 8, 59 HSM 6298; *HLC* 3 373 pl. 141; *ITT* 2 621; 865; 3536; 4192; Maekawa, *ASJ* 8, 118 33; *Managing the Land, Diss.*, 284 19 BM 19139; *MVN* 7 331; 9 147; 11 106 (?) [see n. 316]; 12 2; 17 3; *Nisaba* 13 27; *PPAC* 5 1616; *SNAT* 176; 255; *TCS* 1 206; *TCTI* 1 625; *TUT* 172), Umma (CDLI P429776; *CUSAS* 39 132 [coll.]; *Nisaba* 6 10; 11 27; *SAT* 2 77; 3 1823), Ur (*UET* 3 1091; 1399), and Urusagrig (*CUSAS* 40/2 64; 106; 815; *Nisaba* 15/2 814). For the contrasting of eren$_2$ to arad$_2$ as distinct social strata, see Steinkeller 2013c, 361, as well as the Girsu/Lagaš texts *HLC* 1 30 pl. 29; 2 89 pl. 87; 104 pl. 94 (see the discussion of eren$_2$ here in n. 82); *ITT* 2 926; Maekawa, *ASJ* 20, 106 6; *MVN* 12 117; *PPAC* 5 1432; *TUT* 139; 154; 160; 176.

84. See also Gelb's (1972b, 7) observation about arad$_2$ offering donated (a-ru-a) individuals, whom he assumes cannot be slaves but rather servants. Further evidence in addition to the discussion in Steinkeller 2015a, 7 n. 12, includes phrases attested only in Urusagrig, namely eren$_2$ zah$_3$ arad$_2$ ^{d}Nin-hur-sag (translated as "trabajadores-*eren* fugitivos, servidores de la diosa Ninhursaĝ" in Molina 2020a, 33 and eren$_2$ zah$_3$ arad$_2$ e$_2$-gal (see, for example, *CUSAS* 40/2 184 obv. 7). See also the Girsu/Lagaš text Maekawa, *ASJ* 20, 106 6, which though damaged and difficult to restore, demonstrates that the lines šu-nigin$_2$ 250 guruš im-e taka$_4$-a \ šu-nigin$_2$ ⌜520⌝ guruš eren$_2$ (rev. iv 1–2) and šu-nigin$_2$ 90 geme$_2$ e$_2$-gal \ šu-nigin$_2$ 81 dam eren$_2$ zah$_3$ (rev. iv 17–18) add up to ⌜770⌝ guruš \ ⌜171⌝ geme$_2$ \ ⌜geme$_2$⌝ arad$_2$ e$_2$-gal (le. ed. i 1–3). Although it can be asserted that eren$_2$ in any or all cases mentioned above may not specify an individual's social stratum, dam eren$_2$ zah$_3$ is used for female citizens (see n. 95), suggesting that the eren$_2$ grouped with them, whether in part or in total, were likewise citizens. Moreover, the lines 2 guruš \ 1 guruš a$_2$ ½ \ arad$_2$ e$_2$-gal-me \ gan$_2$ dab$_5$-ba-me (*Nisaba* 15/2 877 obv. i 7–10) add further support that arad$_2$ can refer to citizens (even though the term is not mentioned here), since many of them were half-time workers receiving a land allotment (see, for example, 5.2.2. Conscription and Allotments). A similar inference may be made from *Nisaba* 15/2 953, which lists male and female individuals summarized as geme$_2$ arad$_2$ Nin-sa$_6$-ga (rev. vi 16). Many of the male individuals in particular are engaged in occupations that are not commonly associated with slaves, including scribes (obv. iv 39, rev. v 6).

functioning as servants are typically referred to as arad$_2$ e$_2$-a in texts as well as arad$_2$ Šu-Kab-ta$_2$ or arad$_2$ ME-^{d}Ištaran in seal legends.[85]

In the term eren$_2$ diri (translated as "additional conscripts" in Michalowski 1993, 86), eren$_2$ refers to a conscript without respect to social stratum. This is evident in *YOS* 4 161, which is a sealed receipt of the conscription of an UN-il$_2$ as an eren$_2$ diri.[86] Elsewhere eren$_2$ diri is paralleled by various occupational terms,[87] which further supports its disregard for social stratum. Although eren$_2$ diri can refer to female individuals (see *Nisaba* 15/2 953), eren$_2$ is used primarily, if not exclusively, for male individuals as a social-stratum designation.[88] This may be because males were regularly conscripted, but this certainly does not mean that females could not be citizens. dam (PN) eren$_2$ is sparsely documented in Girsu/Lagaš to refer to wives

85. Although Heimpel (2009b, 45) generally understands arad$_2$ in GARšana texts to refer to slaves (see also p. 78), he occasionally utilizes the term "servant" for various workers in GARšana and especially for arad$_2$ in seal legends (see Heimpel 2009b, 2 and n. 3, 40, 49, 54, 72, 97, 141, 146, 296, 315, 322, 326). However, given that Heimpel (2009b, 40, 72) also translates arad$_2$ in seal legends as "slave" and "servant/slave," it is not clear what distinctions between "slave" and "servant" he may intend. In his discussion of a list of fourteen names in *CUSAS* 3 504, Heimpel (2009b, 74) writes: "The first 7 were identified as slaves in a subscript; the last 7 were only named. The position after the subscript indicates that they were not slaves. … The apparent inclusion of slaves under the supervision of an overseer of hired workers is without parallel." The "subscript" (obv. 9) to which he refers should be read as nita$_2$-me-eš$_2$ rather than arad$_2^{!}$(IR$_3$)-me-eš$_2$, given that the following named individuals are all female. This separation of individuals according to gender in GARšana texts is also present in *CUSAS* 3 562 obv. ii 14–19 (obv. ii 19: nita$_2$-me-eš$_2$), rev. i 4–11 (rev. i 11: munus-me-eš$_2$) and *CUSAS* 6 1569 obv. 1–8 (obv. 6: nita$_2$-me-eš$_2$ [concerning this line David Owen (2011, 254 n. 82) comments "Not IR$_{11}$-me-šè"]). As such, his analysis of some individuals singled out as slaves versus others in this context is not tenable. Whereas Lance Allred (2011, 13) likewise translates arad$_2$ e$_2$-a as "house slaves," Alexandra Kleinerman (2011a, 205) and Waetzoldt (2011, 407) render arad$_2$ and geme$_2$ in this context as "male and female servants" and "Dienerschaft," respectively, which are preferred here.

86. For the function of the expression eren$_2$ diri-še$_3$ in *YOS* 4 161, see pp. 161–62.

87. See, for example, the Umma texts *AOS* 32 G7; *BPOA* 1 1047; *BRM* 3 179; *MVN* 15 131; *SAT* 2 398 and the Urusagrig text *Nisaba* 15/2 953.

88. It is difficult to determine whether eren$_2$ is used as a social-stratum designation for female individuals. In several instances in texts from GARšana (*CUSAS* 3 16 rev. 10, 12; 24 rev. 13', 15'; 30 rev. 6', 8'; 33 rev. 18, 20) and Girsu/Lagaš (*OBTR* 173 rev. 3, 7; *UNT* 17 rev. 5, 8), it appears that female workers can be labeled as geme$_2$ as well as eren$_2$, but eren$_2$ is probably used without regard to social stratum. In the Girsu/Lagaš text Sauren, *ZA* 60, 75 10 obv. 6–8, rev. 2, there are three women, in addition to two men, considered by Herbert Sauren (1970, 86) to be debt slaves that are referred to as eren$_2$ ^{giš}tukul-e dab$_5$-ba-m[e$^{?}$] (rev. 6), but the meaning of eren$_2$ is again uncertain.

of citizens who were likewise presumably citizens. eren$_2$ can also be used to indicate citizenship in the nominal formation nam-eren$_2$ (see Steinkeller 2013, 361).

3.2.1.2. dumu dab$_5$-ba, dumu-gir$_{15}$, dumu uru(^{ki}), *and* dumu *GN*

Besides eren$_2$, there are several other terms that are implemented a few hundred times each, such as dumu dab$_5$-ba ("conscript" according to Steinkeller 2013, 350 n. 1), together with the variant lu$_2$ dab$_5$-ba,[89] and dumu-gir$_{15}$ or dumu-gir$_x$(GI) ("native son / citizen" according to Steinkeller 2013, 350).[90] Although dumu dab$_5$-ba and dumu-gir$_{15}$ are mainly utilized in Girsu/Lagaš and Umma, respectively, both are infrequently attested across a variety of proveniences. While the use of these terms for the citizens is well established,[91] their possible

89. Contra Culbertson's (2011, 37 and n. 4) understanding of dumu dab$_5$-ba, which she bases on Gelb and Heimpel, as "orphaned boys who were seized and forced to work for a temple institution," thus described as "dumu-dab$_5$-ba 'seized children.'" Lafont (2009) relates dumu dab$_5$-ba and lu$_2$ dab$_5$-ba with he$_2$-dab$_5$ (read by him as "gan-dab$_5$-ba") as "categories of 'seized' or 'dragooned' individuals," but he$_2$-dab$_5$ should be distinguished as a term typically for prisoners (see Heimpel 1998, 398; D. Patterson 2018, 301–3) rather than citizens. For further discussion on dumu dab$_5$-ba, see Borrelli 2020, 14–15. Note that dumu da-ba, which is reminiscent of a syllabic writing of dumu dab$_5$-ba (Gelb [1979, 21], Sollberger [1972, 189], and Studevent-Hickman [2006, 1:115] consider this to be the case), appears to be an unrelated occupational term for agricultural workers (see "dumu-dab$_5$-ba" and "dumu dab$_5$-ba" in Borrelli 2013, 75, 108), attested only in Girsu/Lagaš and translated somewhat freely as "ox-driver's helper(s)" in Such-Gutiérrez 2015. A summary of various interpretations of dumu da-ba and dumu dab$_5$-ba is given in Salonen 1968, 322–24. For dumu-dumu dab$_5$-ba, which only occurs in *ITT* 3 6545, see Falkenstein 1956b, 302–7, but this phrase remains unclear.

90. There is some debate over whether dumu-gir$_{15}$ refers to either any free individual or only individuals freed from slavery, especially in legal contexts. For summaries of this debate as well as defenses of the former position upheld in this dissertation as well, see Koslova 2008, 152–53; Wilcke 2014, 522–26. Note that Wilcke (2014, 523) maintains that term dumu-gir$_{15}$ may not function in legal contexts the same way as it does in administrative contexts.

91. Maekawa (1976, 11, 16 n. 1) observes some connections between eren$_2$ and dumu dab$_5$-ba, but he does not elaborate upon them. For evidence establishing the equivalence of dumu-gir$_{15}$ with eren$_2$, see Koslova 2008, 167–73; Sigrist 1979, 111, and for the equating of dumu dab$_5$-ba with dumu-gir$_{15}$ (and thus eren$_2$), see Steinkeller 2013c, 350 n. 8. The overlap of eren$_2$ and dumu dab$_5$-ba is also apparent in the lines ša$_3$-gal eren$_2$ bala tuš-a \ dumu dab$_5$-ba-me (*TCTI* 2 4219 obv. 3–4) and ša$_3$-gal eren$_2$ bala gub-ba \ dumu dab$_5$-ba-me (*TCTI* 2 4243 obv. 4–5). There are also two instances of dumu dab$_5$-ba bala tuš-a instead of eren$_2$ bala tuš-a (*TCTI* 2 3904 obv. 3–4; 4287 obv. 2), which are indicative of their overlaps. Additionally, dumu-gir$_{15}$ is used for three elderly male individuals in the Umma text *CUSAS* 39 132, who are then labeled, among others not designated as dumu-gir$_{15}$, as eren$_2$-⌜me⌝ (rev. 17). Perhaps this term is implemented to distinguish them from the surrounding elderly UN-il$_2$, but that does not seem necessary. The selective usage of dumu-gir$_{15}$ for some eren$_2$

nuances are difficult to precise, though circumstances involving their conscription for work in the royal economy versus an institutional economy may be relevant.[92] Note that an individual can be a dumu dab$_5$-ba even if he is not conscripted (nu PN [see p. 177]) in a given context or deceased (uš$_2$ PN), as is evident in *TCTI* 1 686. Like eren$_2$, both dumu dab$_5$-ba and especially dumu-gir$_{15}$ are contrasted with UN-il$_2$.[93] Whereas dumu dab$_5$-ba appears to be used for male individuals only, there is sparse evidence in the Girsu/Lagaš text *WMAH* 185 rev. ii 6 that lu$_2$ dab$_5$-ba can refer to women. dumu-gir$_{15}$ can be used for women in a context where women are mostly conscripted (see *TUT* 162). There are also a few mentions of munus dumu-gir$_{15}$ (translated as "free-born(?) women" in Maekawa 1998, 84) and geme$_2$ dumu-gir$_{15}$, both of which may be roughly equivalent to each other and the latter of which is certainly equated with dumu-gir$_{15}$ and dam eren$_2$.[94]

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but not others is also apparent in the Umma text CDLI P429776 obv. ii 5–6, but this text is very fragmentary. Although Sigrist (1979, 113) observes that "un dumu-gi$_7$ est un erín mais peut aussi être un-íl" based on the Umma text *OrSP* 47-49 483 rev. ii 9, this is likely an exceptional scribal error. Concerning this issue, Koslova (2008, 193 n. 130) writes "Dieser Text nennt drei ug$_3$-ga$_6$-Arbeiter der D-Klasse [šu-gi$_4$] sowie auch drei dumu-gi$_7$-Arbeiter der D-Klasse; die Notierung dumu-gi$_7$ šu-gi$_4$ in der Summe bei ug$_3$-ga$_6$-Arbeitern verstehe ich nicht."

92. See, for example, the uncertain distinctions between eren$_2$ and dumu dab$_5$-ba in the line ša$_3$-gal eren$_2$ u$_3$ ˹dumu˺ dab$_5$-ba Gir$_2$-su^{ki}-ta gen-na (*MVN* 22 23 rev. ii 6').

93. The clearest examples of the contrast between dumu dab$_5$-ba and UN-il$_2$ are the Girsu/Lagaš and Umma texts *PPAC* 5 183 and *Ontario* 2 190, respectively, the latter of which establishes the equating of dumu dab$_5$-ba with dumu-gir$_{15}$ (see n. 91). Other possible evidence for the social-strata distinctions between dumu dab$_5$-ba and UN-il$_2$ include attestations of eren$_2$, which may support the subtle differences between dumu dab$_5$-ba and eren$_2$ suggested on this page (see the Girsu/Lagaš texts *CT* 7 pl. 38 BM 18427; Maekawa, *ASJ* 15, 128 98; *TCTI* 2 2787; *TUT* 17). For textual studies on the distinctions between dumu-gir$_{15}$ and UN-il$_2$, see Koslova 2004; 2005; 2006; 2008, 152–65, 173–87; 2013a, 314–17, 2013b; Vanderroost 2013, 1:36, 123–39, 145–47, 2:66–67. For additional evidence not highlighted in the above-mentioned analyses, see texts from Puzriš-Dagān (*SET* 252 [note the CDLI transliteration of obv. ii 2, iii 6]), Umma (*AnOr* 1 192; BDTNS 059326; *BPOA* 2 2557; 6 1183; Civil, *Studies Sigrist*, 36; *CUSAS* 39 135; 140; 155; 40/2 736; Englund, *ASJ* 14, 101 3; Fish, *MCS* 3, 88 BM 111745; Gomi, *Orient* 16, 65 79; *MVN* 3 370; *Nisaba* 23 9 [coll.]; 24 31), and an unknown provenience (*CUSAS* 39 241). Note that Snell, *ASJ* 11, 182 juxtaposes eren$_2$ and UN-il$_2$ throughout, though dumu-gir$_{15}$ is used once in a section listing geme$_2$ and UN-il$_2$, so perhaps dumu-gir$_{15}$ is used to single out that individual as a citizen.

94. munus dumu-gir$_{15}$ is present in the Girsu/Lagaš text Maekawa, *ASJ* 20, 106 6. Although Marcos Such-Gutiérrez translates geme$_2$ dumu-gir$_{15}$-me in the Girsu/Lagaš text *CDLN* 2015, 3 §2.23 rev. vi 19 as "(they) are female laborers and (children) dumugi," this term describes the women named in rev. vi 15–18, identifying them as female dumu-gir$_{15}$. This is supported by *HLC* 3 374 pl. 141 rev. ii 3: šu-nigin$_2$ 10 la$_2$ 1 geme$_2$ dumu-gir$_{15}$, which refers to four women named in obv. ii 15–18, who are later summarized as dumu-

The terms dumu uru(ki) ("citizen") and dumu GN ("citizen of GN")[95] both share meanings similar to dumu-gir15[96] and designate citizens. In legal texts (*ITT* 3 6544; 6609), dumu uru appears to be a social-stratum designation granted to certain manumitted slaves (except for its usage in the legal text *ITT* 5 6847), in a similar fashion to the dumu-gir15 designation that is also granted to certain manumitted slaves in the Girsu/Lagaš texts *ITT* 5 6842 obv. 8; *NSGU* 75 rev. 23. The specific meaning of dumu uru(ki) in administrative texts from Girsu/Lagaš (Uchitel, *ASJ* 6, 97 [?]) and Nippur (*BBVO* 11, 283 6N-T432), including in the line eren2 dumu-uru-me (*UET* 3 1391), is difficult to ascertain, however. As for dumu GN, it is used for a variety of locations and in several contexts. Given that numerous instances concern legal texts[97] and soldiers (aga3-us2), the attestations of this term are tabulated according to location and context in Table 3.1.

Table 3.1. Attestations of dumu GN according to Location and Context

Location	Context		
	Legal Texts	**Soldiers**	**Miscellaneous**
AdamDUN	—	—	*ITT* 2 763
Aebara	Fish, *AnOr* 12, 104 8; *BPOA* 1 665	—	—
Badtibira	*BPOA* 1 1075	—	*UET* 3 1139
Gargibila[98]	—	—	*MVN* 3 236[99]

gir15-me (obv. ii 20), and five women named in rev. i 6, 8, 10, 12, 14, who are then designated as dam eren2 zah3-me (rev. i 18).

95. See discussions of these terms in Lafont and Westbrook 2003, 197; Michalowski 1993, 73; Molina 2000, 125; 2008a, 129; D. Patterson 2018, 286; Sollberger 1966, 24; Steinkeller 2013c, 351 n. 16; Veenker and Johnson 2009, 351.

96. This is observed by F. R. Kraus (1970, 374), who writes, "dumu-gi7/gi an diesen sechs Stellen ist sachlich identisch und semantisch verwandt mit dumu uru in der von Falkenstein an zwei Stellen seiner Urkunden nachgewiesenen Wendung dumu uru.gim dím, ‚zum freien Stadtbürger machen'), die zu dumu nibru usw., ‚freier Bürger von Nippur', gehört)." See also Wilcke 2014, 523.

97. See Falkenstein 1956a, 24, 32.

98. I am indebted to Manuel Molina for this normalization and the Nigsuda reference just below.

99. Note that there are several individuals identified as dumu GN from various locations in this text, as can be seen from its recurrence in multiple cells.

Location	Context		
	Legal Texts	**Soldiers**	**Miscellaneous**
GARšana	*BPOA* 1 566; 602; *TJAMC* IES 134 pl. 68	*MVN* 6 280	—
Girsu	—	—	*CT* 9 pl. 43 BM 18426; *MVN* 3 236
Iddula	*BPOA* 1 664	—	—
Ki'esa	—	—	*TCTI* 2 3439
KiluKU	—	—	*MVN* 3 236
Kinunir	—	—	*Berens* 22; *MVN* 6 406
NAGsu	*SNAT* 334	—	—
Nigsuda	Molina, *Studies Pomponio*, 159 2	—	—
NINA	—	*ABAA*, 78 P310; *Amherst* 21; Gomi, *Orient* 16, 87 129; *Nisaba* 33 766; *TUT* 111	—
Nippur	*NRVN* 1 1	*BE* 1/2 pl. 55 125	CDLI P235256; *CT* 3 pl. 48 BM 21340; 10 pl. 14 BM 12235; *HLC* 3 240 pl. 112; *PPAC* 5 309; *SACT* 1 65; *TCL* 2 5526; *TMH NF* 1-2 351; *TUT* 113; 116[100]
Sagub	—	—	*CT* 5 pl. 19 BM 12912 (coll.); 7 pl. 45 BM 17767
Šubar	—	—	Owen, *Studies Milano*, 351 16
Umma	*BPOA* 1 365; 474; 495; 972; van Dijk, *ZA* 55, 79 54370; Molina, *Studies Sigrist* 129 2; 136 9; 137 10; *SNAT* 320; 321; Veenker and Johnson, *AoF* 36, 363	—	*WMAH* 181
Ur	—	*CST* 252; *CUSAS* 40/2 1604; *HSS* 4 64; *Messenger Texts, Diss.*, 180 529 MLC 677; Michalowski, *OrAnt* 16, 288 2; *Nisaba* 15/2 268	*BPOA* 7 2223;[101] Michalowski, *OrAnt* 16, 288 2; *MVN* 3 236; 13 591; *Nisaba* 13 123; *PPAC* 5 473; Steinkeller, *From the 21st Century BC*, 419 32; *UET* 3 1401; etc.[102]
Zabalam	*TCL* 5 6170	—	—
ZA.HAR	—	—	*TCTI* 2 3228

Note that the individuals identified as dumu Šu-ba-ar^{ki}-me in Owen, *Studies Milano*, 351 16 are also designated as arad$_2$-me, but it is not certain whether arad$_2$ is used for citizens here. The term lu$_2$ GN functions similarly to dumu GN, though it may be more broadly utilized. In

100. Rev. i 1 and the lost preceding line should be fairly equivalent, if not identical, to rev. ii 4–5.

101. It is unclear whether the dumu Uri$_5^{ki}$-ma in this text are geme$_2$ or listed alongside geme$_2$.

102. There is a certain Ku-Nanna who is a dumu Uri$_5^{ki}$ in numerous parallel Girsu/Lagaš texts concerning prisoners (see p. 251).

numerous texts it is used for $eren_2$,[103] and in one instance for $dumu\text{-}gir_{15}$ (see the Puzriš-Dagān text *SET* 252 obv. ii 2 [CDLI]). In Urusagrig, lu_2 GN can refer to $nu\text{-}dab_5$ (see the discussion on this term on p. 95), MAŠ.EN.GAG, and $arad_2$, the latter of which are often specified as nam-ra-ak (a-ru-a lugal).[104] This term is also applicable to $geme_2$ on several occasions.[105] The phrase nam-dumu $Nibru^{ki}$ (*MVN* 13 592 obv. 13) is the only instance of nam-dumu GN, and while this phrase probably refers to citizens, Steiner's proposal that nam-dumu indicates citizens (see pp. 65–66) does not appear to be consistently applicable, since at least some instances appear to express the status of being an individual's child (see, for example, the Umma text *YOS* 4 208).

3.2.1.3. Undesignated Citizens

It is important to note that in many texts UN-il_2 are clearly indicated, whereas no such social-stratum designation is given for the rest. In such instances, Koslova (2008, 167–74) and Steinkeller (1987, 78; 2013, 364; 2015, 169) generally assume that these undesignated individuals were citizens from their juxtaposition to UN-il_2, which is validated by numerous examples in Appendix 1 (see Observation No. 1). This distinction between explicit UN-il_2 versus implicit citizens is also present in numerous texts with counts of anonymous workers described generically as (guruš) UN-il_2 versus guruš, the latter of whom were presumably citizens in

103. See the phrase $eren_2$ zah_3 lu_2 $Uru\text{-}sag\text{-}rig_7^{ki}$ in the Urusagrig texts *CUSAS* 40/2 75; 95; 104; 142; 208; 360; 544; 695; 854; 970; 1850; 1910; *Hom. Remesal* 21 1 BDTNS 187701; *Nisaba* 15/2 34; 43; 50; 51; 60; 94; 95; 100; 105; 106; 115; 128; 129; 143; 216; 326; 556; 560. For other cases, see the Puzriš-Dagān text *MVN* 11 212 and the Urusagrig text *CUSAS* 40/2 97.

104. See *CUSAS* 40/2 35; 128; 314; 503; 675; 990; 1441; 1533; 1566; Michalowski, *OrAnt* 16, 290 4; *Nisaba* 15/2 164; 236; 244; 369; 415.

105. See various texts from GARšana (*CUSAS* 3 24; 33; 40; 45), Girsu/Lagaš (*MVN* 6 105; 492), and Urusagrig (*Nisaba* 15/2 528; 590).

many but probably not all instances.[106] However, if no social-stratum designations are provided in a text, the social stratum of any given individual may not be easily assumed. This is evident in the Umma sealed receipt CDLI P370981, which is transliterated and analyzed according to the known social strata of its attested PNs in Table 3.2.

Table 3.2. Transliteration of the Umma Text
CDLI P370981 and the Social Strata of its Attested PNs

Line	Transliteration	Social Stratum of Bolded PN (citations)
obv. 1 (coll.)	la$_2$-ia$_3$ 1 **Engar-zi**	UN-il$_2$ (*Nisaba* 6 10 obv. ii 18, rev. i 16, 19; *Santag* 6 384 rev. iv 26')
obv. 2 (coll.)	1 **Eden-ta**	UN-il$_2$ (*Nisaba* 6 10 obv. ii 20 [coll.], rev. i 19; *Santag* 6 384 rev. iv 28')
obv. 3 (coll.)	1 **Ur-zikum-ma**	UN-il$_2$ (*Nisaba* 6 10 obv. ii 21, rev. i 19; *OrSP* 47-49 324 rev. i 17, iii 23; *Santag* 6 384 rev. iv 29')
obv. 4	1 **Ur-^{giš}gigir** dumu Ur-nim	UN-il$_2$ (*Nisaba* 6 10 obv. ii 23, rev. i 19; *Santag* 6 384 rev. iv 31')
obv. 5 (coll.)	1 **E$_2$-lu$_2$-bi-zu**	citizen (see PIN 162 in Appendix 1)
obv. 6 (coll.)	1 **Im-ta-e$_3$-a**	citizen (see PIN 173)
obv. 7 (coll.)	1 **^{d}Šara$_2$-kam** dumu Da-ti-ti-ni	UN-il$_2$ (*Nisaba* 26 17 rev. 11)
rev. 1	la$_2$-ia$_3$-am$_3$ ša$_3$ bala-a	—
rev. 2	kišib **^{d}Šara$_2$-a-mu**	UN-il$_2$ (*Nisaba* 26 17 obv. 1, rev. 13 [both coll.]; *Santag* 6 384 rev. vi 1')
…		
seal 1	^{d}Šara$_2$-a-[mu]	—
seal 2	[dumu] ^{d}Šara$_2$-[šeš]	

As this text indicates, even an individual sealing a receipt can be an UN-il$_2$ without any designation. Nevertheless, since citizens constituted the majority of the population, it is likely

106. See texts from Girsu/Lagaš (*OBTR* 254) and Umma (*Aleppo, Diss.*, 246 ANM 3782; *AnOr* 1 192; *BIN* 5 226; *BPOA* 1 1625; 6 1483; 7 1599; 2361; Maekawa, *ASJ* 13, 222 69; *MVN* 10 107; 15 390; Owen and Wasilewska, *JCS* 52, 12 57; *RIAA* 125; *SAT* 2 173; 253; 707; *SNAT* 438; *Syracuse* 259; *TCL* 5 6171; *UTI* 3 1943; 4 2684; 5 3044; Veldhuis, *ZA* 93, 66 17). See also numerous texts cited in n. 342, which juxtapose UN-il$_2$ with hired workers, who were probably mostly citizens. There are many Umma texts that document work by anonymous guruš and UN-il$_2$, the latter of whom are either receiving 0.0.4 or 0.0.3 or working at one-half or one-third rates (see *BPOA* 1 559; 818; 2 2300; 2324; 6 288; 1267; 7 1596; 1603; 1633; 2068; Fish, *MCS* 3, 89 BM 111774; Gomi, *Orient* 17, 26 BM 111795; *MVN* 16 1105; *Nisaba* 23 102; 31/2 156; *Princeton* 1 389; 490; 516; *SACT* 2 21; 47; *Syracuse* 138; *UTI* 3 1752; 4 2517; 2826; 2873; 2955; 5 3112; 3386; 6 3690). There are similar Umma texts that designate the guruš as UN-il$_2$ (see *BPOA* 7 2409; *Nik.* 2 113; *SNAT* 311; *Syracuse* 439; *UTI* 3 1828; 2253; 4 2836; 2915; 2937). Since it is not certain whether the designation of the guruš is consistent in every context, the social stratum of undesignated guruš, even in juxtaposition with UN-il$_2$, cannot be strictly assumed.

that many individuals without designated social strata were citizens. In some texts lacking social-stratum designations, details relating to conscription or occupation can be used to infer an individual's social stratum (see, for example, the discussion on *L'uomo* 49 in n. 287).

In many instances, certain administrative terms align well with citizens. Maekawa (1986, 98) defines the administrative term še nu-tuku as "not taking barley" and the term nu-dab$_5$(-ba) as an abbreviation of "gán/a-šà/ŠUKU nu-dab$_5$," which "refers to those who do not hold allotment plots."[107] In several instances, these terms refer to explicit citizens,[108] and it is likely that they refer to mostly citizens when their social stratum is not specified. The term nu-dab$_5$ is also used in Urusagrig (apparently never written nu-dab$_5$-ba), in which case it may mean "not assigned|conscripted," according to Steinkeller (pers. comm.), but it is not clear why this is the case in some of those texts.[109] There it refers to citizens in numerous instances, especially since a nu-dab$_5$ could have a high-ranking managerial occupation (see Table 5.19). Theses individuals also seem to be distinct from MAŠ.EN.GAG and arad$_2$, the latter of whom were probably a mixture of servants and slaves. It is also used there for geme$_2$,[110] at least some of whom may have been citizens as well.

107. nu-dab$_5$(-ba) is also discussed on p. 177. For further support, see Maekawa 1998, 91 n. 21. This interpretation is likewise given in Borrelli 2013, 26, 108–9; Uchitel 2002, 625; Wilcke 1999, 311.

108. Besides the examples Maekawa (1986, 97–99) discusses involving eren$_2$, še nu-tuku is also linked with dumu dab$_5$-ba in the Girsu/Lagaš text *CT* 1 pl. 4 94-10-15 4 and dumu-gir$_{15}$ in the Umma texts *BPOA* 7 1575; *MVN* 16 960; 1182, whereas nu-dab$_5$ is linked with dumu dab$_5$-ba in *MVN* 6 501 as well as with dumu-gir$_{15}$ in *MVN* 6 70 and the Umma text *CUSAS* 39 126 (coll.).

109. Other scholars define similarly (see Lambert 1961, 87 n. 8 ["«non-titularisés»"]; Sauren 1977, 22: ["«nicht erfaßt»"]; Studevent-Hickman 2006, 1:289 ["'unconscripted'"].) Maekawa's understanding, though, appears to be valid for this term in contexts besides Urusagrig where it was used differently.

110. See *CUSAS* 40/2 392; 669 (coll.). Note that *CUSAS* 40/2 392 rev. 1 is transliterated as a$_2$ geme$_2$ nu-dib, which may mean that geme$_2$ sag-dub nu-dab$_5$ in obv. 1 could be geme$_2$ sag-dub nu-dib, but nu-dab$_5$ is preferred for both lines (even if it requires assuming a scribal error in rev. 1), given that this individual appears to be conscripted for work and that this option would conform this text more to *CUSAS* 40/2 669.

3.2.1.4. Royal Citizens vs. Institutional Citizens

While Steinkeller (2013, 358–70) considers the term eren$_2$ to generally refer to a "royal dependent," he also distinguishes between "royal éren" and "institutional éren," concerning which he (2017a, 539) provides the following summary:

> A peculiar feature of the Ur III political organization was the fact that the éren status could be held either directly or indirectly. In the first case, the éren were subordinated immediately to the state and its various institutions, primarily to the central military organization, which had its extensions in every province of the Ur III state. In the latter case, the éren status was bestowed on one through the medium of provincial structures, in that its holders were part of the local provincial organizations (the so-called "institutional" economies), which were managed by the governors, and functioned, for all practical purposes, as exclusive estates of the governors and their extended families. In this way, within each province there were two categories of éren: the royal éren *sensu stricto* and the éren primarily subordinated to the governor. As typical of patrimonial systems, the latter naturally counted as dependents of the crown as well, since the whole society was viewed as one vast household of the king.

Distinguishing between these two subcategories can be based on various contextual circumstances (see pp. 114–15, 211–14) and on terminology. Royal citizens can be identified by their direct relationship to the king or the palace, whereas institutional citizens were directly under the authority of their local governor or temple households.[111] A poignant example of this distinction is given in the Umma text *Nik.* 2 386, which differentiates between lu$_2$ ensi$_2$ and lu$_2$ e$_2$-gal. These phrases are broad, of course, including individuals of any strata. Another noteworthy example is the Umma text *SNAT* 340, which identifies a variety of individuals as dub-sar ka e$_2$-gal-ka, muhaldim lugal, and giri$_3$-se$_3$-ga lugal who, among others, are collectively described as giri$_3$-se$_3$-ga ka e$_2$-gal-ka. The relationship to the palace is often expressed with ka$_{(2)}$ or ša$_3$, which depends on the region in some circumstances. For example, eren$_2$ ka e$_2$-gal is only attested in Girsu/Lagaš texts, whereas eren$_2$ ša$_3$ e$_2$-gal is only found in Urusagrig texts. As all these terms indicate, the direct relationship between a citizen and the

111. For details on the association of eren$_2$ with various temple households, see Maekawa 1976.

king or the local institutions can be expressed with a genitival construction. While this genitival construction often includes the title for the king, the title can be replaced with a specific king's name, such as in nar ^{d}Šul-gi.[112] A less-direct example of citizens under the authority of the king or a local institution is the Umma text *Santag* 6 41 obv. iv 15–16: 30 guruš ašgab u_4 1-$še_3$ \ $ša_3$ e_2-gal. Additionally, there are numerous seals that establish relationships between citizens and the king or a local institution, which are often structured accordingly: PN_1 $ensi_2$|lugal … PN_2 … $arad_2$-zu. It should be mentioned that Ur III texts do not evenly document royal and institutional citizens. Rather, as Steinkeller (2013, 353) demonstrates, most Ur III texts, particularly from Girsu/Lagaš and Umma, detail institutional citizens. Moreover, royal citizens were probably far more prevalent in northern Babylonia (see Steinkeller 2013, 360), which is not well attested during this period.

3.2.2. UN-il_2

While the terminology for the UN-il_2 stratum is limited to UN-il_2 and $geme_2$ (UN-il_2), the reading and interpretation of UN-il_2, which are of course interrelated, are thoroughly debated. Interpretations generally rely on the meaning of IL_2, resulting in translations like "carrier," which have been utilized since the early twentieth century.[113] Despite some agreement about the term's possible meaning, the main readings are ug_3-ga_6 or $u\hat{g}_3$-ga_6 (see Englund 1990, 29–30 n. 103; Koslova 2008, 151 n. 8) and UN-il_2 (see Heimpel 1998, 398; Sigrist 1979, 103; Steinkeller

112. This phenomenon is not exhaustively traced here, and it is not certain whether this applied to genitival constructions with specific governors as well.

113. For one of the earliest translations of UN-il_2 as "carrier," see Lau 1906, 33. For a variety of similar translations, see also Archi and Pomponio 1989, 11 ("portatori"); Englund 1988, 128 ("porter"); Oppenheim 1978, 259 ("carrier"); Steinkeller 2013c, 365 ("'porters'"); Waetzoldt 1972, 92 ("'Träger'").

2013c, 365).[114] Unfortunately, it is difficult to determine the reading of IL$_2$,[115] especially based on its following signs. Tohru Maeda (1980, 205) collates *HLC* 1 253 pl. 46 rev. ii 3 from UN-il$_2$-la-ne (according to the copy) to "un-íl-e-ne." Englund (1990, 29–30 n. 103) and Koslova (2008, 151 n. 8) both rely on the copy of *AnOr* 1 85 obv. ii 33, which Englund transliterates as "á.ùg.ga$_6$.gá u$_4$ 29.15." Based on a more recently available image, however, the -ga$_2$ sign is actually -bi.[116] There is also one attestation of UN-ga$_6$-ga$_6^{ga}$ in The Debate between Copper and Silver (CDLI P478959 101'), but the reduplicated ga$_6$ following UN is only attested here, so this instance is not necessarily conventional. As for possible syllabic writings, Waetzoldt (1992, 13) observes: "So wird in Lau 251 I 5 der Personenname Un-ÍL, in IV 3 aber Un-ga und in UCP 9/2, 45 der PN En-ga-ga (so Siegel, S. 118) im Text En-ga$_6$-ga$_6$ geschrieben." While the second example is clear, the first is unfortunately not, which Waetzoldt (1992, 14 n. 2) himself acknowledges, and cannot be easily collated due to damage. There are, however, a few other examples of the name UN-ga.[117] Steinkeller (2013c, 404) also suggests that the name UN-il in the Umma text *BPOA* 6 1481 le. ed. 1[118] is a syllabic writing for UN-il$_2$. Besides these possible syllabic writings, there are two attestations of the personal name UN^{u2}-il$_2$ (see the Girsu/Lagaš texts *Nisaba* 17 20; 33 305), but these do not offer much help.

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114. Note that while Sigrist (1979, 103) prefers the reading un-il$_2$, his translation of the term is "«gens de service» ou «personnel de corvée»," based on the possible reading un-dusu. Concerning Sigrist's suggestion of un-dusu, Wilcke (2007, 165) observes that "even if the suggested reading *ùĝ(-)dusu and an interpretation as 'corvee people' turns out to be correct, it certainly is not the genitive compound (i.e., not: *"people *of* corvee") indicated in note 56, as the plural is written ùĝ-dusu-ne (MVN 6, 74:4) and ùĝ-dusu-e-ne (SAT 2, 1138:5)."

115. For some helpful and fairly recent discussions on the reading of IL$_2$ generally in the Ur III period, see Heimpel 2009b, 254; Vanderroost 2013, 1:27.

116. The need for this collation is identified by Waetzoldt (1992, 14 n. 2).

117. See *ITT* 2 926 (perhaps -mu in UN-ga-mu is muhaldim]); *NATN* 102; 829; *UET* 3 920 obv. 5.

118. This line has been visually confirmed thanks to images provided by Klaus Wagensonner from the YBC. Based on the images, the sign appears to be a damaged IL, but it is not completely certain. However, it does not appear to be IL$_2$.

The debate about IL$_2$ is also linked to the reading of the UN sign. To explain the UN sign, Heimpel (1998, 398) writes as follows:

> Englund proposed the reading ùg-ga$_6$, apparently understanding the word as u + something assimilated to /g̃/ + "g̃a(g̃)." Note that in my remark about the Ummaite verb, which Englund quotes, I established the form ga(g̃). But "ùg" writes /ug̃/ and not /ug/ and /ug̃ga(g̃)/ makes no phonetic sense. … When read un-íl, the word could be a frozen prospective with imperative meaning, "a carry!"—that is, a person whom one orders to carry. Another noun of this formation is ù-na-du$_{11}$, literally "a say-to-him!" which means "letter." It is also possible to understand the word as a dub-sar formation, "people carrier," designating persons who carried people in litters on their shoulders. In view of the existence of the term AMA-íl, I do not venture any interpretation.

While Heimpel's critique of Englund is fair, his suggestion of a frozen prospective is not convincing, especially if the person ordered to carry is addressed in the second person. As for the dub-sar formation, a literal "people carrier" is also not very plausible (see Sigrist 1979, 102). His comparison with ama-il$_2$, however, may be helpful. Since ab(-ba-)il$_2$[119] and ama-il$_2$ are both dub-sar formations that refer to individuals who temporarily supported or provided for their fathers and mothers (see p. 196), perhaps UN-il$_2$ is a dub-sar formation that refers to individuals who permanently supported or provided for the population (UN) more generally, but this is speculative. This interpretation would have a similar meaning to an epithet of Ninlil with the same signs, which Manfred Krebernik (2000–2001, 454) transliterates and translates as "^{d}UN-íl ‚die das Volk/Land trägt' (weniger wahrscheinlich: Art ‚Arbeiterin')."[120] Based on this reasoning, the reading UN-il$_2$ is preferred here, though the debate remains admittedly unsettled. Further study of the reading of IL$_2$ in various grammatical forms is needed. The usage of UN-il$_2$ prior to the Ur III period as well as its lexical and proverb evidence must be considered as well.

119. The reading of il$_2$ in ab(-ba-)il$_2$, and thus also ama-il$_2$, may be confirmed in *MVN* 3 358 rev. 4: a-ša$_3$ AB-il$_2$-la.

120. For this understanding of ^{d}UN-il$_2$, see also Frayne and Stuckey 2021, 356.

Prior to the Ur III period, UN-il$_2$ is sparsely attested in administrative texts during the Early Dynastic IIIb and Sargonic periods. While it is mostly used as a personal name,[121] including for a certain Sargonic-period šabra in Donald, *MCS* 9, 239 obv. 4, the term otherwise appears to function like an occupational or social-stratum term. Its Early Dynastic IIIb attestations include the Adab text *CUSAS* 35 47 and the Umma text *CUSAS* 33 209. The latter text lists several clear occupations that are generally counted on their own lines, whereas UN-il$_2$ follows a blank space after several unfortunately broken lines, which may suggest that it is not a typical occupation but rather a social-stratum term for various preceding individuals.

In the Sargonic period, the term occurs in the Adab text *Lippmann Coll* 138, the Nippur texts *OSP* 2 174 and *TMH* 5 148, the Tell al-Wilayaḫ text CDLI P520338, and the Ur text *Nisaba* 19 71. Although most of these contexts are brief or damaged, there are a few details that may be noteworthy. In *Lippmann Coll* 138, male and female children are equally described as UN-il$_2$, which may again indicate that it is a social-stratum term. In *OSP* 2 174, which is one of over a hundred texts relating to the Nippur Onion Archive (see Westenholz 1987, 87–183), UN-il$_2$ qualifies the individual Urtir as an occupational or social-stratum term would, though there are no other such qualifications in this text for comparison. As for *TMH* 5 148, UN-il$_2$ is parallel to several other terms following im in preceding lines, including occupations. The parallel term sag sa$_{10}$-a, however, which just precedes UN-il$_2$, is not an occupational term. Nevertheless, the use of UN-il$_2$ in this handful of texts remains uncertain to some extent.[122]

121. For the occurrence of the name UN-il$_2$ in the Early Dynastic III and Sargonic periods, see, for example, Bartash 2017, 515.

122. A brief discussion on the few attestations of UN-il$_2$ during the Old Babylonian period is given in 6.4 The Old Babylonian Period.

The lexical evidence concerning UN-il$_2$ is likewise difficult to interpret. In Proto-Lu 566–573 (*MSL* 12, 53), there are several terms ending with il$_2$, including UN-il$_2$. Based on this group, UN-il$_2$ appears to be an occupation related to carrying, though there are adjacent terms in the list that are not occupations, such as he$_2$-dab$_5$ in line 576. UN-il$_2$ also occurs earlier in this list in the terms ugula UN-il$_2$ (156g) and ugula e$_2$ UN-il$_2$ (158), which are given in a large group of terms based on ugula and which do not add much information, though their proximity to ugula e$_2$ i$_3$-sur-ra (157) may suggest that the UN-il$_2$ were likewise employed in menial work. This kind of sequencing may also be the case for the unfortunately damaged lines in the Lu = *ša* series *KAV* 28 obv. ii 2'–4'. Elsewhere in this series, *CT* 19 pl. 27 K 2061 rev. ii 27 probably reads U[N$^{?}$]-il$_2$ = *ki-na-at-tu*$_4$ (translit. mine), which is unfortunately the only useful attestation of this line. Given the damage, this line is transliterated as "ú?-íl = *ki-na-at-tum*" in *AHw*, 479. The meaning of *kinattu* here is "person of equal social status, comrade, colleague" (*CAD* K, 381) based on several preceding lines, though this term can also mean "menial, person of servile status attached to a household, doing agricultural or other work under supervision" (*CAD* K, 381), which accords well with its Sargonic attestations and with UN-il$_2$. The connection between these terms, however, is complicated by the evidence from the short version of Igituh. According to B. Landsberger and O. R. Gurney (1957–1958, 84), line 294 reads: "LÚ.ù-ìl *ki-na-a-tu*," though il$_3$ seems to be a typo for il$_2$. With regard to alternate readings, Landsberger and Gurney (1957–1958, 86) note: "(1) **B**: Ù.íl; **A**: LÚ kù-sikil (probably error); **D**: only last vertical wedge preserved. – (2) From **D**; **A**: *ki-na-tu*; **B**: *ki-na-at-tu*." This same line is read as "lú.ú.íl = *ki-na-a-tu*" in *CAD* K, 381 and as "ù-íl = *ki-na*(-*a*/*at*)-*tu*" in *AHw*, 479. Since the various witnesses to this line cannot be visually examined, it is difficult to determine how the line should be read. In any case, *kinattu* in this context likewise refers to a "colleague," but the Sumerian term should

relate more to the "menial" connotation. If the line reads (lu$_2$-)u$_3$-il$_2$, it can be related to two instances of U$_3$-il$_2$ as a personal name in *ARET* 3 510 and the Umma text *SAT* 1 4, though neither is visually confirmed. In the seal of the latter text, the name is also the usual UN-il$_2$. Based on all this lexical evidence, UN-il$_2$ in these texts probably refers to individuals performing work often related to carrying.

While the evidence from proverbs supports the servile status of the UN-il$_2$, it is difficult to contextualize and interpret. In Bendt Alster's (1997, 1:110–11) edition, Sumerian Proverb 3 183 is transliterated as "uš-bar du$_8$-a géme min-a-bi un-gùr[il$_2$] du$_8$-a arad eš$_5$-a-bi" and translated as "A released weaver (equals) two slave girls. A released *ungur*[UN-il$_2$]-worker (equals) three slaves." Broadly speaking, the analogy uš-bar : geme$_2$ :: UN-il$_2$: arad$_2$ makes sense. However, uš-bar is an occupation, whereas UN-il$_2$ is a social stratum, at least during the Ur III period. It is also not clear how UN-il$_2$ relates to arad$_2$, since the latter has a range of meanings in various contexts. Moreover, the technical meaning of du$_8$-a in this context is uncertain. Wu Yuhong (1998, 95) argues that this proverb "wishes to tell that the class of the released slaves or serf, who got better life than before, works more efficiently than the class of slaves, who were forced to work." This explanation does not rely on any solid evidence, however, that UN-il$_2$ are "released slaves." As such, although it is interesting to find UN-il$_2$ in a proverb, this text cannot shed much light on its meaning.

Besides examining early administrative and all lexical and proverb attestations of the term UN-il$_2$, the term il$_2$ may also have some relevance. It occurs in administrative and lexical texts from as early as the Early Dynastic IIIa period. In the Early Dynastic and Sargonic periods,

il$_2$ likewise occurs as a personal name, including for an Early Dynastic ruler of Umma.[123] In the Early Dynastic III period, il$_2$ occurs numerous times as an occupational or social-stratum term, which is applicable to both male and female workers.[124] il$_2$ is also attested in the terms gal-UN il$_2$, il$_2$ e$_2$-gal, nu-banda$_3$ il$_2$, and ugula il$_2$.[125] It is often listed alongside broad terms, such as geme$_2$ dumu, giš-kin-ti, igi-nu-du$_8$, RU-lugal, ša$_3$ dub didli, and ša$_3$ dub e$_2$-gal, which group workers according to administrative, occupational, or social categories rather than function as specific occupations.[126] As such, il$_2$ may refer to a broader group of workers rather than a specific occupation. This position is further supported by four attestations of the šidim Enna who is also an il$_2$.[127] In the Sargonic Period, il$_2$ is utilized a few times (besides as a personal name) in generally brief or fragmentary contexts that do not need to be considered here.[128]

With regard to lexical evidence, il$_2$ is present in Early Dynastic Lu E 171. Several following lines, at least 172–177, appear to be thematically linked.[129] Several of these lines refer to menial workers and servants or slaves, and most of these terms do not function as specific occupations. Accordingly, based on the administrative and lexical evidence, there appears to be a

123. The reading of the personal name Il$_2$ is demonstrated in the Early Dynastic text *RIME* 1.9.5.1 iii 34 and the Sargonic text Foster, *JCS* 35, 170 6 obv. 3.

124. See CDLI P225752; P225755; P387452; Charpin, *RA* 71, 102; *CT* 50 pl. 36 BM 102082; *DP* 113; 114; 115; 171; 175; 227; 228; 230; *FAOS* 15/2 119; 120; 121; 122; 123; *HSS* 3 15; 16; 17; 18; 24; *MVN* 3 2; *Nik.* 1 9; *TSA* 13; 14; 16; 17; *VS* 25 11; 71.

125. For gal-UN il$_2$, il$_2$ e$_2$-gal, and nu-banda$_3$ il$_2$, see *CUSAS* 11 36; *DP* 142; 462; 505; *Nik.* 1 125. ugula il$_2$ is attested over about fifty times and need not be cited here.

126. See all the texts in n. 124 except for *DP* 171; 175. See also *BIN* 8 348; CDLI P225765; *CUSAS* 14 4; *DP* 151; 154; *HSS* 3 4; *Nik.* 1 2; *TSA* 15; 22; *VS* 14 29; 25 8; 27 7. For discussions on these groups, see Maekawa 1973–1974, 87–100; Prentice 2010, 22–69.

127. See *HSS* 3 18 obv. v 6–8; 24 obv. ii 14–16; *TSA* 13 obv. ii 13–iii 1; 17 obv. vi 12–14.

128. See, for example, *CUSAS* 11 228; 232; 315; 23 84; 35 276; *USP* 44.

129. For a helpful commentary on these lines, see Bartash 2014, 13.

well-established link between various menial occupations relating to carrying. Since the terms il_2 and UN-il_2 occur contemporaneously as early as the Early Dynastic IIIb period, it is not certain how they relate to each other. In any case, they seem to overlap in meaning and usage. However, despite the breadth of administrative, lexical, and proverb evidence, the term UN-il_2 remains enigmatic to some extent.

Regardless of any uncertainty concerning the origin and meaning of the term UN-il_2, it is clearly used during the Ur III period for a social stratum rather than as an occupational term, whether specific or broad.[130] It is attested roughly 1,750 times (rounded down to factor in UN-il_2 as a personal name), mainly at Girsu/Lagaš and Umma, less frequently at Adab, GARšana, Nippur, Ur, and Urusagrig. As discussed on pp. 87, 90, 93–94, UN-il_2 is often juxtaposed with various terms for citizens or lack thereof. In balanced accounts, inspections, sealed receipts, and work rosters, among other texts that list individual workers by name, the sign UN may precede guruš-age UN-il_2 (UN PN) when they are conscripted.[131] Generally, UN-il_2 refers to male UN-il_2, though it can be qualified by various gendered terms, such as $geme_2$ UN-il_2, guruš UN-il_2, UN guruš, UN-il_2 munus, and UN-il_2 nita, the last two of which only occur together in *BBVO* 11, 271 6N-T190+ rev. i 18', 25'. The phrases 1 $geme_2$ UN-il_2 and 1 guruš UN-il_2[132] unequivocally refer to female and male UN-il_2 rather than $geme_2$ and UN-il_2 or guruš and UN-il_2, respectively. Accordingly, the terms $geme_2$ UN-il_2 and guruš UN-il_2 occur dozens of times with presumably the same meaning. $geme_2$ UN-il_2 is also differentiated from UN-il_2 u_3

130. See Heimpel 1998, 398–99; Sigrist 1979–1980; Steinkeller 2013, 365; 2015a, 24–25. For the possible age range of guruš, see pp. 180–86.

131. See, for example, a few Umma texts, including the balanced account Englund, *CDLJ* 2003, 1 1 Erlenmeyer 152, the inspection *AAICAB* I/1 Ashm. 1911-228, and the work roster *MVN* 3 370.

132. For 1 $geme_2$ UN-il_2, see the Girsu/Lagaš text Maekawa, *ASJ* 20, 110 8 and the Umma text *MVN* 16 1342, and for 1 guruš UN-il_2, see various texts from Girsu/Lagaš (*HLC* 2 56 pl. 74; 99 pl. 93; *SNAT* 255), Puzriš-Dagān (*SET* 252), and Umma (*Nisaba* 24 31; *Syracuse* 259; 439; *UTI* 4 2937).

geme$_2$, which is only found in the Umma text *MVN* 21 225, and from geme$_2$ ⌜x x⌝ u$_3$ UN-il$_2$, which is only present in the Adab text *SAKF* 103.[133] The term UN guruš appears to have the same meaning as guruš UN-il$_2$, though it is generally utilized when allotments are included.[134]

Besides the term geme$_2$ UN-il$_2$, the term geme$_2$ alone or in combination with various occupations can be used for female UN-il$_2$. This term though, like guruš, can be used very broadly for any woman engaging in work as well as for female slaves, and so it must be considered in context.[135] The most likely contexts in which geme$_2$ refers to UN-il$_2$ are texts detailing the work of conscripted women, especially those employed in agricultural work, cereal grinding, textile production, and transportation, though some of these women could be slaves that were former prisoners of war (see Steinkeller 2013c, 365; 2015a, 7–8, 24–25). While many of these geme$_2$ in such contexts are inferred to have been UN-il$_2$, Maekawa (113) observes that "male children of female weavers are often classified as UN-íl in Lagash texts." Additionally, *Ontario* 2 190 obv. 9, 12, 18 provides direct evidence that geme$_2$ could be UN-il$_2$. Overall, since female citizens are largely undocumented in administrative texts (see pp. 259–60), many conscripted geme$_2$, especially in administrative as opposed to legal texts, are reasonably assumed to have been UN-il$_2$.

There are a few texts listing conscripted male individuals in which only citizens are designated, meaning that the remaining conscripted individuals were probably UN-il$_2$. A good example of this phenomenon is *Torino* 2 704, many of whose known UN-il$_2$ are given in Table 3.3.

133. *Nisaba* 6 12 rev. ii 22 reads: UN-[il$_2$ geme$_2$ a-ru]-a-me, but this restoration is uncertain.

134. See, for example, its numerous occurrences in the Umma texts *LAOS* 1 2 and Snell, *ASJ* 11, 182.

135. Bartash (2018a, 69–70) addresses this same ambiguity with geme$_2$ in Early Dynastic texts.

Table 3.3. Undesignated UN-il$_2$ in *Torino* 2 704 who were Explicit UN-il$_2$ Elsewhere

Name	Line	Citation(s) of UN-il$_2$ Stratum
Uremah	obv. i 1 (coll.)	*OrSP* 47-49 483 obv. ii 8
Šešani	obv. i 2	*OrSP* 47-49 483 obv. ii 9
Igipeš	obv. i 8 (coll.)	*OrSP* 47-49 483 obv. i 11
Lu-Suen	obv. i 9 (coll.)	*OrSP* 47-49 483 obv. i 12
Ursilaluh	obv. ii 1[136]	*CUSAS* 39 129 rev. ii 35'; *OrSP* 47-49 483 obv. ii 3
Ur-Šara	obv. ii 2 (coll.)	*MVN* 3 370 obv. 14; *OrSP* 47-49 483 obv. ii 4
Ur-Geštinanka	obv. ii 3	*OrSP* 47-49 483 obv. i 14
Lu-Ibgal	obv. ii 6	*AAICAB* I/1 Ashm. 1924-665 obv. i 30, ii 3; *MVN* 21 199 obv. i 9', 23'; *YOS* 4 232 rev. ii 4
Ur-Iškur	obv. ii 7	*YOS* 4 232 rev. ii 5; le. ed. ii 2
Ur-Guedena	obv. ii 9	*AAICAB* I/1 Ashm. 1924-665 obv. i 28, ii 3; *Organisation administrative, Diss.*, 202-210 6 Talon-Vanderroost 1 rev. iii 26'; *OrSP* 47-49 483 rev. i 14; *YOS* 4 232 rev. ii 22

While there are probably further examples from *Torino* 2 704, these are certainly demonstrative. Another text in which this is probably the case is *MVN* 21 203, though the evidence there is not as clear (see pp. 206–8).

The term UN-il$_2$ also describes a kind of garment (tug$_2$ UN-il$_2$), which is known in Akkadian as *nāramum* (*naḫramum*). While it can be speculated that this was a standard-issue garment for the UN-il$_2$, this garment is limitedly attested at Girsu/Lagaš and Nippur.[137] Moreover, their recipients are rarely known, though some appear to have been UN-il$_2$ e$_2$ ^{d}Šul-gi (*MVN* 7 339 obv. 5) and eren$_2$ ša$_3$-gu$_4$ hu-bu$_7^{bu}$ \ e$_2$ ^{d}Šul-gi-ra (*UNT* 83 obv. 2–3). As such, any possible connections between UN-il$_2$ and tug$_2$ UN-il$_2$ remain tenuous.

136. Obv. ii 1 is difficult to restore, but it appears to include the name Ur-sila-<luh>.

137. See various texts from Girsu/Lagaš (*MVN* 7 339; *UNT* 83) and Nippur (*BBVO* 11, 266 5N-T464 (?); *NATN* 494; *TMH NF* 1-2 237; 238; 239; 241+234; 242).

3.2.3. Slaves

While the terms for slaves are mainly limited to arad$_2$ and geme$_2$,[138] these terms are often ambiguous. There are several contextual considerations, however, that can clarify their meanings. Broader contextual considerations include the genre of the text or the circumstances pertaining to the usage of these terms. In legal texts these terms clearly refer to slaves, and they are often accompanied by the terms nam-arad$_2$ and nam-geme$_2$, which refer to male and female individuals' slave statuses, respectively. Though nam-arad$_2$ and nam-geme$_2$ are mostly utilized in legal texts, they are rarely present in administrative texts with the same meaning.[139]

More narrowly, an individual can be identified as a slave in the phrases PN$_1$ arad$_2$|geme$_2$ PN$_2$ ("PN$_1$, the male|female slave of PN$_2$"), especially when these phrases are utilized in administrative (see 5.2.2.5. Substitutions) and legal texts. However, these phrases, especially PN$_1$ arad$_2$ PN$_2$, can be used for citizens as well, including with DNs (PN arad$_2$|geme$_2$ DN).[140] The phrases arad$_2$|geme$_2$ lu$_2$ ("male|female slave of a person") also refer to slaves, mainly at Girsu/Lagaš and rarely at Umma and Ur.[141] arad$_2$ lu$_2$-me (*HLC* 1 30

138. For discussions on the development of the term arad$_{(2)}$, see Molina 2011, 563; Selz 2011; Steinkeller 1993, 121 n. 38.

139. See the Umma texts *BPOA* 7 2457; *Nisaba* 32 150. Note that *BPOA* 7 2457 rev. 21: nam-arad$_2$-še$_3$ ba-an-tum$_2$ is not present on the tablet, though the following line is correct (I am indebted to Klaus Wagensonner and the YBC for providing images of this tablet). There is also one attestation of nam-arad$_2$ in a seal (see the Urusagrig text *CUSAS* 40/2 1383), but the seal is fragmentary.

140. Besides the fact that numerous names are structured as Arad$_2$|Geme$_2$-DN, the phrase PN arad$_2$ DN occurs frequently (see, for example, *AAICAB* I/1 Ashm. 1911-182), whereas PN geme$_2$ DN is limitedly attested, mostly, if not only, at Nippur (see *NATN* 530; 771; *TMH NF* 1-2 188; 204), though there is a possible but fragmentary example at Umma (see *SAT* 3 1739). For further discussion on the phrases PN$_1$ arad$_2$|geme$_2$ PN$_2$|DN, see Steinkeller 1989, 131.

141. See various texts from Girsu/Lagaš (*'Atiqot* 4 pl. 9 12; *HLC* 1 30 pl. 29; 2 92 pl. 88; 3 374 pl. 141; Maekawa, *ASJ* 20, 106 6), Umma (*MVN* 15 390), and Ur (*Nisaba* 5 591 U. 30610). Note that arad$_2$ in Arad$_2$ lu$_2$ La-a-mu (*AnOr* 1 88 obv. iii 10) is probably a PN in the phrase PN$_1$ lu$_2$ PN$_2$ (see p. 245), especially given the use

pl. 29 rev. ii 5') describes several preceding individuals, many of whom are lost to damage, including AŠc 0.1.0 A-ba-da-sa$_2$ arad$_2$ Ur-e$_2$-an-na nu-banda$_3$ gu$_4$ (rev. ii 2'). This demonstrates the correspondance between arad$_2$ lu$_2$ and PN$_1$ arad$_2$ PN$_2$, which both refer to slaves in this case. The use of geme$_2$ lu$_2$-me in *HLC* 3 374 pl. 141 rev. i 5 is more complicated, however. While it clearly includes AŠc 0.0.3 U$_3$-ne \ dumu arad$_2$ En-gi (rev. i 2–3), it likewise appears to include AŠc 0.0.3 ^{d}Ba-u$_2$-i$_3$-zu sag e$_2$-du$_6$-la Amar-Sumun$_2$-zi-da (obv. ii 21), who is one of several geme$_2$ e$_2$-gal (rev. i 1). There are also four female citizens (dumu-gir$_{15}$ [obv. ii 20]) who are geme$_2$ e$_2$-gal. Accordingly, geme$_2$ e$_2$-gal is used here as an occupational term describing female servants of the palace, whether they were citizens or slaves, whereas geme$_2$ lu$_2$ identifies female slaves, such as Une, the daughter of the slave of Engi, and Bauizu, a slave of the household of Amar-Sumunzida. In the totals section, these geme$_2$ lu$_2$ are counted, but the geme$_2$ e$_2$-gal are not. Instead, all the female citizens, including but not limited to the palace servants, are counted as geme$_2$ dumu-gir$_{15}$.[142] While this text affirms that geme$_2$ lu$_2$ is used for female slaves, it likewise demonstrates the ambiguity of the term geme$_2$.

In addition to arad$_2$ and geme$_2$, the terms sag(-munus|nita$_2$) are often utilized for slaves, especially in sales. Concerning this correlation, however, Steinkeller (1989, 130–31) thoroughly demonstrates that they are used as "gender descriptions" though understandably in

of this phrase in *AnOr* 1 88 rev. iii 3. The same may apply to Arad$_2$ lu$_2$ Ur-^{d}Suen lu$_2$ sum-ma in the Umma texts *AnOr* 7 219; *MVN* 14 395; *SAT* 3 1505.

142. For a discussion on all these female citizens, see n. 94.

contexts often referring to slaves. Besides these terms including sag, sag-rig$_7$ is also used for slaves,[143] concerning which Steinkeller (2017a, 558) writes:

> The term sag-rig$_7$ is rare in Ur III documentation. It typically describes royal slaves, either those forming part of the royal household or the ones presented by the crown to members of the royal family and high officials of the state. Among the mentions of such slaves, note especially TCL 2 5484:6–29 (AS 5/viii), which lists, following the queen's sister Bizu'a, twenty women designated as sag-rig$_7$ šag$_4$ é-gal-me, "donated slaves, the ones (living) in the (royal) palace."

Overall, though there are only a few terms and phrases that are used for slaves, there is often ambiguity, so the context must always be carefully considered.

3.2.4. MAŠ.EN.GAG

The term MAŠ.EN.GAG,[144] which should be understood as the Akkadian term *muškēnum*, is difficult to translate and has been rendered as "'subject'" by von Dassow (2014, 291), "dependents" by Garfinkle (2012, 188), "servant" by Sigrist (1995, 50), and "subordinates" by Steinkeller (2002, 128). These differing translations generally suggest that MAŠ.EN.GAG may have been dependent in a serflike manner similar to UN-il$_2$, though not in temple households, given their context. The debate on the meaning of *muškēnum*, particularly during the Old Babylonian period, is extensive and ongoing, but discussions by von Dassow (2011, 212–18; 2014) and Daniel Fleming (2004, 109, 141–47, 312), among others, are demonstrate that the term is applicable to citizens, albeit in certain contexts. As is noted by Piotr Michalowski (1977, 292), however, the term MAŠ.EN.GAG is not widely attested in the Ur III period and need not be

143. See, for example, texts from Girsu/Lagaš (*ITT* 2 928; 932; *MVN* 12 125; *SNAT* 38), Umma (Steinkeller, *Studies Postgate* 2, 554 C; *TCL* 5 6047), Ur (*UET* 3 44), and Urusagrig (*Nisaba* 15/2 953).

144. MAŠ.EN.GAG is sometimes read as mašda$_2$ (see Oppenheim 1978, 116 O 3; Steinkeller 1992, 20). Note that MAŠ is often written inside of EN, though it follows EN once in the Puzriš-Dagān text *NYPL* 240 rev. 3.

strictly equivalent to *muškēnum* during the Old Babylonian period. Overall, they are difficult to place in the rigid tripartite stratification of southern Babylonia.

In any case, MAŠ.EN.GAG is clearly utilized for certain individuals predominantly from northern Babylonia and the periphery of the Ur III state. They are attested mainly in texts from Urusagrig as well as in others from GARšana, Isin, Nippur, Puzriš-Dagān, the SI.A'a archive,[145] and Ur. Moreover, stated locations of these individuals include Anzagar (*CUSAS* 40/2 128; 1441; *Nisaba* 15/2 395 [?] [may not apply]; 524 [?] [ditto]), Apilanum (*TIM* 3 149), Dêr (Michalowski, *OrAnt* 16, 290 4), GARšana (*CUSAS* 6 1580), Kismar and Maškan-šarrum (*TRU* 144 obv. 11 [˹lugal˺ is probably ˹lu$_2$$^{!}$˺]; *WMAH* 99), Maškan-kullizum (*CUSAS* 40/2 831), Maškan-pūša (*CUSAS* 40/2 503; *Nisaba* 15/2 164; 244), Meduran (*MVN* 15 195; *Nisaba* 33 29), NI.NI-am-ra^{ki} (*Ontario* 1 53), Pašime (Zwaid, *JCEUW* 45, 188), as well as Urusagrig (*CUSAS* 40/2 1566; *Nisaba* 15/2 395).[146]

In the GARšana text *CUSAS* 40/2 831, a MAŠ.EN.GAG is juxtaposed to an arad$_2$ e$_2$-a, indicating that he was not a servant of the household, but the remaining documentation of MAŠ.EN.GAG in GARšana does not provide much help except to indicate that they could be

145. I am indebted to Manuel Molina for the attestation of MAŠ.EN.GAG in an Isin text (*KTI* 676) as well as for the reference to Pašime here. For the location of the SI.A'a archive, see Garfinkle 2012, 37–41.

146. These locations are often established by the phrase MAŠ.EN.GAG (…) lu$_2$ GN, which should be understood as "MAŠ.EN.GAG (…), the person|people of GN" as opposed to Michalowski's (1977, 291) translation of *OrAnt* 16, 290 4 rev. 5: MAŠ.EN.GAG lu$_2$ BAD$_3$.AN^{ki}-me as "the MAŠ.EN.KAK of the 'man' of BÀD.AN^{ki}" and Sigrist's (1995, 50) translation of *Ontario* 1 53 rev. 3: giri$_3$ Giš-ga-ga MAŠ.EN.GAG lu$_2$ NI.NI-am-ra^{ki}-ka as "responsible: Gišgaga the servant of the man of …" Note that Owen (2019, 42) situates Anzagar near Urusagrig. The location of the village of Apilanum is uncertain, but it may be close to the SI.A'a archive. Kismar and Maškan-šarrum belonged to the periphery of the Ur III state that paid the gun$_2$ ma-da tax (see Steinkeller 1991, 28 n. 56). As for Maškan-pūša, Steinkeller (1989, 305–6) notes that it was probably located in the vicinity of Puš, situated near Kutha and Sippar. In a similar fashion, Maškan-kullizum may be near Kullizum, which was in northern Babylonia (see Charpin 2005, 143), but this is uncertain. The locations Meduran and NI.NI-am-ra^{ki} are attested only twice and once, respectively, but they may belong to the periphery like Kismar and Maškan-šarrum. See also *CUSAS* 40/2 1492, which is too broken to understand. Pašime was located at Tell Abu Sheeja in the periphery to the southeast near the Iranian border (see Hussein et al. 2010).

employed in some fashion at the palace.[147] When MAŠ.EN.GAG are attested in Puzriš-Dagān, they often provided livestock, which are sometimes described as their property (nig$_2$-gur$_{11}$) and which served as tax payments.[148] Such participation in this tax system aligns them more with citizens as opposed to UN-il$_2$, who are not known to do so.[149] In the SI.A'a archive text *TIM* 3 149, MAŠ.EN.GAG belonging to a military unit possessed šuku land in the village of Apilanum. Although UN-il$_2$ rarely had military duties (see, for example, p. 225), citizens and UN-il$_2$ both received šuku land (see, for example, pp. 219–29).[150] In Urusagrig, there are a few texts that distinguish eren$_2$ and MAŠ.EN.GAG.[151] They are also differentiated there from nu-dab$_5$ and arad$_2$,[152] but neither of these other terms are exactly clear in such contexts (see the discussion of nu-dab$_5$ on p. 95). In the Urusagrig texts *Nisaba* 15/2 164; 958, the wives of a few MAŠ.EN.GAG are named. In the former, these wives are also designated as MAŠ.EN.GAG. MAŠ.EN.GAG are also attested in one text from Nippur (*MVN* 8 190) and Ur (Legrain, *RA* 30, 120 6) each, the former of which is not very informative and the latter of which juxtaposes them with arad$_2$, which is again limitedly helpful.[153] As such, given the use of MAŠ.EN.GAG for certain individuals mainly from

147. See *CUSAS* 3 529 obv. 12–14: tu$_7$ ba-ra-šeg$_6$ \ MAŠ.EN.GAG lu$_2$-kas$_4$ ka$_2$ e$_2$-gal-ka gub-ba [M]E-^{d}Ištaran \ ib$_2$-gu$_7$ and 541 rev. 4–5: 0.0.2.6 <ninda> šu-ra-gen ½ sila$_3$ du$_8$ \ MAŠ.EN.GAG ka$_2$ e$_2$-gal-ka gub-ba ib$_2$-gu$_7$. Molina Manuel notifies me that the IM 226567, an unpublished text from GARšana, includes the phrase lu$_2$-kas$_4$ MAŠ.EN.GAG ka$_2$ e$_2$-gal gub-ba.

148. See Michalowski, *OrAnt* 16, 290 4; *MVN* 1 144; 15 195; *Nisaba* 33 29; *NYPL* 240; *OIP* 121 73; 89; 100; *PDT* 1 422; Thureau-Dangin, *RA* 7, 188; *Trouvaille* 25; *TRU* 144; *WMAH* 99.

149. I am indebted to Piotr Steinkeller for drawing my attention to this line of reasoning. There is one possible exception, however, which is *SET* 2 rev. 9: 2 udu 1 maš$_2$ dumu Šar-ru-um-ba-ni UN-il$_2$-e-ne, but this is uncertain.

150. For further discussions, see Garfinkle 2012, 188–89; Steinkeller 2002, 128.

151. See *CUSAS* 40/2 128; *Nisaba* 15/2 53; 244; 245a+b.

152. See *CUSAS* 40/2 503; *Nisaba* 15/2 165; 395; Owen, *Studies Milano*, 351 16.

153. Kraus (1958, 155) offers the following tentative reconstruction of another attestation of MAŠ.EN.GAG in Ur: "An der von Falkenstein, Gerichtsurkunden I, S. 98 Anm. 9, herangezogen beschädigten Stelle UET 3 (1937) Nr. 52 I 7′-10′ könnte man etwa ergänzen [N]N GÌR.ARAD.e [… MAŠ].EN.KAK (= 2).mu.um bí.in.dug$_4$, „der Gouveneur NN hat erklärt: '[B(?)] ist mein Untertan(?).'"

northern Babylonia and the periphery of the Ur III state, the term was probably adopted from its preexisting usage to refer to individuals in some kind of serflike subordination, though with similarities to citizens and UN-il$_2$.

3.3. Origins

3.3.1. Social Stratum Determined at Birth

The social strata of all individuals born in Ur III society appear to be inherently determined by the social strata of their mothers. This was probably because the mother of a child was more certain than the father and because of the impact of the mother's legal rights and economic autonomy or lack thereof on her newborn child. While this is difficult to prove in a wide variety of cases, there is sufficient evidence to demonstrate this phenomenon. Most of the evidence is found in law codes, such as *LU* §5 and *LH* §175, which indicate that children of a male slave and female citizen were not inherently slaves, as well as *LL* §25, which demonstrates that children of a male citizen and female slave were inherently slaves, though they may be later freed (see Westbrook and Lafton 2003, 204. There may be some legal texts that also indicate this phenomenon (see Wilcke 2014, 495–98). In his analysis of *LU* §5, Miguel Civil (2011, 254) proposes that "the transmission of a particular status to the offspring, described in the present paragraph, is confirmed by passages such as the conclusion of a list of guruš said to be dumu-ni-me ama-bi dumu-gir$_{15}$ 'they are sons whose mother is a dumu-gir$_{15}$' (*ITT* 4 7564)." Molina (2008, 133) also highlights the authority that mothers could exercise in the sale of their children:

> What our text [*Studies Sigrist*, 132 5] and no. 6 [*Studies Sigrist*, 134 6] below show, is that when children were sold (most probably for debts), their mother kept some kind of rights to them: they could not be sold into slavery to a third party by their new owner without the consent and participation of the mother. On the other hand, the mother could not sell them

on her own initiative unless, as *ITT* 2 3519 establishes, a royal decree making them free was handed down.

These texts indicate that citizens sold into temporary debt slavery retained rights regarding their resale.

Besides this legal evidence, all conscripted individuals, with some, if any, real exceptions, shared the same social stratum as their relatives. Some possible exceptions are noted by Koslova (2008, 189–90 nn. 106, 108):

> [106] In beiden Fällen sind die kranken Personen Söhne der uĝ$_3$-ga$_6$-Arbeiter und trotzdem in der Summe als eren$_2$ bezeichnet (?). Einer von ihnen, namens a-kal-la, der Sohn von lugal-iti-da, ist auch im Text 15 [*YOS* 4 232] belegt, dort auch als "krank" und in der Summe als eren$_2$ bezeichnet.
>
> …
>
> [108] urdu$_2$-^{d}šara$_2$, der Bruder von dem Kranken a-kal-la und Sohn des lugal-iti-da (s. oben Anm. 106), kommt auch im Text 15 vor; er wird dort auch als "entflohen" bezeichnet, in der Summe aber zu eren$_2$ gerechnet, obwohl er eindeutig der Sohn eines uĝ$_3$-ga$_6$-Arbeiters ist.

The ill person not specified above is a certain Niglagare in the Umma text *OrSP* 47-49 324 rev. i 3. Besides these individuals in *YOS* 4 232, there are five individuals in rev. ii 16–20, who appear to be a father and four sons. The father and first son were citizens, however, and the last three sons were UN-il$_2$. As noted by Koslova, *YOS* 4 232 appears to have several exceptions, so perhaps these are all scribal issues, especially since there may be several scribal mistakes in this text. For example, there are erasures in the name of an individual in rev. ii 10, and there are two lines underneath col. i (i 25–26), which seem to be out of place. The notation of the individual in i 25, is unusual, since it looks like ½ without any allotment, whereas ½$_c$ with gan$_2$ is more expected. There is also an issue with rev. ii 36, which inaccurately corresponds to rev. i 8, 19, 21, 25.[154] Some other possible exceptions include Lu-Šara and his father Ursusu, Pešam, and Gaza in the Umma texts *CUSAS* 39 128 obv. iii 38, rev. i 34 (coll.); 129 obv. iv 24, 26, 34; 132 obv. ii

154. See the transliteration of these lines in Studevent-Hickman 2006, 2:439–40.

12; *Nisaba* 11 15 rev. ii 14. *Nisaba* 11 15, however, cannot be visually examined. Additional possible exceptions include Arad-Šara and his son Ur-Mami as well as A(ya)kala, son of Ur-Bil, in *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 obv. ix 7–8, rev. i 3; 217 7 Talon-Vanderroost 2 obv. ii 5–6, rev. i 20. Neither of these texts can be visually examined, and these possible exceptions are likewise insignificant. There is also a possible error in *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 obv. iii 26'–30': AŠ$_c$ gan$_2$ UN Ur-^{d}Suen \ DIŠ Ab-ba-kal-la dumu-ni \ AŠ$_c$ gan$_2$ UN Ur-am$_3$-ma \ AŠ$_c$ gan$_2$ Lu$_2$-^{d}Šara$_2$ \ dumu Lugal-bad$_3$-me. It is uncertain if Ur-Suen was a son of Lugalbad, though it is possible given their proximity as UN-il$_2$. Lu-Šara, however, should be an UN-il$_2$, but this text cannot be visually examined.[155] Considering how limited all these exceptions are in Umma texts overall, it is possible that they are all scribal errors. Thus, based on legal and administrative evidence, social strata were generally inherited.

3.3.2. Citizens

The main source for citizens is the native populations of the various core provinces, particularly in southern Babylonia. With regard to the province of Umma, Steinkeller (2013c, 360) offers the following estimates:

> The total number of royal éren in the province may have been as high as 25,000 (only the heads of families). In contrast, members of the governor's organization were much fewer. According to my estimate, the governor controlled, within the entire province, some 3,000 individuals (certainly not more than 4,000).

155. Note that the individuals listed in *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 obv. iii 29'; *OrSP* 47-49 324 obv. ii 30, rev. i 3; *YOS* 4 232 rev. i 9–10 are counted as UN-il$_2$ in the appendixes. The individuals listed in *CUSAS* 39 128 obv. iii 38, rev. i 34; 129 obv. iv 24, 26, 34; 132 obv. ii 12; *Nisaba* 11 15 rev. ii 14; *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 obv. ix 7–8, rev. i 3; 217 7 Talon-Vanderroost 2 obv. ii 5–6, rev. i 20, however, are not counted in any appendixes.

As for the city of Umma, Steinkeller (2017a, 547) utilizes *TCL* 5 6166[156] to calculate that "the total number of the free citizens and their dependents [wives, children, and parents] living in the city of Umma was between 11,000 and 15,000." Considering that his estimate of the total population of the city was "between 14,000 and 18,000 individuals" (Steinkeller 2017a, 548), citizens may constitute roughly 80 percent of the city's population. A similar, though less precise, estimate of the substantial percentage of citizens in the province of Girsu/Lagaš is offered by Maekawa (1976, 16; 1987a, 64).

Besides native populations, Steinkeller (2015a, 8–9) notes that many citizens were former prisoners of war, concerning whom he elaborates, "such individuals invariably were granted the status of state dependents. As such, they were settled on land and provided with field allotments, integrated into the local rural population, and made part of the royal economy."[157] Accordingly, southern Babylonia was populated by citizens from both local native populations as well as foreign prisoners of war, in addition to whom individuals from northern Babylonia were also settled, though the evidence is somewhat limited (see Steinkeller 2013c, 353, 356–57). As for northern Babylonia, Steinkeller (2013c, 360) notes that most or nearly all the citizens would have belonged to the royal sector, whether they were natives of the region or resettled former prisoners of war.[158]

156. For an analysis of several individuals in this text, see Molina 2014, 138.

157. Von Dassow (2011, 207) similarly writes:
People could become enslaved in various ways; the main routes were through capture in war or through indebtedness, and after that by being born in slavery (Westbrook 1995). In principle, the enslavement of free persons by whatever means was temporary. Redemption by kin, community, or the state was provided for in law (and often accomplished in practice), in order to return members of the community to freedom and thus to full participation as citizens; for only free men, not servants of other men, could be conscripted to work and to fight for the state.

158. For further evidence regarding the distribution of citizens across various settlements, see Steinkeller 2013, 374–80.

Another means of becoming a citizen was manumission, which resulted from various actions, including edicts and redemption (see Lafont and Westbrook 2003, 200; Neumann 1989; Molina 2011), though most manumitted slaves were probably already citizens. In a few instances, manumitted slaves are designated as a dumu-gir$_{15}$ (see the Girsu/Lagaš texts *ITT* 5 6842; *NSGU* 75) or equated with a dumu lu$_2$ or a dumu uru (see the Girsu/Lagaš texts *ITT* 3 6544; 6609; *NSGU* 75). With regard to the statuses of freed citizens in the ancient Near East, particularly during the Ur III Period, Orlando Patterson (1982, 253) offers the following observation:

> In Mesopotamia and in pharaonic Egypt the freedman was made a "son of the city" or a "freedman of the land of Pharaoh," both of which are taken to mean citizenship …
>
> Bernard Siegel makes an extreme claim for the Third Dynasty of Ur. "There is," he states, "considerable documentary evidence for manumission and freedom, which when once established, completely freed the slave from the stigma of his former status." If this is indeed the case, then the Third Dynasty of Ur ranks as an unparalleled instance of tolerance towards the ex-slave.

While claims regarding "the stigma of his former status" (Siegel 1947, 42) or "tolerance towards the ex-slave" are to a certain extent inaccessible and subjective,[159] the texts noted above substantiate this means of attaining full citizenship from slavery.

3.3.3. UN-il$_2$

Although the origins and meaning of the term UN-il$_2$ are uncertain, it clearly describes individuals engaged in menial work. According to Steinkeller (2015a, 24–25), these individuals were likely natives who were unable to sustain their own private households and thus depended

159. To the extent that these claims may be valid, they would comport with the findings in Lindgren 1995 regarding the generally worse treatment of manumitted slaves versus free individuals according to legal sources from a variety of cultures and historical periods.

entirely on gubernatorial and temple households mostly as well as royal households less often.[160] Ur III texts do not clearly detail the process by which any individual became an UN-il$_2$, though Yoshikawa, *ASJ* 9, 315 4 may provide rare evidence that a citizen could be penalized with work as an UN-il$_2$ because another UN-il$_2$ fled from his custody.[161] Another uncertain example is the Huti family attested in several Umma texts, as seen in Table 3.4.

Table 3.4. The Huti Family in the Umma Texts *CUSAS* 39 126; 128; 129; and 140

***CUSAS* 39 128 (AS 3/-/-)**		***CUSAS* 39 129 (AS 5/-/-)**	
Line	**Transliteration**	**Line**	**Transliteration**
obv. iii 24	AŠ$_c$ gan$_2$ Hu-ti	obv. iv 7	--- Hu-ti
obv. iii 25 (translit. mine)	AŠ Giri$_3$-ni-i$_3$-⌜sa$_6$⌝	obv. iv 8	--- Giri$_3$-ni-i$_3$-⌜sa$_6$⌝
obv. iii 26	DIŠ Ur-sa$_6$	obv. iv 9	--- Ur-sa$_6$-[ga]
obv. iii 27 (translit. mine)	DIŠ x{erased$^?$} Lu$_2$-^{d}Inanna	obv. iv 10	--- Lu$_2$-^{d}⌈Inanna⌉
—		obv. iv 11	--- Ba-si[g$_5$]
obv. iii 28	dumu-ni-me	obv. iv 12	dumu-ni-me
***CUSAS* 39 140 (AS 5/vii/[ ])**		***CUSAS* 39 126 ([-]/[-]/[-])**	
obv. iii 17'	AŠ 0.0.3 tug$_2$ Ur-sa$_6$	obv. vi 2	0.0.3 Ur-sig$_5$
obv. iii 18' (translit. mine)	AŠ 0.0.3 tug$_2$ Giri$_3$-ni-i$_3$-⌜sa$_6$⌝	obv. vi 3	0.0.3 Giri$_3$-ni-i$_3$-sa$_6$
obv. iii 19'	dumu Hu-ti-me	obv. vi 4	dumu Hu-ti gab$_2$-ra-me
obv. iii 20' (CDLI)	mu 10-am$_3$ Hu-ti ba-zah$_3$ u$_3$ Ur-sa$_6$ dumu-ni gurum$_2$-da ba-da-an-du$_{11}$ ensi$_2$ e$_2$-muhaldim-ta ba-al-la-še$_3$	…	
		obv. vi 15	gurum$_2$-e taka$_4$⌝(UR$_4$)-a
…		—	
rev. iii 1	[gurum$_2$]-⌜ak⌝ UN-[il$_2$] tur-tur		

160. Although UN-il$_2$ were overwhelmingly dependent on mainly gubernatorial and temple households and less often royal households, there are potentially exceptional examples of UN-il$_2$ who may have been slaves or probably servants in private households, as evidenced in *BPOA* 1 645 obv. 1–2: 1 UN Ur-^{d}Utu \ arad$_2$ Bi$_2$-da and *Nisaba* 23 2 obv. ii 23: AŠ$_c$ gan$_2$ UN Lugal-da$_5$-ba-an engar arad$_2$ Nig$_2$-in-[zu]. It is not certain whether this Ur-Utu is attested elsewhere. This Lugaldaban is confidently attested in *BPOA* 7 2153 obv. 1 (see Vanderroost 2013, 2:296) and probably in Liu, *Orient* 55, 159 5 obv. 3, among other possible texts, but these other texts do not clarify his potential enslavement or servitude. Given the rarity of these examples, it is possible that arad$_2$ is a mistake in *Nisaba* 23 2 obv. ii 23. If so, the line could perhaps be read as AŠ$_c$ gan$_2$ UN Lugal-da$_5$-ba-an engar dumu Nig$_2$-in-[zu], which would be structurally parallel to obv. iii 7: AŠ$_c$ gan$_2$ UN Lu$_2$-^{d}Šara$_2$ engar dumu Ur-nigar$_x^{gar}$. This does not explain *BPOA* 1 645, however. While there may be more examples like these, there remains little evidence that UN-il$_2$ could be slaves or servants in private households.

161. I am indebted to Eric Aupperle and Taha Yurttas for their interpretation of this text, which they intend to discuss in a future publication.

In *CUSAS* 39 128; 129, these members of the Huti family were all citizens, but Ursa and Girini'isa appear to have been UN-il$_2$ in *CUSAS* 39 140. Their social stratum is not known in *CUSAS* 39 126, though this text is large and lists undesignated UN-il$_2$.[162] *CUSAS* 39 140 obv. iii 20' indicates that Huti had been absent for ten years, despite appearing to have been present in *CUSAS* 39 128. Dahl (2020, 206–7) discusses these attestations of the Huti family, suggesting that there was a clear discrepancy between these texts and that *CUSAS* 39 140 was probably correcting previous documentation, which may have been fraudulent. He (2020, 207) translates *CUSAS* 39 140 obv. iii 20' as "For 10 years (when) Ḫuti (had) fled and Ursa, his child, (had) received(?) rations from the kitchen of the governor …" This line is difficult to translate, but it may be understood as "It is ten years (since) Huti fled, but Ursa, his child, was included (lit. 'spoken') with the inspection. The governor (transferred him [Ursa]) to excavating from (working at) the kitchen."[163] Note that Dahl does not draw attention to *CUSAS* 39 126 obv. vi 15: gurum$_2$-e taka$_4$'(UR$_4$)-a, meaning probably "left (unregistered) in the inspection" (see 5.2.1.4.3. Registration), which may not apply to these individuals. If it did apply, however, then this text likewise indicates issues in their registration.[164] Based on these attestations, it appears that the children of Huti became UN-il$_2$ some time after his lengthy unexcused absence. It is not clear when this may have happened or if they became citizens again later in their lives.

The Old Babylonian letter *LFBD* 1 may describe a similar possibility of penalizing someone with work as an UN-il$_2$, though in this case, the term is *babbilum*, which may not be equivalent. This text is translated by Oppenheim (1967, 78–79), which is excerpted here:

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162. See, for example, several undesignated UN-il$_2$ in this text in Appendix 2.

163. I am indebted to Eric Aupperle for his input on my translation, which nevertheless remains uncertain.

164. For the sake of counting individuals in the Huti family in any of the Appendixes, their social stratum is considered to be whatever it appeared to be in any given text.

> As to the case of the temple singer Nabium-mālik, a native of the town of Ḫabuz, the man made the following deposition to me. I quote him: "Nobody ever issued a summons for me to do service as a porter. Now the governor of the Inland Region has sent me notice, and (after I refused) they took a slave of mine as a pledge."

This example is admittedly speculative, however. If this was a means of becoming an UN-il$_2$, it would have probably been rare.

One means of becoming an UN-il$_2$ may have been donation (a-ru-a and far less often a-ri-a), and there are numerous references to the donation of individuals for work at temples mainly.[165] Based on a thorough prosopographical analysis of donated male individuals in Umma texts (see Appendix 2), some amount between about 45 and 70 percent can be identified as UN-il$_2$, and the social strata of the remainder are unknown, though many of them were likely UN-il$_2$. In various Girsu/Lagaš and Urusagrig texts, some donated male and female individuals were privately owned slaves.[166] One poignant example is Bautalu, who was the female slave of the merchant Lu-Ningirsu in *STA* 10 rev. v 23–24 (CDLI) and donated by the same Lu-Ningirsu in *WMAH* 176 rev. iv 25'–26'. Although many donated male individuals were UN-il$_2$, it is not clear whether the process of donation was the cause of or merely a consequence of their UN-il$_2$ status. As for donated female individuals, they are generally referred to as geme$_2$. In several instances, those donated geme$_2$, along with their children, were prisoners of war (literally "booty" [nam|ne-ra(-aš) ak]),[167] though there are texts in which donated geme$_2$ and their children are distinct from the prisoners of war (see *TUT* 159 obv. v 6–rev. v 29) or in which only a portion of

165. For an introduction to this phenomenon, see Gelb 1972b. The connection between donation and the origins of the UN-il$_2$ is suggested in Steinkeller 2015a, 24–25. There is one example of an UN-il$_2$ that appears to be gifted by the king for bala work (see Foxvog, *ASJ* 15, 77 3), which may be similar to donation, but this is exceptional.

166. See, for example, texts from Girsu/Lagaš (*CT* 10 pl. 24 BM 14313; *TUT* 154) and Urusagrig (*CUSAS* 40/2 35; 314; 673; 675; 990; 1533; *Nisaba* 15/2 623).

167. See various texts from Umma (BDTNS 031587; *SAT* 2 1163; Scheil, *RA* 15, 61; *TCL* 5 6039; *YOS* 4 67; Yoshikawa, *ASJ* 7, 193), Urusagrig (*CUSAS* 40/2 1526 [munus is perhaps geme$_2$]; *Nisaba* 15/2 823), and an unknown provenience (*BCT* 2 206).

the prisoners of war were donated (see the Umma text *TCL* 5 6039 rev. ii 5, iv 10). Although many of these prisoner-of-war geme$_2$ and their children can be described as slaves (see Steinkeller 2015a, 7–8), there are a few male UN-il$_2$ children of prisoner-of-war geme$_2$ in *TUT* 159 obv. i 22', ii 10, 20, iii 12'. Given the overall ambiguity of the term geme$_2$ and the social strata of many conscripted geme$_2$, it is difficult to ascertain in any given context whether a conscripted geme$_2$ and her children were UN-il$_2$ or slaves. Accordingly, while uncertainty about the origins of the UN-il$_2$ remains, they generally seem to be impoverished individuals that were fully dependent on mainly gubernatorial and temple households and less often royal households.

3.3.4. Slaves

People could be enslaved for a variety of reasons, though it is important to distinguish between chattel slavery and debt slavery. Chattel slaves were typically nonnative and enslaved permanently or for much of their lives, whereas debt slaves were native citizens who were generally enslaved temporarily. The origins of chattel slaves were mainly from warfare, interregional slave markets, penalities and crimes, as well as birth, the last of which applies to all the strata. As Lafont and Westbrook (2003, 199) observe, “war is only mentioned as a source of slavery for public institutions (NG 190).” While prisoners of war could be resettled as citizens, they could also be enslaved, especially if they were women and children. Adult male prisoners of war were often more difficult to control as slaves, unless they were blinded. Thus, some, if not many, of the prisoner-of-war geme$_2$ and their children mentioned just above could be slaves of temple households or, in some cases, the households of high-ranking individuals whose connections to various institutions granted them slaves. Slaves could also be purchased from interregional slave markets, though this was less frequent (see Steinkeller 2015a, 7–8). As for

penalties and crimes, Lafont and Westbrook (2003, 199) write: "Slavery could be imposed as a contractual penalty on a guarantor, to replace a slave whose services were lost (Steinkeller 45, 127). Finally, the victims of crimes were entitled to enslave or sell as slaves the family of the culprit (NG 41, 42, 203)." Citizens became temporary debt slaves due to poverty. In order to satisfy a variety of debts or to mitigate broader factors of poverty, including famine, parents could sell their children as well as themselves into slavery (see Lafont and Westbrook 2003, 199; Steinkeller 1989, 128–33).[168] Given these various possibilities for enslavement and manumission, there was some fluidity between citizenship and slavery, depending on an individual's actions or circumstances, especially one's financial situation.

168. For additional treatments, see Culbertson 2011a; Molina 2011; Neumann 2011a; Westbrook 1995, 1643–47. Note that Westbrook (1995, 1635–38) distinguishes slavery as a different form of servitude than that which arises from a pledge, distraint, or *kiššātum*, the last of which is further considered in Westbrook 1996.

CHAPTER 4. FAMILY LIFE, HOUSING, AND LEGAL RIGHTS

4.1. Family Life

4.1.1. Establishing Familial Relationships

Establishing familial relationships is possible to a certain extent,[169] especially with patronymics and sometimes with matronymics, though there are some difficulties. Concerning the broad structure of kinship terminology used, Civil (1975, 142) writes:

> The implications of the lack of a term for "cousin" in Sumerian have not yet been realized by Sumerologists. The anthropologist will conclude that šeš and nin$_9$ apply not only to siblings but to cousins as well (i.e., that the Sumerian kinship system belongs to the so-called "Hawaiian" type).

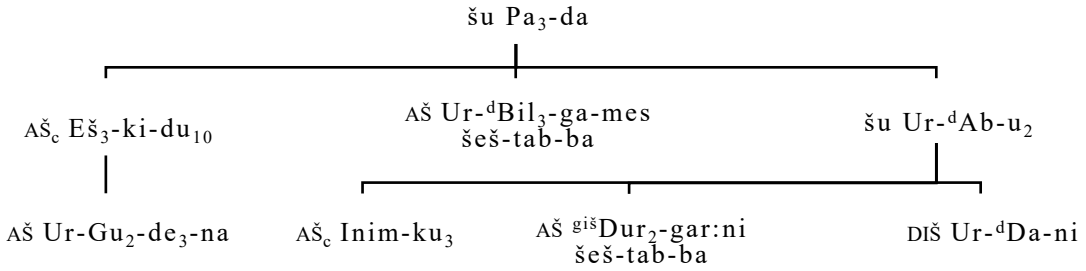
Moreover, the term dumu has some flexibility. While it overwhelmingly refers to immediate children, it can also refer to grandchildren. A prominent example of the latter is demonstrated perhaps by the Pada family attested in Umma, which is presented in Table 4.1 and Figure 4.1.

169. For an extensive treatment on Akkadian and Sumerian familial terms, see Wilcke 1985.

Table 4.1. The Pada Family in the Umma Texts *CUSAS* 39 133 and *TCL* 5 6038[170]

***CUSAS* 39 133 (AS 5/vii/15)**		***TCL* 5 6038 (AS 7/-/-)**	
Line	**Transliteration**	**Line**	**Transliteration**
obv. ii 21	šu Pa$_3$-da	—	
obv. ii 22	AŠ$_c$ Eš$_3$-ki-du$_{10}$	rev. ii 22	1 Eš$_3$-ki-du$_{10}$
obv. ii 23	AŠ Ur-Gu$_2$-de$_3$-na dumu-ni	—	
obv. ii 24	AŠ Ur-^{d}Bil$_3$-ga-mes šeš-tab-ba	rev. ii 25	1 Ur-^{d}Bil$_3$-ga-mes
obv. ii 25	šu Ur-^{d}Ab-u$_2$	—	
obv. ii 26	AŠ$_c$ Inim-ku$_3$	rev. ii 23	1 Inim-ku$_3$
obv. ii 27	AŠ ^{giš}Dur$_2$-gar:ni šeš-tab-ba	rev. ii 24 (coll.)	1 ^{r}^{giš}Dur$_2$-gar-ni^{1}
obv. ii 28	DIŠ Ur-^{d}Da-ni	—	
obv. ii 29	dumu-ni-me	—	
obv. ii 30	dumu Pa$_3$-da-me	rev. ii 26	dumu Pa$_3$-da-me

Figure 4.1. The Pada Family Tree according to the Umma Text *CUSAS* 39 133[171]



In this case, it appears that dumu Pa$_3$-da-me (*TCL* 5 6038 rev. ii 26) could mean "they are the descendents of Pada." Given that known UN-il$_2$ are not identified (see n. 82), perhaps the nature of the Pada family is simplified in *TCL* 5 6038 for administrative ease.

170. Whereas the lines in *CUSAS* 39 133 are given in sequence, the lines of *TCL* 5 6038 are given out of sequence so that they can be matched with their corresponding lines in *CUSAS* 39 133. This formatting decision is implemented in several tables below that compare lines in this manner. Note that individuals within the same family are usually listed in descending age brackets (see pp. 183–84), but Ur-Abu is listed below Eškidug and Ur-Bilgames, who are both presumably younger than him according to their notations. This may be due to avoiding confusion so that these three individuals are understood to be sons of Pada. Besides their attestations in these texts, various members of the Pada family are attested in *MVN* 5 24 (AS 3/vi/15) obv. 2–4: Pa$_3$-da šu-ku$_6$ \ 0.0.4 5 sila$_3$ Eš$_3$-ki-du$_{10}$ \ 0.0.4 5 sila$_3$ Ur-^{d}Bil$_3$-ga-mes and Pomponio, *AION* 64, 41 (ŠS 2/-/-) obv. i 10'–11': ½ Ur-Gu$_2$-eden-na dumu Eš$_3$-ki-du$_{10}$ \ ½ Ur-^{d}Bil$_4$-ga-mes.

171. This family tree and all subsequent ones organize individuals of the same generation from left to right in the order they are listed, which usually corresponds to their age from oldest to youngest, though the Pada family is atypical. In this family tree and all subsequent ones, individuals are given with their age-bracket designations so that their age brackets can be approximated (see pp. 180–86). The terms ab and ama are also included because they clarify important circumstances about these families (see p. 196).

Based on extensive prosopographical work in Umma texts (see Appendix 1), there are several families with apparent discrepancies, which are detailed in Tables 4.2–7.

Table 4.2. The Eue Family in the Umma Texts *CUSAS* 39 128 and 129

***CUSAS* 39 128 (AS 3/-/-)**		***CUSAS* 39 129 (AS 5/-/-)**	
Line	**Transliteration**	**Line**	**Transliteration**
—		obv. v 6	šu UN E_2-u_6-e
rev. i 10	AŠc gan$_2$ UN Al-ba-ni-du$_{11}$ unu$_3$	obv. v 7	AŠc gan$_2$ UN Al-ba-ni-du$_{11}$ unu$_3$
rev. i 11	DIŠ Lugal-šu-nir-re	obv. v 8	DIŠ Lugal-šu-nir-re
rev. i 12	DIŠ ^{d}Šara$_2$-i$_3$-zu	obv. v 9	DIŠ ^{d}Šara$_2$-i$_3$-zu
—		obv. v 10	⌜DIŠ⌝ Gir$_3$-ne$_2$-i-sa$_6$
rev. i 13	dumu-ni-me	obv. v 11	[dumu]-ni-me

Table 4.3. The Gemeu Family in *HLC* 3 238 pl. 113 and *TUT* 156

***HLC* 3 238 pl. 113 (Š [ ]/xii/-)**		***TUT* 156 ([-]/[-]/[-])**	
Line	**Transliteration**	**Line**	**Transliteration**
—		rev. i 1 [translit. mine][172]	šu 2 Geme$_2$-[u$_2$?]
obv. vii 28	AŠc 0.0.3 3 Geme$_2$-uš-bar	rev. i 2 (coll.)	3 Geme$_2$-⌜uš-bar⌝
obv. vii 29	AŠc 0.0.3 3 Nam-nin-a-ni-du$_{10}$	rev. i 3	3 Nam-nin-a-ni
obv. vii 30 (coll.)	AŠc 0.0.3 3 Geme$_2$-[tul$_2$]-sag	rev. i 4	3 Geme$_2$-tul$_2$-sag
obv. vii 31 (CDLI)	AŠ 0.0.2 2 Geme$_2$-^{d}Utu	rev. i 5	2 Geme$_2$-^{d}Utu
obv. vii 32	dumu-ni-me	rev. i 6 [translit. mine]	dumu Geme$_2$-⌜u$_2$?⌝-me

Table 4.4. The Lugalgigire Family in the Umma Texts *CUSAS* 39 127; Peat, *JCS* 28, 219 37; and *TCL* 5 6038

Peat, *JCS* 28, 219 37 (AS 4/viii*/-)		***CUSAS* 39 127 (AS 5/vii/15)**		***TCL* 5 6038 (AS 7/-/-)**	
Line	**Transliteration**	**Line**	**Transliteration**	**Line**	**Transliteration**
obv. 1	½ Nimgir-an-ne$_2$	rev. ii 1	½c gan$_2$ Nimgir-an-ne$_2$ bahar$_3$	rev. iii 23	1 Nimgir-an-ne$_2$ bahar$_3$
—		rev. ii 2	AŠ ⌜Lugal⌝-nesag-e	rev. iii 24 (translit. mine)	⌜1 Lugal-nesag-e dumu-ni {partially erased}⌝
		rev. ii 3	DIŠ ^{d}Šara$_2$-mu-tum$_2$	rev. iii 25	1 ^{d}Šara$_2$-mu-tum$_2$ dumu-ni-me
obv. 2 (coll.)	dumu ⌜Lugal⌝-^{giš}gigir-re bahar$_3$	rev. ii 4	dumu Lugal-^{giš}gigir-re bahar$_3$-me	—	

172. This line should list the same PN in rev. i 6.

Table 4.5. The Sagkurta Family in *RTC* 399

Line	Transliteration
obv. iv 16	uš$_2$ 0.1.0 Sag-kur-ta
obv. iv 17	uš$_2$ 0.0.1 5 UN-il$_2$
obv. iv 18 (coll.)	0.0.1 1 Lu$_2$-^{d}Na-du$_3$-a dumu-ni-<me>
…	
obv. v 14	5 ½ Lu$_2$-^{d}Na-du$_3$-a dumu Sag-kur-ta UN -$^{\lceil}$il$_2$$^{\rceil}$

Table 4.6. The Šarazame Family in the Umma Texts *CUSAS* 39 135 and *Torino* 2 706

***CUSAS* 39 135 (AS 6/v*/-)**		***Torino* 2 706 ([-]/[-]/[-])**[173]	
Line	**Transliteration**	**Line**	**Transliteration**
obv. iv 27	AŠ$_c$ 0.1.1 5 4 UN $^{\lceil d \rceil}$[Šara$_2$-za-me]	A obv. ii' 2'	AŠ$_c$ 0.1.0 4 UN ^{d}Šara$_2$-za-me
obv. iv 28	AŠ$_c$ 0.1.1 5 4 UN Ur-$^{\lceil d \rceil}$Nin-zu	A obv. ii' 3'	AŠ$_c$ 0.1.0 4 UN Ur-^{d}Nin-su
obv. iv 29	dumu AŠ 0.0.2 A-a-ge-na	A obv. ii' 4' (translit. mine)	DIŠ 0.0.1 5 1 ½ A-a-ge-na dumu-ni-<me>
obv. iv 30	dumu-ni-me	—	

Table 4.7. The Ur-Nungal Family in the Umma Texts *CUSAS* 39 133 and *TCL* 5 6038

***CUSAS* 39 133 (AS 5/vii/15)**		***TCL* 5 6038 (AS 7/-/-)**	
Line	**Transliteration**	**Line**	**Transliteration**
obv. iv 25	šu Ur-^{d}Nun-gal	rev. iii 11	1 He$_2$-sa$_6$-ge dumu Ur-^{d}Nun-gal
obv. iv 26	AŠ He$_2$-sa$_6$-ge šeš-tab-ba		
obv. iv 27 (translit. mine)	AŠ Ur-sukkal dumu-ni-<me>	—	

Although these families demonstrate various kinds of discrepancies, they may all be scribal errors, as seen in the Lugalgigire and Sagkurta families. The scribal error involving the Sagkurta family is particularly noticeable, since UNil was too young to be the father of Lu-Nadua and Sagkurta is listed as the father of Lu-Nadua just one column over. The fact that dumu-ni is written on the same line as Lu-Nadua, rather than below, as is preferrable, is further evidence of the extent of the scribal error.

Besides terminological challenges, establishing familial relationships can be difficult due to commonly used names, both within families and across separate families. With regard to the

173. While the differences between *CUSAS* 39 135 obv. iv 29; *Torino* 2 706 A obv. ii' 4' suggest that *Torino* 2 706 predates *CUSAS* 39 135, the differences between *CUSAS* 39 135 rev. v 14; *Torino* 2 706 B rev. iii' 5' (coll.) challenge that, which is unusual and cannot be resolved easily.

use of such names within families, David McGuiness (1976, 1–45; 1982) demonstrates that maternal and paternal great-grandfathers, maternal and paternal grandfathers, and paternal uncles can have the same name as their great-grandsons, grandsons, and nephews, respectively.[174] This phenomenon could also occur for women, as in the case of grandmothers and granddaughters with the same names.[175] McGuiness (1976, 334–39) also identifies several examples of men that are sometimes specified by their wives' fathers instead of their own as well as a man who might have married his niece, thus listing his brother as his "father" in some contexts (see also Garfinkle 2012, 126).

4.1.2. Citizens

Citizens were generally interconnected in extended, including perhaps stem, and nuclear families, which were founded on predominantly monogamous marriages. They were also organized according to mainly patrilineal and patrilocal traditions.[176] The use of patronymics was common, though matronymics could be used limitedly.[177] Although there is scarce evidence, Lafont and Westbrook (2003, 204–5) highlight a few examples of adoption involving "special arrangements" as well as child rearing without adoption.

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174. While McGuiness reconstructs such phenomena by compiling multiple attestations of these familial relationships, the phenomenon of a grandfather and grandson sharing the same name is attested in Owen, *Studies Milano*, 351 16 obv. iv 21–22: AŠ$_c$ ARAD$_2$-aš$_2$-ra-ni dumu Ga-ni \ DIŠ Ga-ni dumu-ni.

175. See, for example, three grandmothers and granddaughters with the same names in various Girsu/Lagaš texts, including the two Etamuzus in *HLC* 3 238 pl. 113 obv. vi 19–24, the two Nininimgenas in *RTC* 399 rev. i 26–29; *STA* 10 rev. iii 25–26; *WMAH* 176 rev. ii 20'–21', and the two Ninmes in *RTC* 399 obv. i 22–25.

176. See Diakonoff 1996; Gelb 1979, 56–95; Lafont and Westbrook 2003, 200–9; Nielsen 2020; Powell 1986; Stone 2005, 145; Widell et al. 2013, 112–13.

177. See, for example, the Umma texts *Nisaba* 23 47 obv. ii 5; *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 obv. vi 26, rev. vii 37, ix 14 (coll.); *OrSP* 47-49 324 obv. i 3. Less certain examples include the Girsu/Lagaš texts *CT* 7 pl. 20 BM 13130 obv. 20–rev. 1; *PPAC* 5 324 obv. i 1–2 as well as the Umma texts *MVN* 16 1309 obv. 3 (obv. 4 in the BDTNS); *YOS* 4 204 obv. 1–rev. 1.

Male citizens were generally conscripted together as families, as indicated in several examples just above (see also Steinkeller 1987). Even children who did not work were documented as conscripted so that they could be provided allotments or possibly factored into their fathers' allotments (see pp. 180–86, 219–29). Documenting them may have also aided in estimating future workforce sizes. Perhaps the largest families conscripted together in Umma were headed by Luga and Lugalsig. Luga's three-generation family was conscripted together in *CUSAS* 39 133 and partly in *TCL* 5 6038, which are presented in Table 4.8.

Table 4.8. The Luga Family in the Umma Texts *CUSAS* 39 133 and *TCL* 5 6038

***CUSAS* 39 133 (AS 5/vii/15)**		***TCL* 5 6038 (AS 7/-/-)**	
Line	**Transliteration**	**Line**	**Transliteration**
obv. iv 29	šu Lu$_2$-ga	—	
obv. iv 30	AŠ$_c$ Lugal-dingir-mu	rev. iii 12	1 Lu$_2$-^{d}Inanna dumu Lugal-dingir-mu
obv. iv 31	AŠ Lu$_2$-^{d}Inanna$^{\lceil}$		
obv. iv 32 (coll.)	$^{\lceil}$AŠ ab $^{d\rceil}$UTU-ba-ni	—	
obv. iv 33 (translit. mine)[178]	DIŠ AB-in-da-NI		
obv. iv 34	dumu-ni-me		
obv. iv 35	AŠ Lu$_2$-kiri$_3$-zal šeš-tab-ba	rev. iii 13	1 Lu$_2$-kiri$_3$-zal dumu Lu$_2$-ga
obv. iv 36	AŠ$_c$ Ur-^{d}Lamma	—	
rev. i 1	AŠ$_c$ Ur-^{d}Ur$_3$-bar-tab		
rev. i 2	dumu Ur$_2$-mah-me		
rev. i 3	AŠ Šeš-du$_{10}$-ga šeš-tab-ba		
rev. i 4	dumu Lu$_2$-ga-me		
…			
rev. i 30	šu Lu$_2$-$^{\lceil}$ga$^{\rceil}$		
rev. i 31 (translit. mine)	AŠ Šeš-du$_{10}$-$^{\lceil}$ga$^{\rceil}$ š[eš$^?$-tab$^?$-ba$^?$]		
rev. i 32 (translit. mine)[179]	DIŠ Nigdaba$^?$-$^{\lceil}$x$^{\rceil}$		
rev. i 33	DIŠ Lu$_2$-^{d}Ha-ia$_3$		
rev. i 34	DIŠ Ur-^{d}A-šar$_2$		
rev. i 35	dumu-ni-me		
rev. i 36 (translit. mine)[180]	$^{\lceil}$AŠ ab Lugal$^{\rceil}$-nig$_2$-lagar$^{!?}$-e$^{!?}$(A)		
rev. i 37	dumu Lu$_2$-ga-me		

The formatting of the Luga family in *CUSAS* 39 133 is possibly unique, since Luga and Šešduga are mentioned twice with notations and the family of a certain Urmah seems to interrupt the Luga family. *TCL* 5 6038 helpfully clarifies that Lukirizal was a son of Luga, meaning that only

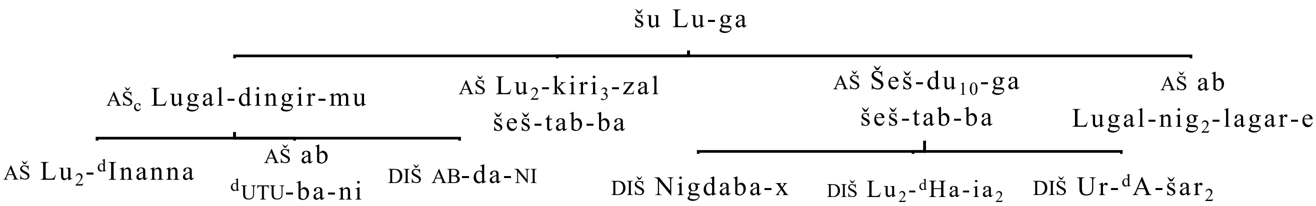
178. This name is similar to names transliterated in the BDTNS as Ri$_2$-in-da-ni (see *Torino* 1 226 obv. 4) and Uru-i$_3$|in-da-zal (see the Girsu/Lagaš texts *AOAT* 25, 440 5 obv. 10; *ITT* 2 920 obv. 8; 2802 obv. 14; 3 6581 rev. 4'). Perhaps it can be read as Eš$_3$-in-da-zal, but this is speculative. The AB sign is certainly not an abbreviation for ab(-ba) il$_2$ in this context.

179. This name is transliterated according to the BDTNS as Nig$_2$-^{d}Inanna, but the first sign appears to be PAD. Neither of these possibilities is attested elsewhere, though Nig$_2$-DN, is a possibility. If the final broken sign is part of the name, this does not add support to the option Nig$_2$-DN, however.

180. The last two signs of this name are expected to be lagar-e, but neither is correct. There are not clear alternatives for these signs, though. There are perhaps two attestations of the name Lugal-nig$_2$-ša$_3$-a (see the Girsu/Lagaš texts *CT* 3 pl. 35 BM 21335 obv. iv 11; *MVN* 6 281 obv. ii 17), but this does work well here.

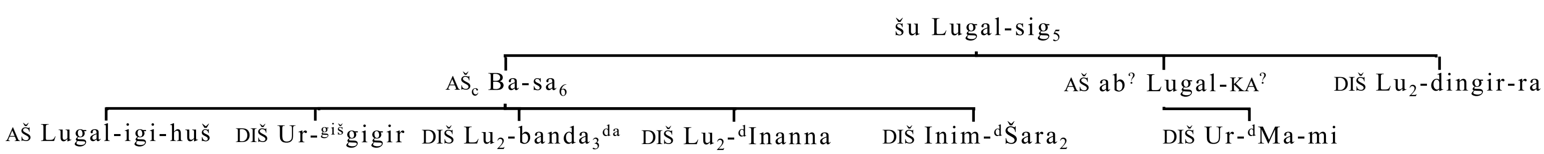
Ur-Lamma and Ur-Urbartab were sons of Urmah. Despite these irregularities, the Lugal family tree can be reconstructed, as seen in Figure 4.2.

Figure 4.2. The Luga Family Tree according to the Umma Text *CUSAS* 39 133



While this family tree demonstrates how several male family members across three generations were conscripted together, it also indicates that two were supporting Luga as ab(-ba) il$_2$ (see p. 196), including his son Lugalniglagare and his grandson Šamaš-bānî. This may be the only case of two such individuals in one family, whether nuclear or extended. As for Lugalsig's three-generation family, it was conscripted together in *Nisaba* 23 2 obv. i 1–12 is depicted in Figure 4.3.[181]

Figure 4.3. The Lugalsig Family Tree according to *Nisaba* 23 2



181. Nisaba 23 2 obv. i 9 is transliterated in the original publication and the BDTNS as AŠ AB? dumu Ki-kur$_2$ lugal-KA?. It is not certain why the AB and KA signs are questioned, but their uncertainty is preserved here. In the original publication, PNs are bolded, but lugal-KA? was apparently treated as an expression. Note that ki-kur$_2$ is not a name but part of the term (dumu) ki-kur$_2$ (see also the Umma texts *CUSAS* 39 135 obv. i 14 [?] [dumu-⸢gir$_{15}$⸣ ki pa$_4$ could be dumu ki-kur$_2$, especially since dumu-⸢gir$_{15}$⸣ does not make sense here], 34 [?] [ki? pa$_4$ could be ki-kur$_2$]; *OrSP* 47-49 382 rev. ii 18 [coll.]; *Santag* 6 384 obv. ii 18', 27'), which has an uncertain meaning. Concerning this term, Steinkeller (2018, 138) suggests:

> The sense of dumu-ki-kur$_2$, literally: "child of foreign land," which secondarily describes the two individuals listed in Santag 6 384, is somewhat unclear. Interestingly, in one instance, this designation is also applied to an ab-il$_2$ worker: AŠ ab⟨-il$_2$⟩ dumu-ki-kur$_2$ lugal-KA? (Nisaba 23 2 i 9). Conceivably, it is a metaphoric term for "orphan," meaning "child of the Netherworld" or the like.

While this term may be mostly or always linked with ab(-ba-il$_2$) and ama(-il$_2$) (*CUSAS* 39 135 obv. i 14 [?], 34 [?] are too damaged to confirm or deny this link, though it is plausible for both), the meaning of "orphan" does not seem to apply. If ki-kur$_2$ is a reference to "the Netherworld," perhaps this expression indicates that the parent under care is close to dying, but this is speculative.

Note that obv. i 11 lists two possible PNs, including Ludingira and Niglagare (name is uncertain), the latter of whom is perhaps indented below the former. If this is the case, Niglagare may also have been a son of Lugalsig, though he is not notated. In comparison to the Luga and Lugalsig families, however, the average conscripted family size was much smaller. While it is challenging to determine the average family size for citizens overall, a fairly comprehensive count of the number of sons conscripted with their fathers in citizen families in Umma indicates that the average father had perhaps one son conscripted with him based on the arithmetic mean of approximately 0.89 sons per father (see Appendix 3). This count also indicates that fathers could have had as many as four, five, or even six sons conscripted with them, but all these family sizes combined amount to less than 5 percent of the total family sizes. This count does not include wives or daughters, of course. As is noted in John Nielsen's (2020, 118) discussion on family sizes in the ancient Near East, families probably had an average of two to four adolescent children, which aligns well with the average of nearly one son per father plus one or perhaps two assumed daughters. As such, the average citizen family may have been four or five individuals.

Although male citizens were often linked together with their male relatives with explicit familial terms while they were conscripted, there are also instances in which they were linked together without explicit familial terms. One simple example is the male family members of a certain Dingira. Whereas they were listed together with an explicit familial term in *Nisaba* 11 15, which recorded conscripts, they were also listed together without an explicit familial term in *Nisaba* 23 56, which recorded hired workers, as seen in Table 4.9.

Table 4.9. The Dingira Family in *Nisaba* 11 15 and *Nisaba* 23 56

***Nisaba* 11 15 (-/-/-)**		***Nisaba* 23 56 (-/-/-)**	
Line	**Transliteration**	**Line**	**Transliteration**
—		rev. ii 8[182]	1 nindan 3 kuš$_3$ gid$_2$ 5 sar sukud$^{!?}$ 5 sar a$_2$ lu$_2$ hun-ga$_2$
rev. i 10	šu Dingir-ra	rev. ii 9	Dingir-ra
—		rev. ii 10	3 ⅔ kuš$_3$ 3 šu-si 2 ½ sar
rev. i 11	--- Ur-^{d}Ur$_3$-bar-tab	rev. ii 11	Ur-^{d}Ur$_3$-bar-tab
rev. i 12	--- Lu$_2$-bala-sig$_5$	rev. ii 12	2 ½ kuš$_3$ ⅔ Lu$_2$-bala-sig$_5$
rev. i 13	--- ^{d}Šara$_2$-kam	—	
rev. i 14	dumu-ni-me		

This example demonstrates that individuals listed together could be related, even if it is not stated. It also shows that male citizens could hire themselves out together in addition to their conscription (see 5.2.3. Hired Work and Wages). A more complicated example of parallel texts listing families, whether explicitly or implicitly, are the Umma texts *StOr* 9/1 31 pl. 12 and *AAICAB* I/2 Ashm. 1971-398.[183] The former is an inspection that lists presumably all male citizens conscripted together with explicit familial terms. The latter is a barley-allotment report for grooms and plant carriers (kir$_4$-dab$_5$ u$_2$-il$_2$-me), who are organized according to occupation rather than by family (see pp. 220–22). These examples do not, however, mandate that all individuals listed in proximity must be related, though they indicate that familial ties were significant and pervasive to various aspects of employment, even if they were not explicit.

4.1.3. UN-il$_2$

The family lives of the UN-il$_2$ are difficult to determine. At a minimum, however, male UN-il$_2$ are frequently documented with their male family members in identical fashions to citizens. Based on the same count of conscripted sons with their UN-il$_2$ fathers (see Appendix 3), the

182. The BDTNS suggests sukud$^{!?}$ for šuku in the original publication.

183. *AAICAB* I/2 Ashm. 1971-398 overlaps to some extent with *Nisaba* 33 1056; *UCP* 9/2-1 5.

arithmetic mean is around 0.8, meaning that UN-il$_2$ families may have been similar in size to citizen families. Like citizens, male UN-il$_2$ could be conscripted with numerous sons, though likewise in rare cases. The family of the UN-il$_2$ Lalua is particularly extensive and well documented in Umma texts, which is evident in Table 4.10 and Figure 4.4.[184]

184. For an equally large family of conscripted male UN-il$_2$, see the Ea family in the Umma text *OrSP* 47-49 324 obv. ii 4–14.

Table 4.10. The Lalua Family in the Umma Texts *AAICAB* I/1 Ashm. 1911-228; *CUSAS* 39 131; *Ontario* 2 191; and *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1

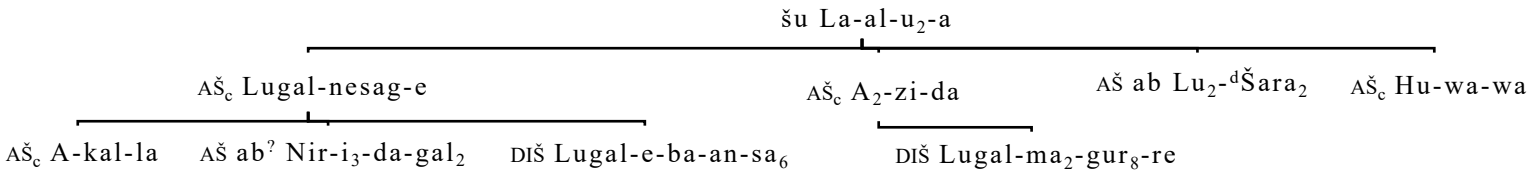
***CUSAS* 39 131 (AS 3/v/-)**		***Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 ([-]/[-]/[-])**[185]		***Ontario* 2 191 (AS 6?/vi*/-)**[186]		***AAICAB* I/1 Ashm. 1911-228 (ŠS 5/vii/[-])**	
Line	**Transliteration**	**Line**	**Transliteration**	**Line**	**Transliteration**	**Line**	**Transliteration**
rev. i 9	šu UN La-al-u$_2$-a	obv. vii 37	šu UN La-al-u$_2$-a			—	
rev. i 10	AŠ$_c$ UN gan$_2$ Lugal-nesag-e engar	obv. vii 38	AŠ$_c$ gan$_2$ UN Lugal-nesag-e engar			obv. ii 21	AŠ$_c$ gan$_2$ UN Lugal-nesag-e engar
rev. i 11	AŠ$_c$ UN gan$_2$ A-kal-la	obv. vii 39	AŠ$_c$ gan$_2$ UN A-a-kal-la			—	
rev. i 12	AŠ Nir-i$_3$-da-gal$_2$	obv. vii 40[187]	AŠ ab? Nir-i$_3$-da-gal$_2$			obv. ii 22	AŠ$_c$ gan$_2$ UN nu-dib Nir-i$_3$-da-gal$_2$ Lugal-nesag-e tum$_3$^{mu}-dam
rev. i 13	DIŠ Lugal-e-ba-an-sa$_6$	obv. vii 41	DIŠ Lugal-e-ba-an-sa$_6$-a			obv. ii 23	AŠ Lugal-e-ba-an-sa$_6$
rev. i 14	⌜dumu⌝-[ni]-me	obv. vii 42	dumu-ni-me			obv. ii 24	dumu-ni-me
rev. i 15 (coll.)	AŠ$_c$ ⌜UN gan$_2$⌝ A$_2$-zi-da	obv. vii 43	AŠ$_c$ gan$_2$ UN A$_2$-zi-da			—	
—		obv. vii 44	DIŠ Lugal-ma$_2$-gur$_8$-re dumu-ni				
rev. i 16	AŠ ab Lu$_2$-^{d}Šara$_2$	obv. vii 45	[x] Lu$_2$-^{d}Šara$_2$	obv. 1	1 Lu$_2$-^{d}Šara$_2$ dumu La-al-u$_2$-a		
rev. i 17	AŠ$_c$ UN gan$_2$ Hu-wa-⌜wa⌝	obv. vii 46	[x U]N Hu-wa-wa	—			
rev. i 18 (coll.)	⌜dumu⌝ La-al-⌜u$_2$-a-me⌝	obv. vii 47	[dumu La]-al-u$_2$-a-me				

185. Concerning the date, Vanderroost (2013, 1:202) writes "entre AS5/vi et AS6/vi." Note that the UN-il$_2$ Lugalurani, who received šuku land in *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 obv. ix 16, received barley allotments in *Nisaba* 26 17 rev. 4 (see p. 227 for further discussion of this individual). Since this latter text is dated to AS 6/xii/-, perhaps the former is dated to AS 5, but more evidence is needed.

186. Although the year could be either Š 42 or AS 6, AS 6 makes better sense given the age of Lu-Šara in *CUSAS* 39 131, which is dated to AS 3.

187. ab? is x in the BDTNS and original publication, but ab is plausible.

Figure 4.4. The Lalua Family Tree according to the Umma Texts
CUSAS 39 131 and *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1



The attestations of the Lalua family in *CUSAS* 39 131; *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 demonstrate that three generations of male UN-il$_2$ worked together during their conscription. The use of the term ab for Lu-Šara, a son of Lalua, likewise indicates that UN-il$_2$ could care for their elderly parents like citizens. While male UN-il$_2$ are mostly listed with other male UN-il$_2$, there are rare instances in which UN-il$_2$ fathers are listed with one or more of their daughters.[188] Though patronymics were commonly used for UN-il$_2$, matronymics were also used more so than for citizens.[189]

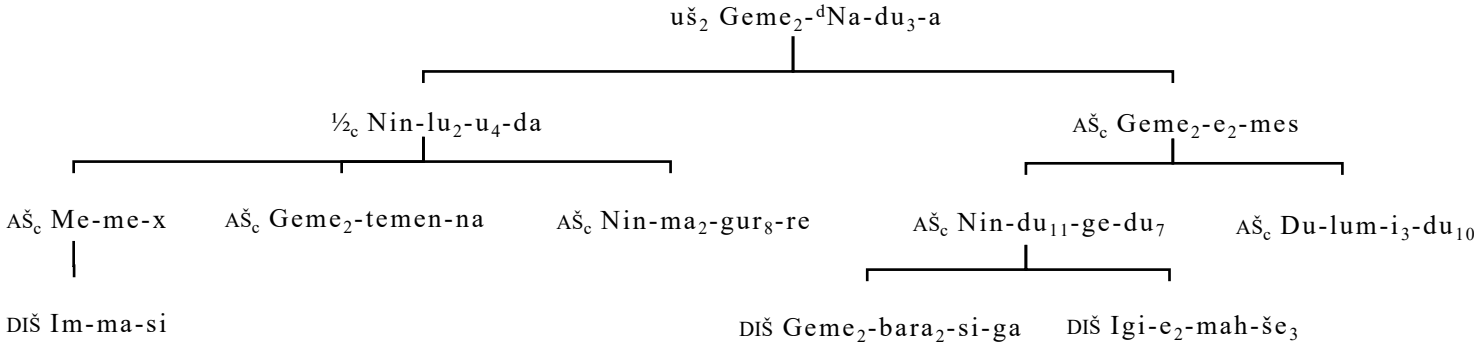
The wives of these male UN-il$_2$, however, are not explicitly known. While it is reasonable to speculate that a portion of the conscripted geme$_2$ and their children shared familial ties with these individuals, an extensive search of all named spouses (dam) has not resulted in any clear connections. Nevertheless, there are numerous texts detailing the family structures of conscripted geme$_2$ and their children, which could be large and extensive like those of the male UN-il$_2$, including a family of a mother and six daughters (see *TUT* 162 obv. iv 19'–26'). One notable example of an extensive family is the four-generation family of a certain Geme-Nadua in *HLC* 3 238 pl. 113 obv. iv 9–23, which is presented in Figure 4.5.[190]

188. One example is the Banzige family in the Puzriš-Dagān texts *Ontario* 2 190 obv. 6–10; Seri, *CDLJ* 2007, 1 13 KVM 32.1133 obv. 1–7; *TRU* 301 obv. 1–7.

189. There are several UN-il$_2$ with matronymics in the Umma texts *BPOA* 6 35; *CUSAS* 39 134; *Organisation administrative, Diss.* 1, 230 12 Talon-Vanderroost 5, among others.

190. Note that Ninlu'uda's notation is collated and that DIŠ notations in this text are often difficult to see and may not even be present. They are included in this family tree because the allotments that correspond to them are present.

Figure 4.5. The Geme-Nadua Family Tree according to *HLC* 3 238 pl. 113



As is the case with the Lalua family, this Geme-Nadua family demonstrates that multiple generations were conscripted to work together as a family.

It is important to note that whereas male UN-il$_2$ were generally conscripted with only their male family members, many geme$_2$ were conscripted with both their daughters and sons, including adult sons in some rare instances.[191] This may suggest that, in those situations, the sons may not have had fathers with whom they could be conscripted. This phenomenon even occurred rarely for geme$_2$ that were clearly UN-il$_2$,[192] which may mean that some female UN-il$_2$ did not have husbands or perhaps their husbands passed away. Concerning the family lives of the UN-il$_2$ and geme$_2$, Steinkeller (2015a, 25 and n. 60) states: "Most of them probably did not have family life. … Many of the grown UN-íl workers probably were sons of the unmarried géme. See ASJ 9 315 4:1–9, which concerns a runaway UN-íl, who was the son of a female miller (géme kikkin)." Overall, while large and extensive families of male UN-il$_2$ and geme$_2$, who could be UN-il$_2$, are attested, there does not appear to be any documented evidence of marriages between male UN-il$_2$ and geme$_2$, and it is difficult to determine what their family lives were like. As Steinkeller comments, they probably did not experience family lives like that of the citizens, though they

191. See the Girsu/Lagaš text *HLC* 3 238 pl. 113 obv. ii 5–9, iii 14–19, though other examples may exist.

192. See the Girsu/Lagaš text *TUT* 159 obv. i 19'–24', ii 9–22, iii 8'–14', rev. ii 1'–5', though other examples may exist. Note that all the geme$_2$ cited here are implicitly UN-il$_2$ based on the designations of their sons.

seem to have families structured like those of the citizens. In any case, their family lives would have been heavily impacted by other aspects of their lives, such as their housing, legal rights, and economic conditions.

4.1.4. Slaves

The family lives of slaves are especially challenging to access. It is necessary to determine whether they were formerly prisoners of war, purchased from interregional slave markets, or citizens. In any case, connections with their relatives were dramatically and perhaps permanently damaged or destroyed. If they were formerly prisoners of war, adult men in their family could have been killed, leaving women and their children (see p. 120). Since these survivors were conscripted together, it seems that they at least worked together if not otherwise shared other aspects of their lives together. It is not known, however, if these women could remarry or if their children could marry. Perhaps some of these women could marry UN-il$_2$ men, but this is speculative. If they were formerly citizens, however, there were instances in which they maintained their patronymics or familial relationships to some extent. This is noted by Culbertson (2011a, 44–46), who accordingly challenges Orlando Patterson's concept of "social death" in this form of slavery. If they were freed, they could presumably reconnect with their relatives and marry as well. Their potential to reconnect with their families was also aided by the possible prohibition against their sale abroad. Since citizens were often enslaved in private households, they could have children with free citizens (see pp. 112–13).

4.2. Housing

4.2.1. Citizens

Citizens typically inhabited privately owned houses spanning a range of sizes and qualities.[193] While precise archaeological data of Ur III houses are limitedly available,[194] Ur III textual data as well as comparative archaeological and textual data can be utilized. Concerning house layouts, Elizabeth Stone (1981, 26; 1996, 233) theorizes that linear houses were better suited for nuclear families, whereas courtyard or square houses could support extended families.[195] She also notes evidence for roof access or second stories, particularly in northern Babylonia (Stone 1996, 231; 2005, 146). *OrSP* 47-49 504 depicts a square-house floor plan dating to the Ur III period with measured rooms. Its rooms have a combined size (excepting doorways and walls) of approximately 2.72 sar. In her discussion on this floor plan and similar floor plans, Eleanor Robson (1999, 148–50) considers the measurements of these rooms to be designed according to convenience as exercises. Thureau-Dangin, *RA* 4, 23 2 also portrays a floor plan with labeled and measured rooms.[196] The context of the floor plan is uncertain (see Sallaberger 1994, 139; Zettler 1992, 84–86), though it could be a mid-third-millennium floor plan of a linear house with a size (not counting fragmentary rooms, doorways, or walls) of over 2 ½ sar.

193. For a discussion on ownership of houses and orchards versus possession of arable land, see Steinkeller 1999b. Note that in a few instances, husbands and wives sold houses together (see the Nippur texts *AOS* 32 Noor 2; *NATN* 966 and the Umma texts Kamil, *AoF* 44, 211; *Sale Documents* 88*).

194. There are some excavated residential areas from Umma (see al-Mutawalli and Khaleel 2011; Ur 2014), which include Ur III and early Old Babylonian structures. While Nawala al-Mutawalli and Khawla Khaleel (2011) discuss these areas and offer scale diagrams, precise measurements of each structure's interior are not given. Nevertheless, these residential areas are probably consistent with other contemporary excavated residential areas in southern Mesopotamia (see pp. 146–48).

195. Stone (1979, 309–30; 1981, 20–27) demonstrates with Old Babylonian evidence how brothers can inherit rooms within a square house. She also notes that some extended families may share a household "only for a relatively short period during the life of a generation" (Stone 1987, 126). For an extensive treatment on linear houses, albeit in the Iron Age Levant, see Aja 2009. A discussion on the construction of Ur III houses (primarily in GARšana) is given in Heimpel 2009b, 171–88.

196. A helpful scale rendering is given in Heinrich and Seidl 1967, 28 Figure 3.

There is some debate, however, regarding how to measure house sizes. Stone (1979, 30–31, 310, 315, 330 332–33, 356; 1981, 20–22) makes a compelling case by synthesizing archaeological and textual data that e$_2$ du$_3$-a refers to only "roofed floor space." As for kislah, Stone (1979, 33) writes:

> It has normally been discussed in terms of an empty lot, but at Nippur it seems to be better defined as an unenclosed courtyard. In many texts kislah is mentioned together with roofed house property. It seems likely that this land was property outside the confines of the house itself, but which was used for those activities which usually took place in an enclosed courtyard, like bread-baking. In some instances, however, large tracts of kislah, some the size of a city block, were recorded. These cannot be thought of as courtyards.[197]

In a discussion on brick metrology and the ratio of walled space to floor space, Robson (1999, 150–51 [italics hers]) offers the following disagreement:

> Elizabeth Stone (1981: 20) has suggested that in house sale contracts from Old Babylonian Nippur the meaning of É.DÙ.A is 'roofed floor-space', excluding the area of the walls and central courtyard. However, in quantity surveys it is precisely the area of the walls that is under consideration, so É.DÙ.A must have a broader sense here. When a built house is sold the most important consideration is the amount of living space it provides; the area of the walls is largely irrelevant, not to mention very difficult to measure. With an empty building plot, on the other hand, the surveyor is concerned with the site as a whole. The proportion of walls to *roofed* floor-space would be meaningless in this context. However, if often happened, especially in urban sites, that the external walls were party walls with another property, and may have already been standing (cf. Van De Mieroop 1992*a*: 124). It may be, then, that the floor-space coefficient refers not to the proportion of all walls to the external area of the house, but the proportion of the internal walls to the internal area.

With regard to some of the houses discussed just below, it is apparent that the size of an e$_2$ is probably calculated from the total size of the area it occupies, which may include a courtyard. Moreover, e$_2$ can be equated with e$_2$ du$_3$-a[198] or e$_2$ du$_3$-a u$_3$ kislah (see Steinkeller 1989, 122). As such, despite Stone's strong evidence, there may be some doubts about whether e$_2$

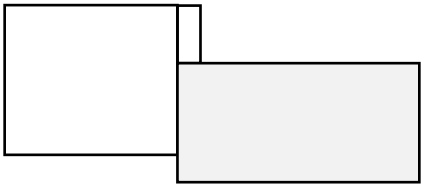
197. For a discussion of the usage of these terms and others in Ur III sale documents, see Steinkeller 1989, 112–24.

198. See perhaps the Adab and Girsu/Lagaš texts *Nisaba* 32 213 obv. 1–2 and *RTC* 293 obv. 2, respectively, as well as especially the Girsu/Lagaš text Maekawa, *ASJ* 18, 167 9 obv. i 20, ii 1, rev. i 1–2, 23.

du$_3$-a refers to roofed spaces exclusively and especially about the basis for calculating house sizes.

While these floor plans are largely devoid of context, *OrSP* 47-49 506 includes house plans of three specific houses in Umma. On the obverse, there are three spaces, two of which are clearly labeled as e$_2$ Ki-la-ri and e$_2$ HU.LUL.HU.LUL, demonstrating the common phenomenon of two or more houses sharing walls. On the reverse, there are four spaces, all of which are presumably considered to be e$_2$ ^{d}Šara$_2$-zi-da. Fortunately, these houses can be corroborated by *Syracuse* 479 rev. 2–7: 12 ⅔ sar e$_2$ \ Ki-la-ri \ 13 ½ sar e$_2$ \ Hu-u$_2$-hu-u$_2$ \ 9 sar e$_2$ \ ^{d}Šara$_2$-zi-da, which is a house survey of built-up houses and empty house lots, in addition to other properties.[199] To clarify the proportions of Kilari's and Huhu's houses, which are substantially different according to the measurements, they are rendered to scale in Figure 4.6.[200]

Figure 4.6. Scale Diagram of Houses in the Umma Text *OrSP* 47-49 506 obv.



Based on the measurements provided, the size of Huhu's house (light gray) in *OrSP* 47-49 506 is 13 $^{9}/_{16}$ sar, which is roughly 0.46 percent larger than its size in *Syracuse* 479 rev. 4. As for Kilari's house (blank), if the unlabeled area is included, its size in *OrSP* 47-49 506 is 12 $^{13}/_{16}$ sar, which is about 1.12 percent larger than its size in *Syracuse* 479 rev. 2. Given the apparently missing measurement for one of the sides of the rightmost area of Šarazida's house, its total size cannot be calculated, though the combined size of the other areas is 7 $^{55}/_{72}$ sar.

199. This connection is discussed in Steinkeller 2013d.

200. 1 kuš$_3$ = 0.02 in (ca. 1:984.25 scale). Note that whereas the walls were aligned in the original diagram, Huhu's house and the small unlabeled space belonging to Kilari (see the discussion just below) do not line up with the main space of Kilari's house. As such, this scale diagram depicts them in one of several possible layouts.

Though house sizes could be rounded to a suitable fraction, there are a few recorded house sizes with extremely precise measurements, such as the house sizes of $^{273}/_{360}$ sar in *ITT* 5 6754 and 1 $^{691}/_{4800}$ sar in the Nippur text *MVN* 10 153.[201] This latter house size is remarkably specific, and it can be supported by similarly accurate side measurements, all of which are different. Although the exact shape of this house is uncertain, its calculated size is approximately 1.14 sar, which is virtually identical to the recorded size of 1 $^{691}/_{4800}$ sar![202]

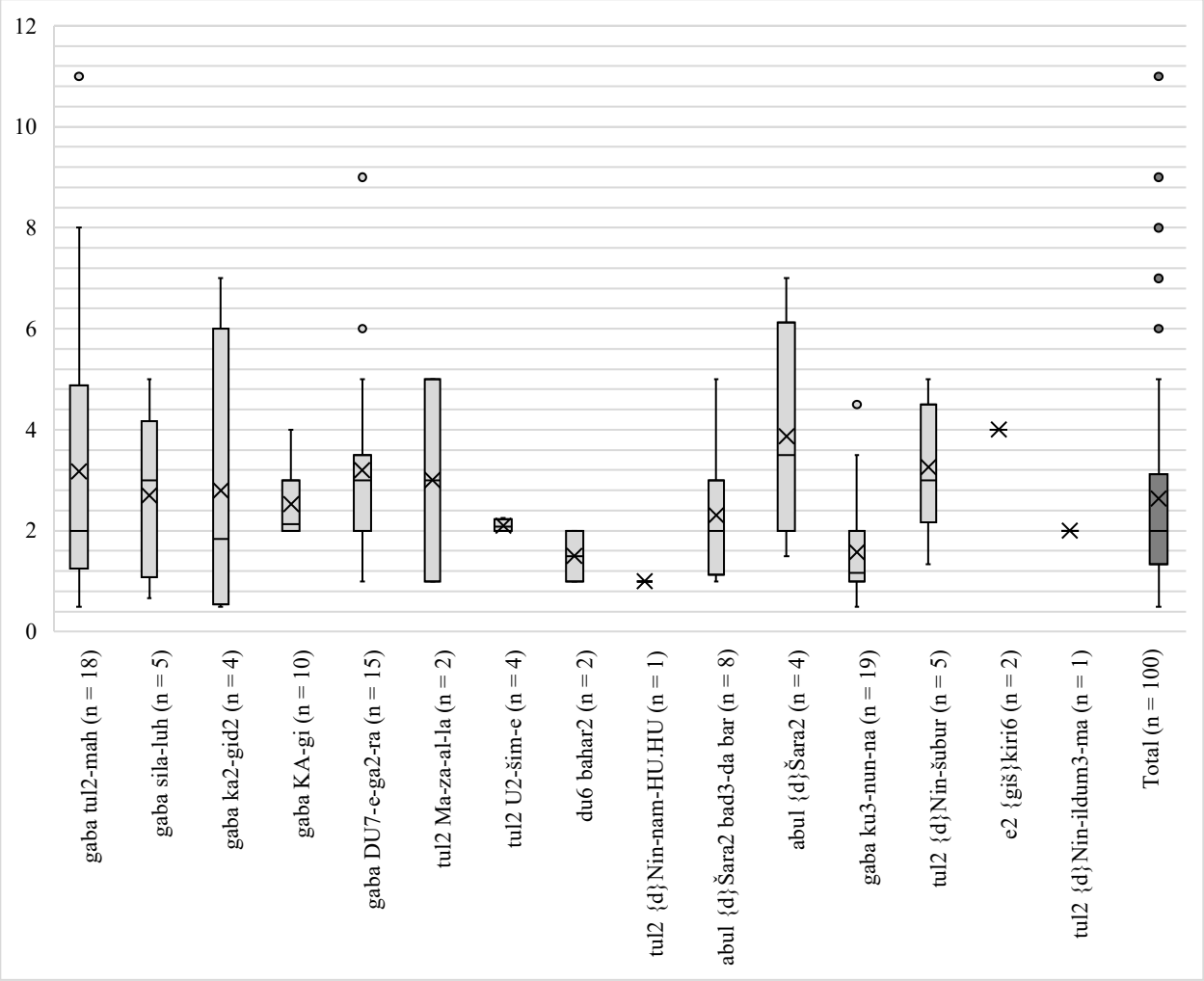
Another substantial survey of house sizes from different neighborhoods or regions in Umma is *Nisaba* 11 19, the sizes of which are given in Graph 4.1.[203]

201. The stated area in *MVN* 10 153 obv. 5 is 1 sar 8 ½ gin$_2$ 25 še la$_2$ igi-4-gal$_2$ še. The calculation for the sar fraction is 8.5(gin$_2$) × 180(še/gin$_2$) + 24.75(še) = 1554.75(še). This result is divided by 10800(še/sar), which equals $^{691}/_{4800}$ sar.

202. The size was calculated by converting each side into the smallest linear measure (še) to accommodate the side measure of 1 nindan 3 ⅔ kuš$_3$ 4 ½ šu-si (obv. 4). While calculating the size of an irregular quadrilateral without any known interior angles is challenging, Brahmagupta's formula (https://en.wikipedia.org/wiki/Brahmagupta%27s_formula) can provide an approximate size of 5336089.40 sq. še. Note that sq. še (ca. 7.84 mm^2) is not equivalent to the larger Sumerian area unit še but is a theoretical unit utilized for precision (see Powell 1987–1990, 458–61). Since there are 2160 še per nindan, there are 4665600 sq. še per sar, meaning that the calculated house size is approximately 1.14 sar. Note that the most precise comparison available in this discussion is the calculated size of roughly 5336089.40 sq. še versus the recorded size of 5337252 sq. še.

203. *Nisaba* 11 19 overlaps considerably with *YOS* 4 300 (see al-Rawi and Verderame 2006, 7). Though these texts share a lot of content, *YOS* 4 300 offers further information on various house sizes when they were purchased versus when they were surveyed. Note that the neighborhoods or regions are organized in order of appearance.

Graph 4.1. House Sizes (in sar) in *Nisaba* 11 19



Out of the total dataset, the median and mode are both 2 sar, whereas the arithmetic mean is approximately 2.64 sar. Although the datasets of the neighborhoods or regions vary from one to eighteen houses, Graph 4.1 draws attention to which neighborhoods or regions have medians or arithmetic means, in addition to other metrics, above or below one another's or the total's. Note, for example, that the four houses located at the gate of Šara (abul ^{d}Šara$_2$) were, as is probably expected, substantially larger than the eight houses outside the wall at the gate of Šara (abul ^{d}Šara$_2$ bad$_3$-da bar) with regard to minimums, first quartile bounds, medians, arithmetic means, third quartile bounds, and maximums, respectively. As for the eighteen houses located

across from the great well (gaba tul$_2$-mah), they spanned the largest range of sizes, being equivalent to the same range for the total set.

In addition to comparing house sizes, *Nisaba* 11 19 provides evidence that individuals with diverse occupations resided in the same neighborhoods or regions, as seen in Table 4.11.[204]

Table 4.11. Known Occupations of Residents of Neighborhoods or Regions of Umma in *Nisaba* 11 19

1. gaba tul$_2$-mah (obv. i 18, ii 1)		**3. gaba KA-gi (obv. iii 4)**		**5. abul ^{d}Šara$_2$ bad$_3$-da bar (rev. i 21–22)**		**7. gaba ku$_3$-nun-na (rev. ii 25)**		**8. tul$_2$ ^{d}Nin-šubur (rev. iii 9)**	
Line	**Occ.**	**Line**	**Occ.**	**Line**	**Occ.**	**Line**	**Occ.**	**Line**	**Occ.**
obv. i 3	šidim	obv. ii 16	muhaldim	rev. i 13	unu$_3$	rev. ii 1	nagar	rev. iii 1	ašgab
obv. i 4	šabra	obv. ii 17	šu-ku$_6$	rev. i 15	sipa lugal	rev. ii 4	i$_3$-ra$_2$-ra$_2$	rev. iii 3	išib ^{d}Gu-la
obv. i 7	gala	obv. ii 19	nagar	rev. i 18	šu-ku$_6$	rev. ii 5	gudu$_4$	rev. iii 6	aga$_3$-us$_2$ PN sukkal-me
obv. i 9	a-zu	**4. du$_6$ bahar$_2$ (rev. i 9)**		rev. i 19	gudu$_4$	rev. ii 10	šu-ku$_6$	**9. tul$_2$ ^{d}Nin-ildum$_3$-ma (rev. iii 15)**	
obv. i 13	nu-banda$_3$	**Line**	**Occ.**	**6. abul ^{d}Šara$_2$ (rev. i 27)**		rev. ii 11	zadim	**Line**	**Occ.**
obv. i 20	šu-i$_2$	rev. i 8	bahar$_2$	**Line**	**Occ.**	rev. ii 12	dub-sar	rev. iii 14	nagar
2. gaba sila-luh (obv. ii 8)		—		rev. i 23	šakkan$_6$	rev. ii 13	bahar$_2$	—	
Line	**Occ.**			rev. i 25	nagar	rev. ii 14	azlag$_7$		
obv. ii 6	nar			—		rev. ii 15	[šu]-ku$_6$		
—						rev. ii 21	išib		
						rev. ii 24	nimgir		

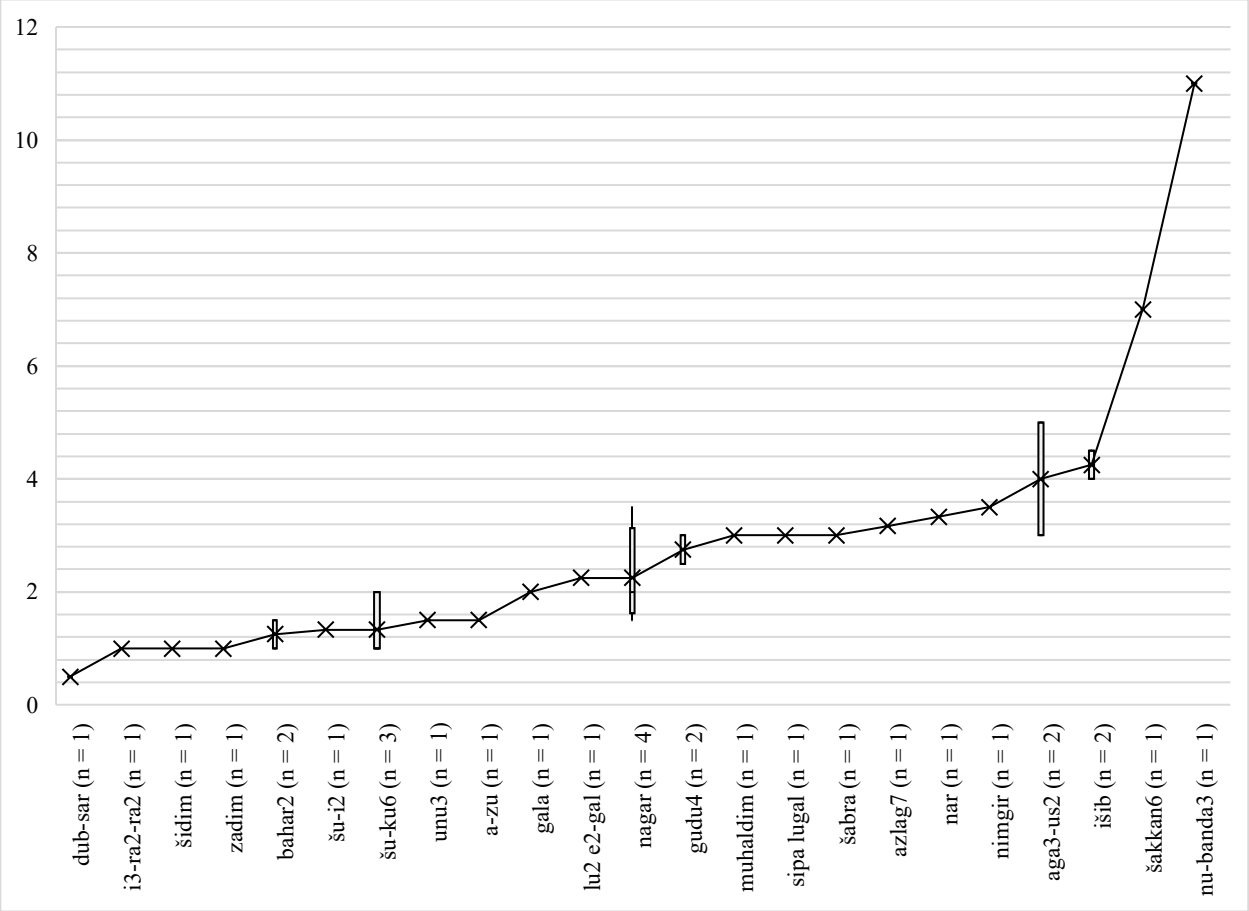
At the same time, there are a few instances of individuals with the same or similar occupations residing near each other, such as a certain cowherd and royal shepherd as well as two soldiers, the latter of whom may have had adjacent houses, possibly sharing a wall, since it is likely that individuals listed in a sequence owned houses in such proximity, as was the case for Kilari's and

204. Neighborhoods or regions are numbered in order of their appearance and stacked in columns to save space. Note that "Occ." is an abbreviation for "Occupation."

Huhu's houses. There is also a potter residing at or near the potter's hill (du$_6$ bahar$_2$),[205] though there is another potter elsewhere. Nevertheless, given the general variety of occupations in proximity, Steinkeller (2013d) argues that the families of these houses were mainly nuclear. While extended families were conscripted together in numerous instances, that does not necessitate that they lived down the street from one another.

Besides considering the spatial distribution of individuals with known occupations in *Nisaba* 11 19, their house sizes can also be compared, as in Graph 4.2.[206]

Graph 4.2. House Sizes (in sar) according to Occupation in *Nisaba* 11 19



205. For a discussion of this location as a workspace, see p. 174.

206. Occupations are arranged in ascending order according to their arithmetic means. If two or more occupations have the same arithmetic means, then they are organized alphabetically. This formatting is applied to all graphs with occupations.

Overall, individuals engaged in occupations relating to nonproductive activities and management tended to have larger houses than those involved in resource extraction as well as construction and manufacturing (see 5.1.2. Occupational Categories). Interestingly, the smallest house size of ½ sar was for an individual with the title dub-sar, but this term does not necessarily indicate a scribal occupation (see p. 160). The Umma text *MVN* 3 213 records the purchase of a 1 sar house by a scribe from a builder (šidim),[207] which lines up well with the house sizes belonging to the scribe and the builder in *Nisaba* 11 19. Other texts that provide evidence for house sizes linked to certain occupations, all of which support the trend above, include the Girsu/Lagaš texts *RTC* 293, which documents the sale of a 2 23/60 sar house from a reed worker (lu_2-gi-zi), and Waetzoldt and Sigrist, *Studies Hallo*, 279 BM 19972, which lists inventories of various households. Waetzoldt (1997, 145) summarizes the house sizes in the latter text as follows:

> Die in den Texten angegebenen Flächen für Privathäuser liegen in BM 19972 zwischen 108 und 180 m^2 [3 and 5 sar]. Die Häuser zweier Schreiber sind nur 108 m^2 groß. Ein "Aufseher über die Getreidemagazine", also ebenfalls ein Schreiber, verfügte über 162 m^2 [4 ½ sar]. Zwei "Aufseher über die Müllerinnen" hatten jeweils 180 m^2 und ein Kleinviehzüchter (kurušda) nur 108 m^2. Ein Mann, dessen Beruf sich nicht feststellen ließ, besaß ein Haus von 180 m^2.

This text also provides helpful information on household belongings, such as various kinds of furniture, bitumen mortars, and grinding stones, among other possessions (see Waetzoldt and Sigrist 1993).[208] It is important to note that citizen craft workers could possibly work from home part-time during their conscription or otherwise, so their houses may have been larger than otherwise needed to include their workshops (see Steinkeller 1996, 252).[209]

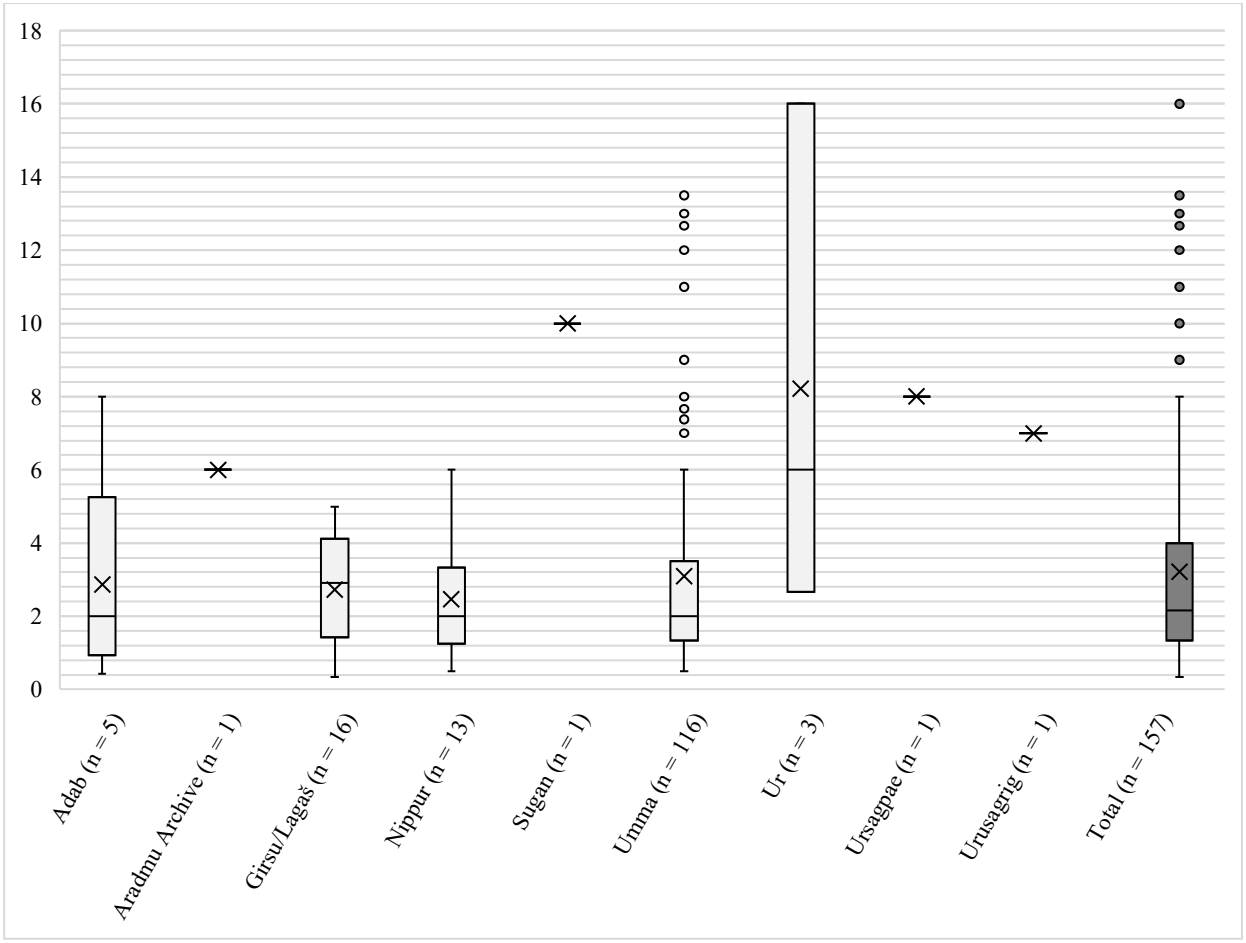
207. The scribe Lukala and builder Gibaba appear to both be in *Nisaba* 23 56 obv. i 6, rev. ii 1, but Lukala was a very common name. Other attestations of Gibaba are treated on p. 253.

208. For further discussion on household belongings, see Waetzoldt 1996, 147–51.

209. See also 5.1.4. Occupational Organizations and Industrial Structures, including Workshops.

In the same manner that all the house sizes recorded in *Nisaba* 11 19 are visualized above, Graph 4.3 plots an extensive record of house sizes according to location (see Appendix 4).

Graph 4.3. House Sizes (in sar) according to Location



Out of the total dataset, the median is 2 ⅙ sar, the modes are 2 and 3 sar (both occurring twenty-one times), while the arithmetic mean is approximately 3.21 sar.[210] Moreover, the bounds of the

210. The arithmetic mean of approximately 3.21 sar is rather close to the arithmetic mean of 3.48 sar calculated on the basis of sale documents in Sallaberger and Pruß 2015, 108–9. Additionally, in his conclusion regarding Ur III house sizes, Waetzoldt (1996, 151) posits as follows:

> Die meisten Bürger der Mittelschicht lebten in Häusern von unter 100 m^2 [2 ⅞ sar]; einige verfügten sogar nur über ca. 36 m^2 [1 sar], doch gab es auch reichere, die 150 [4 ⅛ sar] oder 180 [5 sar] sogar 216 m^2 [6 sar] ihr eigen nannten. Diese Häuser wurden – soweit überhaupt feststellbar – von wenigstens zwei bis zehn Personen bewohnt. Zu den Hausbewohnern gehörten häufig auch einige Sklaven.

Considering that the median in the dataset above is 2 ½ sar, Waetzoldt's estimation that most of the population lives in house sizes under 2 ⅞ sar is justified.

interquartile range are 1 ⅓ sar and 4 sar. Despite the unevenly spread data overall, the data from the three largest subsets, namely from Girsu/Lagaš, Nippur, and Umma, are well aligned and surely the best representatives. While it is challenging to know the actual occupancy of many of these house sizes, the average nuclear citizen family may have been four to five individuals, which, if using the lower interquartile range bound of 1 ⅓ sar and the median of 2 ½12 sar, is 4⁄15 to roughly 0.52 sar per person, not including roof space. This ratio is complicated, however, by the possibility that citizens may have shared some of their housing with their slaves, though most households with slaves would have been larger than the range used here (see 4.2.3. Slaves).

While this discussion focuses mainly on the housing of citizens in general, high-ranking individuals and members of the royal family had large and sometimes multiple households, such as Šū-Kabtā and Simat-Ištaran, who had large households in GARšana and Nippur (see Heimpel 2009b, 2–3), or NinTUR.TUR who had a household in Eduru-NinTUR.TUR, among others (see Steinkeller 2013c, 357–358). There were of course large households for the various governors and several palaces for the royal family as well.[211] Though the sizes of these households and palaces are not known, they were of course much larger than the households so far discussed and presumably comparable to other palaces in the region from the late third and early second millennia. The construction of the palace at Tummal, for example, was a massive undertaking that required thousands of workdays (see Steinkeller 2013c, 362–72; 2015b, 156–81). Other individuals not discussed at length here include high-ranking priests, some of whom would have lived in the temples themselves (see, for example, Zettler 1992, 208).

Having examined a variety of textual data, comparative archaeological and textual data can be considered. The most adjacent data are archaeological and textual data from southern

211. For helpful treatments on the households of the governors of Girsu/Lagaš and Umma, see Borrelli 2020 and Stępień 2012, respectively.

Mesopotamian cities during the Old Babylonian period. In her discussion of house sizes in Old Babylonian Ur and Nippur, Stone (1996, 232–33) presents the following results (see Table 4.12), noting that "central spaces" of courtyard houses are omitted and that excavated linear houses can be smaller than any recorded house size.[212]

Table 4.12. House Sizes (in sar) in Old Babylonian Ur and Nippur according to Archaeological and Textual Data (adapted from Stone 1996, 233)

Source	Number	Maximum	Minimum	Arithmetic Mean	Standard Deviation
Ur Inheritance Texts	3	1 4/15	9/10	1 1/12	11/60
Nippur Inheritance Texts	23	6 ½	5/6	2 17/60	1 31/60
Ur Courtyard Houses	37	5 5/12	14/30	1 ¾	1 1/15
Nippur TA Courtyard Houses	2	1 7/15	13/15	1 1/6	5/12
Ur Linear Houses	11	49/60	13/60	31/60	1/6
Nippur TA Linear Houses	3	11/20	2/5	7/15	1/12
Ur Subtotal	51	5 5/12	13/60	ca. 1.44	—
Nippur Subtotal	28	6 ½	2/5	ca. 2.01	
Total	79	6 ½	13/60	ca. 1.64	

Although the weighted arithmetic means of the subtotals and total are smaller than that of the Ur III data presented just above, this can be attributed to Stone's omission of central spaces and the presence of archaeological data, among other possible factors. Nevertheless, they all lie within the lower half of the interquartile range bounds of the Ur III data. In terms of the Nippur houses in particular, Stone (1987, 126–27) makes a significant observation concerning their distribution:

> Not all variation in house size and complexity can be attributed to family size. In TA wealth differences must also have played a role. Unfortunately our ability to pinpoint variations in wealth is extremely limited; nevertheless, it appears that TA housed both the very rich residents of House K and the poor baker living in House P. Such wealth differences between neighbors are less apparent in TB.
>
> …
>
> The differences which distinguish TA from TB are precisely those which defined neighborhoods in medieval Islamic cities. Both TA and TB appear as residential districts whose occupants are united by ties of clientage and, in the case of TA, of kinship. Class distinctions, on the other hand, do not seem to have been reflected in the patterns of residence, as evidenced by the proximity of Houses P and K in TA, buildings which housed people of very different wealth and influence.

212. The original measurements in gin_2 are converted to sar. Subtotal and total rows are added as well as arithmetic means for all rows except the subtotals and totals, for which weighted arithmetic means are included.

Although Stone (1987, 127) also states that occupations were shared to a certain extent within neighborhoods, the proximity of houses with substantial size variations is congruent with the distribution of houses among various neighborhoods and regions in *Nisaba* 11 19 discussed above, especially the eighteen houses located across from the great well.[213]

Overall, the integration of Ur III textual data with comparative data from archaeological and textual sources sheds light on several issues regarding the housing of citizens. It is apparent that their houses probably conformed to the widely used linear and courtyard or square layouts, which ideally accommodated nuclear and extended families, respectively. Their houses were organized in neighborhoods characterized by diversities in both house sizes and occupations of their inhabitants. Moreover, house sizes tend to correlate to occupations, such that those participating in resource extraction or manufacturing probably had smaller houses than those occupied with nonproductive activities and management. While the data are unevenly spread, it seems that houses smaller than 1 ⅓ sar were in the lowest 25 percent of house sizes, whereas those larger than 4 sar were in the highest 25 percent. All these observations, however, while based on textual data and often supported by comparative data, are of course tentative and subject to new data and further study.

4.2.2. UN-il$_2$

The housing of UN-il$_2$ is unfortunately one of the most unknown aspects of their conditions. Although there are several texts that detail the owners of private houses, none of these

213. For discussions on other cities with neighborhoods organized in this fashion or examples to the contrary, see Nishimura 2012; Rainville 2001; Stone 2005, 146. Note, however, that house size variation may not necessarily be an indicator of wealth disparity (see Stone 2005, 147; Widell et al. 2013, 123). Further summaries of house sizes according to city or region, see Sallaberger and Pruß 2015; Stone 2005, 145–48; Widell et al. 2013, 123.

individuals can be identified as UN-il$_2$, though that does not mean that none of them were UN-il$_2$. In his study on the eren$_2$ and UN-il$_2$, Sigrist (1979, 104) interprets the term e$_2$ UN-il$_2$ as a reference to a "quartiers d'habitation propres." While e$_2$ UN-il$_2$ occurs in lexical texts (see p. 101), it does not occur in any administrative texts. More recently, Heimpel (2009b, 163–65) identifies the term e$_2$ gi-na-(ab-)tum as a barracks for personnel under guard, though he does not include UN-il$_2$ among such personnel. This suggestion is refuted by Steinkeller (2015b, 159 n. 84), however. Moreover, e$_2$ gi-na-(ab-)tum is limitedly attested at Girsu/Lagaš and Umma where UN-il$_2$ were the most prevalently documented. Zettler (1992, 163) speculates whether any of these individuals lived in the temples upon which they were dependent, but he considers a range of options besides that. It is admittedly puzzling that Ur III texts do not provide more information about the housing of UN-il$_2$, given the amount of detail they include about other important aspects relating to them. Perhaps donated UN-il$_2$ were housed by their donors, but their relationships need further study to support or dismiss this speculation.

While evidence for the housing of UN-il$_2$ during the Ur III period is lacking, a variety of comparative textual evidence from the Early Dynastic, Sargonic, Old Babylonian, and Neo-Babylonian periods may provide some insights. In a study on the organization of work during the Early Dynastic IIIb period, Glenn Magid (2001, 317–26) addresses phrases involving the Sumerian verb ti|se$_{12}$ in allotment reports that seem to indicate that various kinds of fully dependent workers lived together with their supervisors or in the vicinity of where they were stationed to work. Some of the highlights of his (2001, 320) treatment are provided as follows:

> On the surface, these expressions appear to specify actual living arrangements. While this may be true, it is not always clear how such arrangements would have been realized, nor why certain workers should have lived together, let alone with their overseers. In fact, the only straightforward case is that of the *iginudu*s, who were often assigned to garden-work. By every indication, *iginudu*s were chattel slaves. There is no evidence that they had families or any property of their own. Thus, in the case of the *iginudu*s we are probably

> justified in concluding that they did live together on the orchards or in the households of the gardeners to whom they were assigned.
>
> Was the same true of other workers? Take the case of women weavers, who are routinely listed with their children in the ration texts. The social status of these women is unclear. There is no evidence that they were widows or prisoners of war, or even that they were unmarried. Even if they were, however, what are we to make of the fact that as many as eight weavers and their children are said to "live" with their overseer? Does this mean that they—like the *iginudu*s—actually lived in their overseer's household, together with his family? Does it also mean that they worked side by side? Perhaps it does. But it is equally plausible, in this case, that *ti/se*$_{11}$ expressions mark persons as living (in their own households) in the vicinity of their overseer. If this is true, then we must reckon with the possibility that different neighborhoods, in Girsu, were specialized for different kinds of craft production.

As can be gleaned from this excerpt, the material is ambiguous and supportive of several possibilities. Bartash (2020, 27) notes this phenomenon in Sargonic texts as well and considers this evidence for the housing of "palace and temple dependents ('menials')." How this may have worked is not clear, however. Besides these possibilities, Magid (2001, 320–24) acknowledges that the workers may not have actually lived with their supervisors but rather worked in their industrial households, whether those were physical or figurative. As for the Old Babylonian period, Stol (1995, 306) identifies a few texts indicating that UN-il$_2$ were kept under guard, but it is not certain if they were permanently housed this way and whether this applies to the Ur III period. In terms of the Neo-Babylonian period, Kleber (2011, 106) states that *širku*'s could own or rent their own houses in the city or countryside, some of which were a few sar in size. While they had some similarities to UN-il$_2$, the *širku*'s could own their own slaves, which UN-il$_2$ probably could not do, so it is not certain if their housing was comparable. Despite all these uncertainties, UN-il$_2$ were probably housed in more-crowded and lower-quality spaces than citizens. Since they were regularly conscripted all year round with a few days off a month, they probably had to live close to where they worked and may have been monitored in some fashion by their supervisors.

4.2.3. Slaves

Slaves were presumably housed by their owners, though there are several complications. Slaves owned by citizens in most private households may have shared some amount of the housing space, though how much and which areas of the house are difficult to determine. Concerning the number of slaves owned in a single household, Hans Neumann (2011a, 22) offers the following considerations:

> According to the available data, it is still difficult to correctly judge the actual number of slaves in private ownership. As a rule, a wealthy family in Ur III Babylonia owned at least one or two slaves. Of course, the concrete number of slaves in private ownership depended not only upon the wealth of the slave owner, but also upon the precise kind of activities the master wanted the slaves to do. This is why the number of slaves can differ widely from family to family. Using the Ur III court records, Falkenstein (1956–57, vol. 1: 87 n. 5) determined that the highest number of slaves attested in a private household is six. According to sale contracts that originate from northern Babylonia, we find that a certain high-ranking man named SI.A-a, a chief shepherd (na-gada) who was actively engaged in the local economy for twenty-nine years, owned at least three male slaves at the value of 7 to 9 shekels of silver and four female slaves at the value of 1/2 to 3 1/3 shekels of silver, or more than 7 shekels of silver.

Though Neumann does not specify what portion of the population would have been wealthy enough to own one or more slaves, Steinkeller (2017a, 548) assumes that roughly a third of citizen households could afford slaves. The upper third of the house sizes in *Nisaba* 11 19 range from 3 to 11 sar, with an arithmetic mean of 4 ²⁹⁄₆₀ sar, and there are larger houses documented in Umma. Slaves owned by large houses, including temple households, would have existed in significantly larger numbers, such as a few hundred (see Steinkeller 2017a, 547), and at least some of them may have been housed in similar conditions UN-il$_2$ that were housed.

4.2.4. Estimating Population Density and Intramural Population Size

Based on these data concerning family sizes and housing, it is possible to offer estimates on population density and intramural population size. Since the typical nuclear citizen family may have been four to five individuals, which is averaged to four and a half for this estimation, what remains to be determined is the amount of houses per hectare as well as the percentage of housing within the city walls. In *Nisaba* 11 19, the 100 extant house sizes total 263 $\frac{5}{12}$ sar or approximately 9483 m^2. According to this ratio of houses to area, there would be roughly 105.45 houses per hectare, which can be rounded down to 100 houses, especially since industrial structures and shrines would have been mingled with housing.[214] Given the average of four and a half citizens per household, there would be about 450 citizens per hectare of only housing, mingled with industrial structures and shrines. This does not factor in gardens (including orchards), streets, water sources, and other empty spaces between houses, however, which may be at least 30 percent of such hectares, rounding up from the estimated 28 percent utilized by Thomas Hertel (2014, 34–35).[215] A Kassite plan of Nippur, for example, indicates that a substantial portion of the intramural space was a garden (see Zettler 1992, 8–11).

Using Leonard Woolley's (1974, pl. 61) map of Ur during the late third and early second millennia in combination with aerial imaging (see Hammer 2019), it appears that roughly 40 percent or more was occupied by a possible canal, monumental structures, harbor space, and

214. For industrial structures, see *Syracuse* 479, for example, though Steinkeller (2013d) notes that these structures may not have been included within the city walls. Regardless, there would have been industrial structures within the walled city. A discussion of workshops is given in 5.1.4. Occupational Organizations and Industrial Structures, including Workshops. As for shrines, see, for example, Van De Mieroop 1992, 34, 138–47.

215. The presence of water sources and orchards mingled with housing is readily apparent in *Nisaba* 11 19. Note that Hertel (2014, 26, 37) uses five individuals per household, though he does not factor in monumental buildings, which he states were not found in the lower town of Kaneš.

wadis.[216] The excavated areas of housing were around 3 percent, leaving about 57 percent of empty space, though there could have been more empty space due to difficulty measuring areas adjacent to the walls. Nevertheless, about 60 percent of the space at most could have been predominantly housing, with some room for industrial structures and shrines. If at least 30 percent of this space was not housing, then about 42 percent of the intramural space could have been housing, though a range of 30 to 40 percent is preferrable, especially if the wadis or other nonresidential factors were underestimated.[217] If this estimate of space use is accurate, then there would have been around 1,800 to 2,400 households in the walled city of Ur, since the intramural area was approximately sixty hectares during the Ur III period (see Hammer 2019, 175). the intramural population could have been around 8,100 to 10,800 citizens, which can be smoothed out to 8,000 to 11,000 citizens. After further rounding, this is 125 to 175 citizens per intramural hectare.

The intramural city was also populated by UN-il$_2$ and slaves, whose numbers can be estimated in broad terms, though their housing is not certain. The portion of UN-il$_2$ is difficult to estimate, though there may have been about one UN-il$_2$ for every four citizens,[218] so there could have been roughly 2,000 to 2,750 UN-il$_2$, or simply 2,000 to 2,500 UN-il$_2$. As for slaves, utilizing estimates from Steinkeller and Neumann, there may have been one to two slaves per

216. Concerning a possible canal, Emily Hammer (2019, 174) writes: "The depression separating the north and south portions of the mound, perhaps representing the pathway of an ancient canal, is visible."

217. For a brief discussion on urban planning, see Stone 2007, 225–28. Another non-residential factor to consider is burial spaces.

218. In terms of the ratio between male UN-il$_2$ and citizens based on the extensive count of their remunerations while conscripted in Umma texts, there were roughly two UN-il$_2$ per three citizens, but this ratio could be more precisely determined with further study. This ratio is higher than the estimate used here because not all male citizens would have not been conscripted. The ratio used here also factors in Steinkeller's (2017a, 546–47) estimate of about 400 male UN-il$_2$ versus 3,600 male citizens (before adding dependents) in Umma, which is reduced to one male UN-il$_2$ per nine citizens. While Steinkeller counts female UN-il$_2$ separately, the ratio of one UN-il$_2$ for every four citizens, both female and male, is a little less than the average of the ratios 2:3 and 1:9 for the sake of estimating thousands of individuals.

one third of the citizen households as well as a few hundred slaves in the royal and institutional households, which means there could have been approximately 1,000 to 1,500 slaves. Based on these rough estimates, the total intramural population could have been around 11,000 to 15,000 people, meaning that there were around 175 to 250 people per hectare, which agrees with the higher end of typical estimates noted by Hertel (2014, 37). This estimate is rather speculative in terms of UN-il$_2$ and slaves, however, and is dependent on the specific topography and space use of the intrmural area of Ur. Therefore, these estimates cannot be used uncritically, though this discussion hopefully aids in ongoing endeavors to determine population density and size.

None of these estimates considers the extramural area of Ur, which could have been an additional 440 or so hectares. It is not certain how much of this area was part of Ur during the Ur III period, however, since much of the pottery dates to the Old Babylonian period or later. In any case, the population density of this area would have been drastically lower, especially since fields and water courses cut across substantial portions, particularly along the eastern and southern sides of the walled city. There is evidence, though, of numerous structures along the eastern side, and there is also the suburb Diqdiqqah to the northeast, but this area was also divided by water courses (see Hammer 2019). While a precise estimate is not ventured here, this extramural area was certainly inhabited by a few thousand people.

4.3. Legal Rights

4.3.1. Citizens

Citizens were generally guaranteed the fullest possible extent of legal rights,[219] though male household heads possessed some authority over their wives and especially their sons and unmarried daughters (see Culbertson 2011, 37; Lafont and Westbrook 2003, 198; Steinkeller 2013c, 350; Westbrook 1995, 1365). In his discussion on the population of Umma, Steinkeller (2017a, 539) provides an important observation on the egalitarian nature of adult male citizens:

> This broad and inclusive sense of éren is fully in evidence in Text A [*TCL* 5 6166], where 3,614 Umma residents of markedly varied economic and professional backgrounds — some of whom were members of the organization of the local governor, while others were direct dependents of the state — are all afforded this particular designation. The egalitarian character of this social designation is further underscored by the uniform rate of payment that is applied to the éren throughout Text A.

Thus, regardless of their social status, there is an important aspect of uniformity among adult male citizens. Since this treatment on the legal rights of citizens focuses on their rights with respect to mandatory work and enslavement, their mobility and salability are discussed below (manumission is discussed on p. 116). Additionally, in agreement with Diakonoff and Gelb with respect to the potential of branding (see Table 2.1), it does not appear that citizens were branded (see Bartash 2018b, 274–76).

The kind of mobility considered here is not social mobility but rather what Diakonoff (1974a, 58) refers to as "freedom of movement" and in contrast to what Gelb (1972a, 87) considers to be "immobility." Citizens were permitted some mobility, though their periodic conscription (see, for example, pp. 201–8) would have compelled them to remain predominantly immobile or forced them to relocate temporarily for work (see Bartash 2020, 27). Delinquency in

219. A helpful summary of legal rights guaranteed to citizens in ancient Near Eastern societies is given in von Dassow 2011, 212–13.

performing work obligations, whether due to flight or some other kind of illicit absence (see pp. 197–200), could be pursued and punished, including with imprisonment (see Koslova 2013a, 318).[220] Additionally, those who held managerial roles over such work obligations were held accountable for deficits (see, for example, Englund 1991, 279; Koslova 2013b, 163–164), which would have likewise constrained their mobility. At the same time, Wilcke (2006, 107–8) demonstrates that restorations of these deficits and others owed to whom he calls "Institutionelle Gläubiger" could be deferred or forgiven in various circumstances. Citizens who were resettled former prisoners of war were also coerced into their resettlement, which affected their mobility (see Bartash 2020).

Although citizens were guaranteed a variety of legal rights, they were nevertheless potentially salable into slavery or otherwise subjected to involuntary servitude, perhaps even as UN-il$_2$, due to impoverishment, often to satisfy debts and famines, or because of certain crimes (see pp. 120–21). Although Ur III evidence is limited, there were restrictions on the resale of enslaved citizens in some circumstances (see Falkenstein 1956a, 138; 1956b, 115, 264; Molina 2011, 563; 2008, 132–35); Westbrook 1995, 1662, 1675). Such a prohibition would have kept enslaved citizens local so they could maintain familial ties during and especially after manumission (see 4.1.4 Slaves).

220. For a discussion on the pursuit and punishment of mainly fugitive slaves, with a few cases regarding citizens, see Reid 2015. A likely example involving a citizen is discussed in Englund 1990, 160–62. Concerning this latter example, Molina writes:

> Another text (*NG* 189 = BM 105346) where a man who escaped from the ĝiš-gid$_2$-da service is mentioned has been discussed by Englund (*Fischerei*, pp. 160–61). It deals with a certain ME.PI.ZU dumu Ur-^{d}Suen unu$_3$, who fled and was seized by a fisherman. This same ME.PI.ZU is recorded one year later, together with his father, in a text listing prisoners (*MVN* 18 557 = *AuOrS* 11 557).

4.3.2. UN-il$_2$

The evidence for the legal rights of UN-il$_2$ is limited, though inferences about their mobility and salability can nevertheless be drawn. As Wilcke (2014, 523) observes, UN-il$_2$ are not explicitly mentioned in either law codes or other legal texts, but further prosopographical study may identify undesignated UN-il$_2$. With regard to their mobility, however, numerous administrative texts demonstrate that they were conscripted throughout the year with limited days off such that they were far less mobile than citizens. Additionally, like citizens, they could be pursued and punished for delinquency in performing their work obligations (see Studevent-Hickman 2006, 1:100). Since UN-il$_2$ are not clearly mentioned in legal texts, they probably could not be sold into any form of chattel or debt slavery, either domestically or abroad. If this is the case, they were similar to *širku*'s in this manner, who were also not salable (see Culbertson 2011, 106). Overall, they probably had a variety of rights similar to citizens (see Steinkeller 2013c, 365; 2015a, 25).

4.3.3. Slaves

Slaves are often featured in a variety of legal texts, and while they did not have much or any agency in many texts, there are also instances in which they appeared to advocate for themselves, which is assessed by Culbertson (2011a, 43) as follows:

> Several court records contain stock first-person denunciations of personal enslavement, purporting to give the voice of a disputing slave with the construction: "The slave so-an-so appeared before judges and said, 'I am not a slave'" or "I am not so-and-so's slave." These declarations are intriguing given that the entitlement to participate in the urban court system as a disputant was not guaranteed to all members of Ur III provincial communities, let alone to slaves. Whether or not these slaves were indeed afforded the opportunity to represent himself or herself in real-life proceedings will remain unknown to us; both the Ur III dispute resolution system and the textual documentation it yielded were intended to protect the interests of elites. Yet there are several references in the court records to slaves

> who claim to possess sale records or other forms of written proof attesting to the conditions of their enslavement, and there is at least one case in which a slave girl actually produces a document in court (*NG* 205; see also Sigrist 1995: no. 1).

Besides the right to advocate for themselves, there is limited evidence that slaves could marry, conduct some business transactions, and perhaps acquire property of their own (see Molina 2011, 563; Steinkeller 1989, 120–21). Otherwise, slaves possessed few legal rights and were generally treated as property.

Slaves were immobile, living and working under the control of their owners, though slave women working at temples could have a few days off a month (see, for example, pp. 208–10)—perhaps slaves in private households were given rest days as well. If they fled, they could be pursued and punished, including with imprisonment or physical punishment, the latter of which is hardly ever detailed, though Molina and Such-Gutiérrez (2004) identify one Ur III text describing the cutting of a slave's nose as a punishment for flight. In terms of salability, chattel slaves could be resold, but the resale of citizens who were debt slaves was restricted in some circumstances.

Although there is virtually no explicit Ur III evidence that people could be branded (see only *UET* 3 721 rev. 4: 2 $^{\text{uruda}}$za$_3$-šu$_4$ lu$_2$), there is limited Sargonic evidence that slaves were branded (see Gelb, Steinkeller, and Whiting Jr. 1991, 243). Concerning this paucity of evidence, Daniel Foxvog (1995, 3) offers the following considerations:

> It is noteworthy that all these texts are Sargonic in date, suggesting that the practice was an innovation and of limited duration, perhaps even restricted to palace or temple slaves. Apart from the human branding-irons of UET 3, 721 above, clear evidence for the regular branding of slaves does not reappear until the first millennium, and even then the practice seems limited mostly to temple slaves. Non-permanent slave marks, particularly the *abbuttu* hair-lock, may well have been the norm throughout most of the history of Mesopotamia.[221]

221. Remco de Maaijer's (2001) study on branding during the late third millennium does not provide any additional evidence that people were branded during the Ur III period.

Not only is *UET* 3 721 rare evidence that people were branded, but it does not specify who was branded or why. Lorenzo Verderame (2018, 15 n. 6) notes that there is no textual evidence for the usage of the *abbuttum* during the third millennium. Mallory Ditchey (2016) offers a contrasting view to Foxvog, suggesting that branding and other forms of temporary and permanent slave markings were prevalent from the third to the first millennia. Though she (2016, 7–9) notes that second-millennium evidence is limited, she argues that some of it was rather notable and indicative of these practices. She (2016, 3) also highlights several texts, including two Sargonic texts, that identify people who were not branded, indicating that branding was therefore assumed in some contexts. Nevertheless, given the rare and unclear Ur III evidence, at least some slaves were probably branded, but its prevalence or reasons are not certain. Its absence in numerous legal texts concerning slaves may be indicative that it was not widely practiced then.

CHAPTER 5. ECONOMIC CONDITIONS

5.1. Occupations

5.1.1. Identifying Occupations

The concept of "occupation" in this dissertation is expansive, including a range of activities regardless of prerequisite training as well as administrative functions.[222] In Ur III texts, an individual's occupation can be indicated in several ways. Occupations often directly follow the individuals they describe or are given in predicate-nominative constructions after two or more individuals. When occupations follow individuals, they can function as titles for identification and may then vary, depending on context.[223] As such, it cannot be assumed that an individual was always defined by a single occupation. This is especially the case for the term dub-sar, which often indicates that an individual had completed his or her scribal training, though he or she may have had a more specific occupation (see Garfinkle 2012, 73; Michalowski 1991, 51; Steinkeller 2017b, 53–54). Some occupations beginning with lu_2- can be abbreviated, especially if the term includes a resource. Some examples include lu_2-gu, lu_2-kas$_4$, lu_2-mun, lu_2-sum(-

222. In her study on social classes, von Dassow (2008, 252) likewise uses the term "occupation" in this manner.

223. For helpful discussions on the use of occupations as titles, see Garfinkle 2010, 311; 2012, 72–73, 126, 150–52.

ma), lu_2-ŠIM, and lu_2-tir, which are all abbreviated in the phrases PN gu, PN kas_4, PN mun, PN sum(-ma), PN ŠIM, and PN tir, among others.[224]

There are also instances in which an occupation precedes an individual, which typically indicates that the individual is working in that occupation separate from other individuals in the same context. Two notable texts that draw attention to this phenomenon are the Girsu/Lagaš texts *CTNMC* 54 and *Nisaba* 33 305. *CTNMC* 54 is an inspection of female weavers, including their barley allotments, though it also lists nine individuals whose names and allotments are preceded by kinkin.[225] Those individuals are then separated in the totals section to grind cereals (see rev. vii 9). As for *Nisaba* 33 305, which lists še š[uku]-ra $ša_3$-gu_4 (rev. ii 23), there are two individuals listed as dumu-gu_4-gur PN (obv. ii 14, rev. i 23') and one as dumu-gu_4-gur PN dumu-gu_4-gur (obv. ii 17),[226] meaning that they are all singled out for employment as dumu-gu_4-gur, including the one who also happened to be a dumu-gu_4-gur (obv. ii 17). This last example demonstrates how an occupation preceding a PN serves a different function than one following it. Note that this formatting also applies to terms indicating tasks, which are often location-specific, such as gu_4 PN, kaskal PN, mar-sa PN, and tir PN, among possible others.[227]

An individual's occupation can also be modified by the postpositions -$še_3$ and -ta. -$še_3$ modifies an occupation that the individual would perform after a previous reference point, since

224. While all these phrases can be found with the BDTNS or CDLI, PN gu is perhaps the most difficult (see, for example, the Umma text *YOS* 15 113 obv. 8, 11).

225. In obv. i 20, the kinkin sign is listed below the allotment toward the left edge of the line rather than preceding it, but this appears to be a scribal inconsistency.

226. For a discussion on this occupation, see Borrelli 2013, 75.

227. gu_4 PN and tir PN are discussed in Koslova 2008, 180 n. 80. For examples of kaskal PN and mar-sa PN, see *Nisaba* 15/2 797 obv. ii 13; 953 obv. iii 38, v 33, vi 16; 1074 rev. i 18', ii 2', 7', 9', 11', 16' (all include $uš_2$ kaskal PN according to the CDLI) and the Umma text *Santag* 6 384 obv. v 29', rev. v 29', 31', 34', 36', respectively.

performing the occupation modified by -še$_3$ was the purpose or result of a previous action.[228] -ta modifies an occupation performed by the individual before a present reference point, indicating a change from a past status. These postpositions can have the same functions with other terms relating to tasks to be performed or an individual's work output. For example, sag-dub-ba-še$_3$ ("as a top-quality worker")[229] occurs several times in *CUSAS* 39 126, some of which are complemented by šu-gi$_4$-ta ("from the (status of) an elderly (working) person"). A clear example with -ta is *OrSP* 47-49 488, which includes several attestations of ama-il$_2$-ta and ab-il$_2$-ta, which Steinkeller (2018, 140) translates as "from the (status of) ama-il$_2$ … from the (status of) ab-il$_2$." A lengthy task modified by -še$_3$ is apparent in the Umma text *CUSAS* 39 133 obv. i 29 (emphasis mine): --- Nimgir-an-ne$_2$ šu-ku$_6$ **ka e$_2$-gal-še$_3$ ku$_6$ tum$_3$-še$_3$** Ur-^{d}Utu i$_3$-dab$_5$, meaning "--- Nimgirane, the fisherman (Ur-Utu conscripted him **in order to bring fish to the entrance [lit. 'mouth'] of the palace**)." The fact that Nimgirane was indented means that he was not conscripted to work with the others listed directly above and below him, since he was singled out for different conscription.

5.1.2. Occupational Categories: A Modified Fourfold Sectoral-Structural Approach

For the sake of comparisons and summaries, occupations can be categorized according to various frameworks. The sectoral-structural approach, which categorizes occupations according to the broad kinds of activities they require, offers a helpful overview of a society's economy (see Schafran et al. 2018). Before discussing this approach further, native occupational categories, to

228. For this usage of -še$_3$, see example (207) in Thomsen 2001, 102 (emphasis mine): ud ^{D}En.líl-le ^{D}Nin.urta ur.saĝ kalag-ga-ni **maškim-šè** mu-ni-in-tuku-a 'When Enlil has let him have Ninurta, his strong warrior, **as bailiff**' (Išme-Dagan 3, 3-7)." In this example, Ninurta acts as a bailiff as the purpose or result of Enlil's action.

229. For sag-dub-ba, see 5.2.1.4.4 Capacity.

whatever extent they may exist, are considered. The evidence for native categories highlighted here is primarily textual, consisting of mainly lexical and administrative texts, which span about two millennia of Mesopotamian history.

Native categories are difficult to detect, though lexical texts, such as the archaic Lu A and Officials lists,[230] may provide some insight into how occupations could have been natively categorized. In his discussion of Lu A, Steinkeller (2017b, 56) regards it as "a founding charter of the Managerial Class, which, by virtue of its enormous antiquity and prestige, legitimized the political claims of this social group, many of whose members could actually find their own particular titles and occupations in this charter." As such, it is possible to categorize several of the occupations listed in Lu A along with those in the similar Officials list, as managerial, though the label itself is externally imposed. Moreover, Lu A perhaps demonstrates native conceptions of how occupations or kinds of work can be categorized, albeit not exhaustively, as Steinkeller (2017b 98–99) further expounds:

> As for the term nam_2-$šita_2$ itself, one needs to begin with an observation that the initial element nam_2 appears in nine other entries of the Lu A list: nam_2-KAB/TUKU (2), nam_2-DI (3), nam_2-umuš (4), nam_2-uru (5), nam_2-EREN (6), nam_2-apin/engar (8), nam_2-PA.RAD (10), nam_2-ŠAB (26a), and nam_2-PA.KIŠ/ALIM (26b). Without any doubt, this nam_2 is a variant spelling of the formant nam, which serves to create abstract concepts in Sumerian. As a matter of fact, this spelling appears occasionally in the ED III and later sources. This evidence leads one to the conclusion that nam_2-$šita_2$ and the other entries composed with nam_2 are abstract terms, which, rather than being titles or occupations *per se*, identify either the areas of professional responsibility or the officials collectively responsible for particular aspects of the government and economy. In this way, nam_2-umuš possibly means "counseling, advising" or the "consulting body"; nam_2-uru may describe the duties related to or the officials responsible for city administration; and nam_2-apin/engar certainly means agricultural concerns or the functionaries collectively responsible for agriculture. By analogy with these terms, nam_2-$šita_2$ may be expected to be a similar general/collective designation.

230. For a recent discussion on these lists, see Lecompte 2018.

Another illustrative lexical list is Early Dynastic Lu E, which Niek Veldhuis (2010, 391) considers to be "apparently created to replace Early Dynastic Lu A with a modernized list of professions." Its structure is summarized by Civil et al. (1969, 16) accordingly:

> In the 220-line text, of which approximately 190 are preserved, no rigid hierarchy can be noted in the sequence, though the text begins with administrative personnel. Other occupations tend to be in related groups, e.g., artisans, musicians, temple personnel. It is probably that in one of the gaps there occurred a series of terms for herdsmen: na-gada, sipa, sipa-gud, sipa-anše, ÁB.KU, etc. Other common professions which are almost certain to have been included are gala, engar, and dub-sar.

This grouping of similar occupations may also aid in developing general occupation categories, though broader categories can be utilized as well. Moreover, this grouping of similar occupations without a clear hierarchy is noticeable in a lengthy list of occupations given in a Neo-Assyrian edict (*SAA* 12 83 rev. 3–17),[231] translated by Melanie Groß (2018, 369 [italics hers]) as follows:

> *Brewer, confectioner, sons of the cupbearer, cartwright, architect, scribe, smith, goldsmith, coppersmith, engraver, priest, temple-enterer, bowmaker, weaver, fuller, sash-weaver, tanner of coloured leather, firewood man,* gaddāiu*, oxherd, fowl-herd, milk man, cook, dishwasher, fowler, boatman, reed-worker, prostitute, son of the female palace slave, farmer, beer man, gardener, vegetable gardener, donkey-driver, horse trainer, lower garment man, alum man, merchant, messenger, palace manager, overseer of the royal tombs, (…)*

Despite the grouping of similar occupations, some seemingly related occupations, such as those involving food processing, are separated into smaller clusters.[232]

The terms gašam and especially giš-kin-ti refer to a useful native and broad occupational category of craft workers,[233] and these terms are attested hundreds of times across a

231. This list is similar to *SAA* 12 82 obv. 4–8', which is more fragmentary.

232. A similar list of occupations given in a letter dated prior to "the end of the Ramesside era in Egypt (about 1200 BCE)," is translated by David Warburton (2020, 190) accordingly:
> "craftsmen, manual laborers, office workers, administrative officials, time-servers, stewards, mayors, village headmen, empowered district officers, department heads, scribes of offering tables, commissioners, envoys, administrative messengers, brewers, bakers, butchers, servants, confectioners, cake bakers, wine tasters, project managers, supervisors of carpenters, chief craftsmen, deputies, draftsmen, sculptors, miners, masons, wreckers, stone workers, guardians […] statue sculptors […] wood workers, […]"

233. For helpful discussions on craft workers in ancient Mesopotamia, see Paoletti 2016; Renger 1996.

wide variety of proveniences. Waetzoldt (1987, 121) identifies the following occupations as belonging to this category during the Ur III period:

> Among the crafts, masculine occupations are represented by—among others—copper smiths, gold and silver smiths, reed weavers, wood workers, leather workers, bakers and cooks, potters, malters, brewers, shipwrights, basket makers, rope makers, and fullers, as well as scribes. Grinding grain, pressing oil, and weaving were female occupations.

It is important to note that while certain scribes can be grouped with craft workers, the term has a range of meanings and uses, of course.

Other terms for native occupational categories are ab-ba ab-ba and sag-apin, though these terms are used only a few dozen times, mainly at Girsu/Lagaš. While it is difficult or impossible to determine which occupations belong to the ab-ba ab-ba and sag-apin categories in several texts, there a few that itemize these occupations, which are discussed by Maekawa (1999, 76, 80) in his treatment on temple personnel as such:

> A group of Girsu documents refer to the number of those who worked for the public institutions with information on their administrative titles or occupations. Their personal names, however, are as a rule left unregistered. The administrative titles or occupations vary only slightly in different texts. These records, which I name as "staff lists" here, have already been studied in detail by Gelb in his 1979 article.
>
> …
>
> The men who are inspected in each "staff list" are classified into the following social groups.
>
> Group 1: Those who could be designated as "elders" (ab-ba ab-ba-me). Their titles or occupations are sanga/šabra, ka-gur$_7$, ša$_{13}$-dub-ba, sag-du$_5$, šár-ra-ab-du, dub-sar gu$_4$-apin ("scribe" of the plow animals), and sometimes ab-ba uru ("town elder"). …
>
> Group 2: Those who worked in the field [sag-apin-me]. Their occupations are dub-sar gu$_4$-10 (not always registered in the lists, however), nu-banda$_3$ gu$_4$, engar, šà-gu$_4$/gu$_4$-da-ri-a (= dumu-da-ba, dumu-gu$_4$-gur), and sometimes other subordinate workers called šà-gu$_4$ and dumu-nita$_2$ diri.
>
> Group 3: Men of other occupations, such as the carpenter(s) (nagar), felter(s) (ad-kub$_x$) [*sic*], courier(s) (ugula kaš$_4$), "carrier(s) of a chari)" (gu-za-lá), and inspector(s) of irrigation water (a-igi-du$_8$).
>
> Group 4: Laborers called erín and UN-íl.[234]

234. Note that the Gelb 1979 article to which Maekawa refers is discussed on pp. 59–61.

Maekawa (1999, 91 n. 52) also notes that certain priests and priestesses can belong to the ab-ba ab-ba category. Based on these texts though, occupations categorized as ab-ba ab-ba are broadly managerial, whereas those categorized as sag-apin are all focused on cultivation, which are both distinguished from other kinds of occupations. Besides this juxtaposition of various ab-ba ab-ba and sag-apin occupations, there are several texts that juxtapose ab-ba ab-ba and engar nu-banda$_3$ gu$_4$.[235] Note that sag-apin is possibly attested in the Girsu/Lagaš text *MVN* 13 319 (the term is slightly damaged), in which case it appears to include a much wider variety of occupations, including craft workers, among others. Even if sag-apin is present, this is an exceptional case.

In order to succinctly categorize all the various occupations, an external framework can be utilized with some adaptations. Since the early to mid-twentieth century, some scholars have developed a sectoral-structural approach to economics, which divided economic activity into several sectors according to their basic products or outputs, such as raw materials, finished goods, or intangible services, which are generally considered to be primary, secondary, and tertiary activities or sectors, respectively. Moreover, some intangible services can be further subdivided into information-based and managerial services, considered to be quaternary and quinary activities or sectors (see Schafran et al. 2018).

To adapt this framework for the Ur III period or the ancient Near East in general, it is proposed here that occupations can be categorized according to the following four categories: (1) resource extraction, (2) construction and manufacturing, (3) nonproductive activities, and (4)

235. See the Girsu/Lagaš texts CDLI P234855; *CUSAS* 16 127; *Nisaba* 17 134; *TCTI* 2 3723; *TUT* 111. Note that *Nisaba* 10 35 lists these occupations together without any clear separations.

management.[236] The category of nonproductive activities is broad, including custodial duties, military duties, personal care (physicians, for example), and transportation, among others. Management includes individuals who supervise personnel and resources, including those involved in the other categories. These individuals were, of course, nonproductive as well with regard to their outputs. It is important to note that individuals engaged in what are generally considered to be cultic activities, like priests and temple singers, are difficult to categorize in this manner. They can be variously included with the categories of nonproductive activities and management. Individuals who managed temple personnel and resources, like a sanga or a šabra, are considered to be involved in management. Their functions are addressed by Steinkeller (1999b, 297) in his defense of a nuanced "temple economy" system as follows:

> Unfortunately, the word "temple" conjures, especially for those who are not intimately familiar with third-millennium economic records, the notion of a theocratic state, run by hordes of priests. In actuality, nothing could be farther from the truth. There was nothing inherently "religious" or "priestly" about the organization of temple estates. Their managerial organizations, headed by the sangas and sabras, were purely secular bodies. To be sure, there was an undeniably religious aspect the offices of the sanga and the sabra, but this was equally true of everyone else in the temple community, since everyone partook of the same subservient, yet, at the same time, intimate, relationship with the divine owner of the temple estate. This peculiar meshing of the secular and the religious, in which it is impossible to draw a clear line between one and the other, is in fact the most distinguishing feature of the southern system.[237]

236. Warburton (1997, 115) also utilizes the concept of primary, secondary, and tertiary activities or sectors to refer to agriculture, construction, and various services. Elsewhere, he (2020, 190–91) delineates occupational categories as such:

> Among those working in the agricultural sector were shepherds, cultivators, farmers, gardeners, vintners, and field-workers; other rural occupations included fishermen, foresters, and bitumen collectors. Among the active craftsmen were builders, seal-cutters, bow-makers, potters, sculptors, masons, carpenters, basket-makers, and boat-builders. These must be distinguished from the more industrial occupations, such as weavers and smiths. Among the professional classes were merchants, barmaids, prostitutes, physicians, barbers, priestesses, managers, governors, and scribes. Sailors and soldiers wandered between the various professions, acting at times as merchants and farmers.

237. For further discussion, see Steinkeller 2019.

Overall, these categories are similar to Robert Hunt's (1991, 149–50) simplification of "economic functions," which include "1) Production of goods, 2) Distribution of goods, 3) Cultic ritual activity, and 4) Governance," though the categories proposed here are not as simplified.

This bottom-up approach from resource extraction to management perhaps accords well with native conceptions of a societal occupational hierarchy, as discerned from the Warka Vase, for example. The lower frieze depicts a variety of resources that can be extracted, whereas the middle frieze displays the transportation of such resources to a presumable structure, which requires both construction and manufacturing as well as nonproductive activities. The upper frieze shows the offering of these resources, which is facilitated by personnel engaged in management, including cultic activities. Although these four categories can be arguably rearranged into a variety of hierarchies, the present order aligns well with several measures of inequality, such as house sizes, bala work rates in *MVN* 15 390, as well as šuku-land and apin-la$_2$-land sizes (see pp. 143–44, 211–14, 229–31, 238–40, 243–44, 261–62).

It is difficult, however, to place each occupation within only one of these categories. While identifying occupations in the two productive categories is generally clear, there are a few occupations linked with resource extraction that are considered to be managerial, such as na-gada, at least in some instances (see Garfinkle 2012, 70–71), and nu-banda$_3$ gu$_4$. Moreover, while engar typically had supervised ša$_3$-gu$_4$ and related occupations (see Garfinkle 2012, 62; Steinkeller 2002, 119), their occupation was still under several layers of management (see Maekawa 1987b), so they are considered here to be engaged in resource extraction. This distinction may be evident in the Umma texts Gomi, *Orient* 21, 1 BM 105334 obv. i 10–ii 1; Steinkeller, *Studies Postgate* 2, 562 E obv. i 9–10, 11–12 (both coll.), which both read: 100 engar 0.1.0 gan$_2$-ta \ 300 ša$_3$-gu$_4$ 0.0.3 gan$_2$-ta \ 10 dub-sar gu$_4$ 10 3.0.0 gan$_2$-ta \

20 nu-banda$_3$ gu$_4$ 1.0.0 gan$_2$-ta. It appears that the engar are grouped with the ša$_3$-gu$_4$, whom they supervised, whereas the dub-sar gu$_4$ 10 are grouped with the nu-banda$_3$ gu$_4$, whom they likewise supervised. Given these challenges, the categories to which occupations are considered to belong here are not rigidly prescribed but rather suggested. When graphing measurable inequalities according to occupations, they are arranged in ascending order according to their arithmetic means.

5.1.3. The Relationship between Occupations and Gender, Parentage, and Social Stratum

5.1.3.1. Gender

Occupations were closely linked to gender, parentage, and social stratum. In terms of gender, many occupations were predominantly, if not exclusively, performed by male or female individuals.[238] Based on his study of certain traditional assumptions about gender-based divisions of work, however, Lafont (2016b, 153–54) offers the following critiques and observations:

> But we must admit that the available Sumerian documentation challenges this usual and traditional view, according to which men worked outdoors for the primary productive sector of the economy (mainly in the fields and in animal husbandry), while women were occupied in the secondary productive sector (indoors, to produce flour, oil, clothing, and so on).
>
> …
>
> Moreover, some of them [women] could have had professional skills equal to those of men, which they could, and often did, exercise outside the family home. To illustrate this point let us simply examine the list of women's professions and specializations recorded in the recently discovered archives of Garšana and Irisagrig. Thanks to this new data, we can now assert that women held many positions hitherto documented only for men. These specialized occupations include:
> - **geme$_2$ azlag$_2$** cf. usually male **lu$_2$-azlag$_2$**, "fuller, washerman"
> - **geme$_2$/munus muhaldim** cf. usually male **muhaldim**, "cook"
> - **geme$_2$ i$_3$-du$_8$** cf. usually male **i$_3$-du$_8$**, "doorkeeper"
> - **geme$_2$ kisal-luh** cf. usually male **kisal-luh**, "(temple) sweeper"

238. For helpful discussions, see Garcia-Ventura 2016; Heimpel 2009b, 47, 65–76 (note, however Heimpel's problematic usage of the term "slave" discussed in n. 85); Lafont 2016a; Lion and Michel 2016.

- **geme$_2$/munus nar** cf. usually male **nar**, "singer, musician"
- **munus a-zu** cf. usually male **a-zu**, "physician"
- **munus dub-sar** cf. usually male **dub-sar**, "scribe"
- **munus gudu$_4$** cf. usually male **gudu$_4$**, "purification priest"[239]

In addition, Lafont (2016a, 67) highlights a rare case of a female merchant. Although there are nuances, occupations were nevertheless generally organized according to gender.

5.1.3.2. Parentage

As for parentage, occupations were overwhelmingly passed down from parents to their children, especially from fathers to their sons, which was typical in the ancient Near East (see, for example, Archi 2015, 511–12). This was because families worked together in a variety of contexts, so much of the occupational training would have been conducted during this work. This was the case for occupations from the various occupational categories, ranging from foresters to potters to merchants, among many others.[240] A few simple examples of the hereditary nature of occupations include the Umma texts Kamil, *AoF* 44, 211 obv. 10: [1 x]-mu nagar dumu Ha-ba-lu$_5$-ge$_2$ nagar and *STU* 50 obv. 3: 1 Ur-^{giš}gigir muhaldim dumu Lu$_2$-dingir-^{r}ra^{1} muhaldim.

There was some occupational mobility, however, especially for male individuals. Steinkeller's (1987, 88–90) traces several supervisors of foresters and their families, demonstrating that sons whose fathers were supervisors could also become supervisors in later years after working as foresters. Overall, male individuals, especially citizens, whose fathers or

239. For an example of a female physician, see the discussion on Ubartum in Kleinerman 2011b, 179–80.

240. Several helpful treatments on the hereditary nature of occupations in the Ur III period include Borrelli 2013, 170–71; Garfinkle 2015; Michalowski 1991, 48–49; Steinkeller 1987, 78–83, 88–90; 1996, 249; Winter 1991, 67–68; 1992, 177–78, 200–18.

who themselves had occupations involving nonproductive activities and management were probably the most mobile. Borrelli (2013, 170–71), for example, identifies several families in which the fathers were all field surveyors (sag-du$_5$), while some of their sons held various other managerial roles, such as chief plot manager (nu-banda$_3$ gu$_4$), šar$_2$-ra-ab-du administrator, and temple-household manager (sanga). Two straight-forward examples include *NATN* 870 obv. 1–4: Ur-^{d}Nin-giš-zi-da \ di-ku$_5$ \ dumu An-na-hi-li-bi \ sukkal lu$_2$-kas$_4$ and the Puzriš-Dāgan text *SNAT* 50 obv. 4–rev. 1: ki Šar-ru-um-i$_3$-li$_2$ šuš$_3$ \ dumu Lu$_2$-^{d}NINA^{ki} nar-ta. This kind of mobility typically required scribal training, which was more available to families with these occupations. Besides this prerequisite training, familial connections played a role in occupational mobility. This is demonstrated by the well-known figure Šū-Kabtā, who, as a physician and son of a high-ranking individual, became a general after marrying a member of the royal family (see Steinkeller 2017a, 544).

5.1.3.3. Social Stratum

The influence of an individual's social stratum on one's occupation was also substantial. This was due to both access to various occupations contingent upon social stratum as well as the influence of different employment arrangements on one's occupation, which likewise depended on social stratum. With regard to access, male citizens were probably able to engage in any possible occupation according to their gender in Ur III society. Female citizens, so far as their occupations are documented, were probably also able to have any occupation according to their gender.

UN-il$_2$, however, were rarely involved in management.[241] In his discussion of the Umma text *ASJ* 11, 182, Daniel Snell (1989, 200) observes: "Even high officials who take in charge their squads are apparently regarded as erín, but un-íl do not seem to have high officials among them. And the governor's body-guard and his policemen are all erín." Steinkeller (2013c, 365) similarly remarks that UN-il$_2$ tended to perform menial work, particularly in agriculture, construction, and transportation. Although male UN-il$_2$ minimally held managerial occupations, they could be scribes,[242] supervisors, such as the frequently attested Šara'ayamu (see Table 3.2), and supervisors of ten individuals (ugula nam-10).[243] Though assistants (šeš-tab-ba) and soldiers (aga$_3$-us$_2$) were predominantly citizens, there were rare examples of UN-il$_2$ assistants and soldiers (see p. 225). As for occupations engaging in cultic activities, a few male and female UN-il$_2$ were temple singers.[244] Female UN-il$_2$ were overwhelmingly limited to menial occupations according to their gender, though a few geme$_2$, at least some of whom were UN-il$_2$, held managerial occupations (see Heimpel 2009b, 67–78).

The occupations of slaves depended on the context of their enslavement. If they were female slaves with their children in a temple household, for example, they would have had

241. For percentages of UN-il$_2$ among all attested occupations conscripted half-time or full-time in Umma texts, see Appendix 5.

242. There may be UN-il$_2$ scribes in Snell, *ASJ* 11, 182 obv. i 9, but the context is damaged. The scribe Lukala, the father of Šarabazige, also appears to have been an UN-il$_2$ based on his son's UN-il$_2$ designation in *CUSAS* 39 134 rev. i 8; *Santag* 6 384 rev. iii 8.

243. See the Umma text *Organisation administrative, Diss.* 1, 230 12 Talon-Vanderroost 5 obv. i 1, seal 1–2. Snell, *ASJ* 11, 182 rev. iii 13 reads: 2(AŠ$_c$) UN guruš IŠ$^?$ 0.1.0 4 ma-na-ta (translit. mine). Although IŠ$^?$ could be šuš$_3$, there do not appear to be any other UN-il$_2$ that were šuš$_3$. Moreover, it does not seem likely that an UN-il$_2$ who was a šuš$_3$ would receive a barley allotment instead of šuku land. Note that this line is not counted in Appendix 5.

244. See texts from Girsu/Lagaš (*HSS* 4 11 rev. 2, 6) and Umma (Owen and Wasilewska, *JCS* 52, 12 57 obv. iii 12' [?] [may not apply]; *Santag* 6 384 rev. vi 31' (see *Nisaba* 26 17 rev. 11); *YOS* 15 115 rev. iv 18'–19', v 7', 17'–19'). Note that [Lugal$^?$]-me-a in *UTI* 6 3515 obv. 4' is an išib according to the transliteration, which cannot be visually confirmed. This individual appears to be an UN-il$_2$ who is an ugula and ugula nam-10 in *Organisation administrative, Diss.* 1, 230 12 Talon-Vanderroost 5 obv. i 1, seal 1–2. If this is the case, then perhaps išib is actually ugula.

menial occupations like female UN-il$_2$ (see Steinkeller 2015a, 7–8). If they were slaves in private households, which included citizens in debt slavery, they could have a wider variety of occupations, including those involved in resource extraction, construction and manufacturing, as well as nonproductive activities (see Neumann 2011a, 24–25; Steinkeller 2015a, 6–7).

Besides access to occupations based on social stratum, various employment arrangements, depending on social stratum, impacted an individual's occupation on a periodic basis. It is widely attested across various proveniences that citizens with occupations from the various categories could be conscripted or hired to work on mainly cultivation, construction, and transportation. UN-il$_2$, however, could rarely, if ever, hire themselves out, though they were likewise conscripted to work on the same tasks as citizens (see, for example, pp. 201–8).[245] Slaves in private households could be used as substitutes for conscription, which would have caused periodic changes in their occupations as well (see 5.2.2.5. Substitutions). Thus, while individuals were often trained in specific occupations according to their gender, parentage, and social stratum, their changing employment arrangements would have exposed them to periodic occupational changes.

5.1.4. Occupational Organizations and Industrial Structures, including Workshops

For a variety of reasons, individuals with the same or similar occupations tended to work in proximity with one another, including in occupational organizations and in industrial structures, such as workshops. One fundamental reason for this proximity was that individuals often worked

245. For evidence from GARšana, see Heimpel 2009b, 65, 72–76, and *CUSAS* 3 884; 1523. One particularly demonstrative text from Umma is *MVN* 15 390 (see pp. 211–14). Some examples from Urusagrig include *CUSAS* 40/2 236; 595; 1538; *Nisaba* 15/2 494; 533; 547; 740; 915.

with their families. In some instances, especially for citizen craft workers and merchants, families could work together at their homes or in other workspaces they privately owned (see Steinkeller 1996, 248–49; 2004, 100–2). Another reason for this proximity was because individuals with the same or similar occupations often needed to share materials, power sources derived from animals, humans, and the environment, techniques, tools, and workspaces to accomplish their work. As such, they worked in proximity in both outdoor and indoor spaces. An interesting example is the potter's hill in Umma (see pp. 140–43), where one or more potters would have lived and certainly worked. This need to work together was manifested in occupational organizations and industrial structures, such as workshops. In terms of occupational organizations, Steinkeller (2004, 102–3) details the guild-like organizations of merchants at Nippur and Umma, including their headquarters. As for industrial structures, including workshops, there were structures for the various occupational categories, though many of these structures were workshops for craft workers and others engaged in manufacturing, such as cereal grinding.[246]

5.2. Employment Arrangements and Their Incomes

5.2.1. Employment Terminology and Notations

5.2.1.1. Defining Employment Arrangements and Their Incomes

Understanding employment is pivotal to clarifying the economic conditions of individuals belonging to the various strata of Ur III society. For this dissertation, employment is the direction of an individual to work, which includes determining what kind of work an individual should

246. Several discussions of workshops and other industrial structures include Allred 2011; Heimpel 1998; 2009b, 150–70; Kleinerman 2011a; Neumann 1993; Steinkeller; Waetzoldt 2011.

perform as well as when and how much such work the individual should performed. This direction to work is either transitively initiated by one individual and carried out by another or reflexively initiated and carried out by the same individual, in which case it is self-employment. Concerning the use of the terminology relating to "employment," von Dassow (2008, 146 n. 23) offers the following helpful reflection:

> In what follows I have chosen to use the word "employer" because it works, semantically and grammatically, better than other possible words such as "superior" (which is an adjective as well as a noun, and overly general) or "patron" (laden with connations linked to various ancient and modern cultures), rather than because I believe "employer" to be the most accurate term for persons in the position at issue. Individuals identified (with or without an occupational designation) as PN *ša* PN_2/*šarri*/*ekalli* are certainly "(in the service) of" PN_2/the kind/the palace, and therefore can be said to be "in the employ" of that person or entity, who is then logically an "employer." Of course, the use of this word and the verb "employ" are not meant to connote a socioeconomic structure like that associated with employment in the modern world.

Note that this reflection does not consider the concept of self-employment, though it draws attention to the authority that an employer has over an employee in that the employee is "'in the service'" of the employer. This authority is expressed above with the term "direction," and it is rooted in several factors relating to the social hierarchy, including especially the extent to which an individual owns or otherwise possesses immovable and movable properties utilized for work, which are the means of production. A wide array of such properties was predominantly owned or otherwise possessed by the king and governors, along with their families, as well as by various managerial temple personnel, who often belonged to these families. As such, these royal and institutional households had the authority and means to employ particularly citizens and UN-il_2 through mandatory conscription and voluntary hired work. Note that hired work could also be offered by wealthy individuals for their own benefits. Self-employment was also possible, given that many individuals, mainly citizens, owned or otherwise possessed sufficient property to direct their own work intermittently.

Whereas conscription and hired work were integral to the economy of the state, self-employment and hired work offered by wealthy individuals for their own benefits were more independent from the state. On the distinction between such kinds of economic activity, which are often articulated as public and private, Steinkeller (2004, 92–93) elaborates accordingly:

> Rather than representing a completely separate entity, the private economic activity was an extension or, more precisely, the other side of the state economy. The best analogy I can offer to illustrate the relationship between the two is the double helix of the DNA structure. If one visualizes the Ur III economy and society as an all-embracing vessel shaped as a pyramid, with the king at its apex, one could say that this entire pyramid was woven out of intermeshing threads of public (or state) and private (or independent) activity. For this reason, the term "private" is not only useless but also confusing and harmful when applied to ancient realities, particularly as far as the Ur III economy and society are concerned. In fact, I would argue that much of the controversy surrounding the Ur III organization is simply a misunderstanding, which is directly attributable to that unfortunate usage. Since the label "private" unavoidably conjures up all the modern meanings and connotations carried by this word — especially the notion of "private" as an exclusive category — to avoid imposing those concepts on alien situations it is best to abandon this label altogether — unless one understands that "private" when applied to the Ur III situation means something specifically different.

As such, individuals generally experienced an intricate blending of conscription, hired work, and self-employment, which all benefited the state and themselves to varying degrees.

The basic term used to describe the conscription of an individual is dab_5 ("conscript|seize"), which is often given in the phrase PN_1 PN_2(-e) i_3-dab_5 ("PN_2 conscripted|seized PN_1").[247] This phrase, however, is used for individuals (PN_1) who were absent, ill, deceased (see pp. 193–94, 197–200 for these conditions) or otherwise not conscripted (see just below), and there are rare instances when the one conscripting or seizing (PN_2) was himself deceased (see *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 obv. vii 6, 14, rev. vi 19, 28). As such, the phrase is formulaic rather than literal and perhaps basically

247. Contra Uchitel's (1984, 79) interpretation: "PN *ì-dab*$_5$ ('PN hired')." Note that the formula above is simplified to omit extraneous details.

states that PN_2 was in charge of PN_1 for conscription in general, even if one or the other was not physically able to conscript or be conscripted in a given text.

When an individual, regardless of social stratum, was not conscripted, he or she could be indicated as nu(-dib-ba), which Sallaberger (1999, 328) explains as "nu = Abkürzung für nu-dib-ba, 'nicht transferiert (von den letzen Liste)/konskribiert' vor dem Name." The exact meaning of this term and why dib is used rather than dab_5 are uncertain. It is also not clear why any individual may be recorded as not conscripted, though absence, illness, and death are clearly indicated otherwise, including in the same texts. Both the abbreviation nu and the term nu-dib(-ba) are attested across a variety of proveniences, though the term is used most at Girsu/Lagaš. In several instances there, this term, including its abbreviated form, is juxtaposed to gub-ba(-am_3|me), meaning "(it [the work group] is | they are) stationed."[248] Note that nu(-dib-ba) differs from nu-dab_5(-ba). The distinction between these terms is readily apparent in *MVN* 6 369, which lists individuals identified as nu-$^{\lceil}dab_5^{\rceil}$-me (rev. 16'), but only one is noted as nu (obv. 11). With regard to conscription, dab_5 is also used in the form he_2-dab_5 for prisoners engaging in penal work and in the phrases sila-a dab_5-ba and ^{giš}tukul-e dab_5-ba for individuals seized from "the street" or by force, respectively (see 5.2.2.6. Penal Work).

Conscripted individuals were remunerated with allotments, typically of barley (še-ba) or land (šuku) and garments or wool (tug_2-ba and siki-ba, respectively), among other resources, which were mostly standardized according to an individual's age and gender (see Table 5.1), though šuku-land sizes varied widely according to occupation and social stratum (see, for

248. See *CT* 3 pl. 5 BM 18343; 10 pl. 30 BM 14612; Foxvog, *ASJ* 18, 88 24; *HLC* 1 376 pl. 47; 2 56 pl. 74; *MVN* 17 54 (?); 56 (?); *PPAC* 5 1; 285 (?); *TCTI* 1 721; 728; *TÉL* 6 (?); 244; *TUT* 160; *WMAH* 175. Note that *MVN* 17 54; 56; PPAC 5 285; *TÉL* 6 are difficult to collate. However, in *MVN* 17 54, nu-x-x-ba (rev. ii 29), $geme_2$ nu-dab_5-ba (rev. iv 12'), and nu-dab_5 (rev. iv 33') could be nu-dib-ba, $geme_2$ nu-dib-ba, and nu-dib, respectively. With regard to *MVN* 17 56, nu-dab_5-me (rev. v 22) could be nu-dib-me. As for *PPAC* 5 285, nu-dab_5-ba (rev. ii 3) could be nu-dib-ba. In *TÉL* 6, $eren_2$ nu-dab_5-ba (obv. 4) could be $eren_2$ nu-dib-ba.

example, pp. 228–31). Although some scholars consider these allotments to be rations, others have refuted this conception (see pp. 78–79). It is important to note that these allotments were probably determined by the Ur III state to be the minimally acceptable amounts of remuneration to support the conscripted population, sort of like a minimum salary.

When individuals were hired, the process can be articulated as a_2 $geme_2$ | guruš-a … $geme_2$|guruš-bi # u_4 1-$še_3$ še # $sila_3$-ta ba-hun ("the work of working women|men … [output for a given task] for # working women's|men's workdays is hired at # $sila_3$ of barley each"),[249] and hired individuals can be described as ($geme_2$|guruš|lu_2|PN) hun-ga_2. There is also one occurrence each of the forms ib_2-hun-$eš_2$ and im-hun-ga_2 in the Girsu/Lagaš texts *MVN* 7 497; *BPOA* 1 125, respectively.[250] As indicated above, those who were hired were remunerated with wages, often written as a_2 (lu_2) hun-ga_2 and typically in barley amounts that exceeded the barley allotments given for conscription (see pp. 232–36, 251–52). Hired work can also be implicit based on the circumstances (see pp. 255–56). In comparison to conscription and hired work, there is no clearly identifiable terminology for self-employment and profits, which are otherwise recognizable or at least deducible based on context (see 5.2.4. Self-Employment and Profits). Distinguishing between hired work and self-employment can be difficult, since both are voluntary forms of employment and determining who is directing the work or owns the means of production for it can be inaccessible or subjective. Nevertheless, the voluntary nature of these employment arrangements is significant, even if they cannot always be distinguished.

249. This formula is attested in approximately fifty texts from GARšana and unknown proveniences. This discussion does not consider the use of hun for the appointment of priests and priestesses, as is widely attested year names.

250. There is also one instance of i_3-hun in the Umma text *Nisaba* 6 20, but the context is broken.

5.2.1.2. Work-Rate and Age-Bracket Terminology and Notations

A variety of terms and notations are used to detail the work rates and age brackets of employed individuals, especially while they were conscripted.[251] In this dissertation, notations are signs that have specific numerical values and potentially additional meanings, depending on context. Work-rate notations measure the rate at which an individual worked over a given time. Age-bracket terms and notations, which are collectively referred to as designations, indicate the age bracket of an individual (e.g., child, adult, elderly adult).

Work-rate notations are either fractions (⅓, ½, and ⅔) or whole numbers corresponding to the work rate of an individual for a time period, particularly in balanced accounts and sealed receipts. This can be seen in the Umma sealed receipt *MVN* 8 231 obv. 1–rev. 2, which documents three individuals, including one child, notated as ½: ½ A-al-ni \ ½ Lugal-he$_2$-gal$_2$ \ ½ Ur-^{d}Šara$_2$$^{!}$(MA$_2$) dumu nita$_2$ \ tir-da tuš-a \ ki Da-da-ta \ giri$_3$ Ur-sila-luh \ kišib nam-ša$_3$-tam.[252] Assuming that the two adults had larger outputs than the child, the ½ notation should refer to their work rate over a time period, meaning that for however long they were conscripted for forester work, it was on a half-time basis. As such, the most common work-rate notations used are ½ and 1, which are often utilized within the same text to differentiate half-time and full-time conscripts. It is important to emphasize here that across a variety of

251. For several helpful studies on terminology and notations relating to work rates and age brackets, see Englund 1988; Koslova 2008; Monaco 1985–1986; Sallaberger 1999, 327–28; Sigrist 1979–1980; Steinkeller 1987, 78–80; Vanderroost 2013, 1:129–48.

252. For the reading Ur-^{d}Šara$_2$$^{!}$(MA$_2$), see Steinkeller 1987, 102. Note that the sealed receipt *SACT* 2 117 obv. 1: a$_2$ ½ Ur-^{d}Suen makes the use of the MAŠ sign before PNs in sealed receipts explicitly related to their work capacity. Sealed receipts may include notations and allotments, in which cases they can be clearly distinguished, as seen in the Umma text *Princeton* 1 367 obv. 1–2, 4, 7–8, rev. 2: ½ Lugal-iti-da \ ½ A-da-ga … ½ Ur-Gu$_2$-de$_3$-na … 0.1.0 še-ba lugal \ Lu$_2$-^{d}Utu dumu Ur-^{d}Bil$_3$-ga-mes … šu 0.0.4 Ur-^{d}Bil$_3$-ga-mes. As such, the MAŠ sign in these contexts is read sometimes as 0.0.1, so based on an extensive search, the following texts are collated: *AnOr* 7 351; *BPOA* 1 810; *MVN* 14 2; 15 238; 16 985; 1309; 1318; *Princeton* 1 388 (note that others need collations in a future treatment). In some sealed receipts, there are no notations, such as in *Aleppo, Diss.*, 275 ANM 3579; Alivernini and Foster, *RSO* 83, 347 26; CDLI P342108; Peat, *JCS* 28, 224 57; 225 60; *YOS* 4 198, among others.

contexts, citizens were conscripted half-time, whereas UN-il$_2$ were conscripted full-time.[253] There are some complications, especially with regard to bala work (see pp. 210–11), but this dichotomy is often valid. Sometimes in those texts, half-time conscripts may be inferred from the formula 1 PN$_1$ u$_3$ PN$_2$, in which case the combined work rates of PN$_1$ and PN$_2$ were equivalent to that of one full-time conscript, but the context is overall more complicated.

Age-bracket designations are typically utilized in inspections and similar texts. In generally ascending order of age, they include DIŠ, dumu AŠ, AŠ, AŠ … aga$_3$-us$_2$ ("soldier"), AŠ … šeš-tab-ba ("apprentice|assistant"), ⅓$_c$, ½$_c$, ⅔$_c$, AŠ$_c$, and šu(-gi$_4$) ("elderly").[254] All the notations including a curviform wedge are used to describe the work rates of adults, such that ½$_c$ = ½, AŠ$_c$ = 1, etc., though the context of these work rates often differs from the work-rate notations used in balanced accounts and sealed receipts (see, for example, pp. 201–19). AŠ is used for both children and adults, depending on accompanying allotments or terms (see just below), and it is the only age-bracket notation used for apprentices or assistants (simply assistants hereafter), though not all soldiers were notated with AŠ.[255] In the totals sections of inspections and similar texts, individuals are usually counted with the same signs with which they are notated, though workers notated with ½$_c$ are generally counted as #(AŠ$_c$) geme$_2$|guruš

253. Substantial evidence is provided in 5.2.2.2 Umma, for example. This position differs from Maekawa (1999, 77) and Waetzoldt (1987, 138–39), who relate half-time work rates, among other fractions, to ability and possible unpaid debts, respectively.

254. Note that dumu AŠ is sometimes transliterated as TUR AŠ in the BDTNS. Concerning šeš-tab-ba, Waetzoldt (1987 121 n. 28) notes that it "denotes both 'assistant' and 'apprentice,' which clearly implies that he would later take over the office of his superior." The notations ⅓$_c$ and ⅔$_c$ are rare, occurring perhaps only in *Ontario* 2 190, whose provenience is uncertain. These notations may also be present in the Girsu/Lagaš texts *MVN* 6 535; *PPAC* 5 247; *TCTI* 2 3811, but these texts cannot be visually confirmed currently.

255. There are a few instances where šeš-tab-ba is linked with the AŠ$_c$ notation in transliterations (see the Umma texts *CUSAS* 39 130 obv. i 6 [coll.]; *CST* 880 obv. i 2' [CDLI]; *SAT* 2 77 rev. ii 12, 14, 16 [all coll.]; *YOS* 4 211 rev. ii 7 [coll.]), but these cases are rare and questionable or disprovable upon closer examination. For two other possible examples (Sigrist, *RA* 73, 115-120 obv. i 6; *YOS* 4 232 obv. i 1), see p. 341.

(a$_2$) ½$_{(c)}$.[256] In many cases, individuals were allotted monthly amounts of barley or unmeasured šuku land for the year as well as yearly amounts of garments or wool in consistent amounts corresponding to their age-bracket designations and gender, which are presented in Table 5.1.[257]

Table 5.1. Allotments of Barley or Land as well as a Garments or Wool corresponding to Age-Bracket Designations and Gender

Age-Bracket Designation	Allotments for Male Workers	Allotments for Female Workers
šu	0.0.5 tug$_2$	—
	0.0.4 tug$_2$	
	0.0.4 3	
	0.0.3[258]	0.0.3 3[259]
	—	0.0.2 2
AŠ$_c$	gan$_2$	—
	0.2.1[260]	0.2.1
	0.1.4[261]	—
	0.1.1 5 4	
	0.1.0 tug$_2$	
	0.1.0 4	0.1.0 4
	0.0.5 tug$_2$	—
	0.0.5 4	0.0.5 4
	0.0.5 3	—
	0.0.4 tug$_2$	
	0.0.4 3	0.0.4 3
	—	0.0.3 5 tug$_2$
	0.0.3 tug$_2$	0.0.3 tug$_2$
	—	0.0.3 3

256. In the Girsu/Lagaš text *STA* 10, geme$_2$ notated with ½$_c$ and AŠ$_c$ are counted in the totals sections with DIŠ. There may be other exceptions, of course.

257. The age-bracket designations are arranged according to seniority from the oldest to the youngest. AŠ … šeš-tab-ba precedes AŠ … aga$_3$-us$_2$ as it does in Snell, *ASJ* 11, 182. This table includes virtually every allotment rate, but some transliterations are not collated here, and possible exceptions may be missed here. Some possible rates are omitted, such as AŠ$_c$ 3.0.0, which may not be monthly and which appears to occur only in the Girsu/Lagaš inspection *PPAC* 5 324 for two captains (ugula geš$_2$). AŠ$_c$ 0.0.2, AŠ 0.1.0 4, AŠ 0.0.5 5 <sila$_3$>, AŠ 0.0.1 5 1 ½, and DIŠ 0.0.3 tug$_2$ are also not included because they are too difficult to confirm.

258. Several šu 0.0.3 could be šu 0.0.4 (see the Umma texts *BCT* 2 208; *Torino* 2 705, which are difficult to collate), but see *HLC* 1 74 pl. 26 obv. ii 18 (tug$_2$ 0.0.3 should be šu 0.0.3).

259. This rate is rarely attested in the Girsu/Lagaš text *HSS* 4 15 and the Umma text *L'uomo* 62, which is difficult to read well enough to be sure.

260. This rate occurs several times for male and female individuals but only in the Urusagrig text *Nisaba* 15/2 164. There are a few attestations of AŠ 0.2.1 here, but they are probably all AŠ$_c$ 0.2.1, though it is difficult to confirm them all.

261. This rate may only occur in the Umma text *LAOS* 1 2 obv. i 18.

Age-Bracket Designation	Allotments for Male Workers	Allotments for Female Workers
½c	gan$_2$	—
	0.1.1 5 4	
	0.1.0 4	
	0.0.4 tug$_2$	
	—	0.0.3 tug$_2$
		0.0.3 3
		0.0.2 5
AŠ … šeš-tab-ba	gan$_2$	—
AŠ … aga$_3$-us$_2$	gan$_2$	
AŠ	0.0.5 4[262]	—
	0.0.4 tug$_2$	
	0.0.4 3	
	0.0.3 tug$_2$	
	0.0.3 3	
	0.0.2 5	0.0.2 5 2
	0.0.2 tug$_2$	—
	0.0.2 2	0.0.2 2
dumu AŠ	0.0.2 2	0.0.2 1 ½
	0.0.1 5	—
DIŠ	0.0.2 2	—
	0.0.1 5 1 ½	0.0.1 5 1 ½
	0.0.1 5 1	0.0.1 5 1
	0.0.1 1	0.0.1 1

There are several important details that can be gleaned from the various allotment amounts and their corresponding age-bracket designations based on age and gender. In terms of age distinctions, the allotments increase with age until they decrease slightly for the elderly. There are, however, amounts that correspond to more than one age-bracket designation, so an individual's age-bracket designation may not be inferable in contexts where only allotments without this designation are given. As for gender distinctions, there were no female assistants and soldiers. While allotments for both are nearly even for the DIŠ and dumu AŠ age-bracket designations, males received more than females on average for the remaining age-bracket designations, especially because they could receive šuku land. Note also that more males across these age-bracket designations tended to receive garments instead of wool, which may be

262. This rate is rarely attested in *Torino* 2 703 rev. ii 7. There are several occurrences of AŠ 0.0.5 in *TUT* 154, but these all appear to be AŠ 0.0.5.

because more females were expected to make their own from their wool allotments. While more study is needed, it appears that some individuals received less barley while they were working as prisoners, as seen in the Umma text *Nisaba* 24 5 (see 5.2.2.6. Penal Work), which documents several adult males at the rate of AŠc 0.0.5 tug$_2$, which is a little less than what they typically received.

When various individuals of the same family are listed together, as in an inspection, they are nearly always ordered in descending age (for a possible exception, see n. 170), which is evident based on their age-bracket designations. An interesting example of this formatting is the Lugu family, whose attestations in two Umma texts are given in Table 5.2.

Table 5.2. The Lugu Family in the Umma Texts *AnOr* 7 301 and *CUSAS* 39 135

***AnOr* 7 301 ([-]/[-]/[-] [predates *CUSAS* 39 135])**		***CUSAS* 39 135 (AS 6/v*/-)**	
Line	**Transliteration**	**Line**	**Transliteration**
obv. iii' 21	½c ⌜Lu$_5$-u$_2$⌝-gu	obv. ii 35	šu Lu$_5$-gu
obv. iii' 22	AŠ Lu$_2$-du$_{10}$-ga	obv. ii 36 (coll.)	AŠc gan$_2$ Lu$_2$-du$_{10}$-ga
obv. iii' 23	DIŠ Lu$_2$-^{d}Šara$_2$	obv. ii 37	AŠ gan$_2$ Lu$_2$-^{d}Šara$_2$ šeš-tab-ba
obv. iii' 24	dumu-ni-me	obv. ii 38	dumu-ni-me

Moreover, as Table 5.2 demonstrates, over an unknown time period, Lugu's notation changes from ½c to šu, Luduga's from AŠ to AŠc, and Lu-Šara's from DIŠ to AŠ … šeš-tab-ba. Another example that demonstrates this formatting, including deceased and ill individuals, is the Ur-Bau family attested in the Umma text CDLI P429776, which is recorded in Table 5.3.

Table 5.3. The Ur-Bau Family in the Umma Text CDLI P429776

Line	**Transliteration**
obv. i 2	tu Ur-^{d}Suen šeš-tab-ba
obv. i 3	dumu Ur-^{d}Ba-u$_2$
obv. i 4	DIŠ Lu$_2$-hu-bu-ra-x
obv. i 5	uš$_2$ Ur-^{d}Ma-mi
obv. i 6	DIŠ Šeš-a-ni
obv. i 7	DIŠ Šeš-kal-la
obv. i 8	dumu-ni-me

Although Ur-Suen was ill, he would have otherwise been notated with AŠ. As for Ur-Mami, because he is placed between two of his brothers notated with DIŠ, he would have been notated with DIŠ prior to his death. Since Ur-Suen, who was probably in his mid-twenties, already had four young children, perhaps Šešani and Šeškala, whose names seem to reflect each other, were twins.

While these age-bracket designations can be generally aligned from youngest to oldest, it is also possible to estimate the actual age ranges associated with most of these age-bracket designations. The approach here utilizes multiply attested male individuals in Umma only, given the extensive prosopographical data available for that subset of the population. As such, all these individuals whose age-bracket designations remain the same among two or more texts with known year dates can establish the longest documented year spans for these designations as well as their approximate age ranges. The longest known year spans, which may be at or near their actual limits, are presented along with their approximate age ranges in Table 5.4.

Table 5.4. Approximate Age Ranges of Age-Bracket Designations for Male Individuals

Age-Bracket Designation	Longest Documented Year Span (Citations)	Approximate Age Range
DIŠ	~6 (*SNAT* 332 [AS 2/vii/-] obv. 5; CDLI P429776 [AS 8/xii/-] obv. i 11)	0–6
AŠ	~7 (*CUSAS* 39 136 [AS 4/vii/15] obv. 3–6, 9, 11, 13, 17, 19, rev. 12 [see the CDLI translit.]; *MVN* 10 102 [ŠS 2/xii/-] obv. i 1–2, 5–8, 10–11, 14, 20)	6–13
X_c	~28 (*Nisaba* 6 17 [Š 28/-/-] obv. i 6;[263] CDLI P429776 [AS 8/xii/-] obv. ii 2)	13–45|50
šu	~4 (*CUSAS* 39 132 [AS 3/v/-] rev. i 7, 9, 15; *Torino* 2 705 [AS 7/vii/-] obv. ii 17–18, 23)	45|50–50|55+

These approximate age ranges probably overlap to some extent with the same age-bracket designations for females, though the ½c notation may be used for female individuals that are a

263. While the notation $DIŠ_c$ cannot be collated, it is either ½c or $AŠ_c$.

little older than AŠc individuals, as seen generally in *HLC* 3 238 pl. 113 (note the Geme-Nadua family in Figure 4.5).[264]

Although these ranges should be generally accurate, they depend on a few factors. Individuals notated with DIŠ were certainly infants and children probably too young to work, though they received allotments to sustain them. This age range agrees well with the age range utilized by Bartash (2020, 44, 46) in his discussion on young children:

> Both texts [*CUSAS* 26 69; 35 24] mention several terms for children. They are "sons/daughters, children" (**dumu**) of these two women. Scribes used this kinship term to denote the children of 0-5/6 years old in the context of the economy of temple households. Reaching the age of five or six, boys and girls left the category of "minors," and the administration of central households began to use their labor. …
>
> The modern understanding of what a baby is can be misleading in the context of the "babies" in Sumerian administrative records. Jonathan Tenney demonstrated that breastfeeding lasted at least four years and beyond in ancient Mesopotamia (Tenney 2017: 745). Hartmut Waetzoldt suggested that the "babyhood" of the administrative records ended around 5/6 years of age (Waetzoldt 1988: 40). A modern definition of Sumerian "babies" would include "babies/infants" and "preschoolers." In effect, the "baby" boy or girl in our principal example may have been up to six years of age or so.

While the age range for DIŠ is well established, there are some challenges regarding dumu AŠ and AŠ. The UN-il$_2$ Lu-Šulgira, for example, is notated as DIŠ in AS 2 and then as AŠ in AS 3 (see the Umma texts *CUSAS* 39 132 obv. ii 17 [missing in Dahl 2020, 184, and the CDLI]; *OrSP* 47-49 324 rev. i 10), thus skipping over dumu AŠ. Overall, this age-bracket designation does not appear to have an appreciable year range, so these individuals receiving 0.0.2 2 were probably equivalent to AŠ individuals receiving 0.0.2 tug$_2$ or 0.0.2 2, especially since the latter were generally regarded as children (dumu-nita$_2$), but they could be rarely described as adults (guruš).[265] The maturity of AŠ individuals receiving larger allotments vary as well. AŠ

264. For a study on age grades and distinctions between male and female individuals, see Bartash 2018c.

265. The only known case is the Umma text *YOS* 4 211 obv. i 8, ii 25, rev. i 15, le. ed. ii 2.

individuals receiving 0.0.2 5 are rarely attested and may be considered adults,[266] and AŠ individuals receiving even larger allotments are often viewed as adults, but there are exceptions as well.[267] The age range for individuals notated with X_c probably coincides with the teenage years and may have lasted until around fifty, even if the full range cannot be proven with the extent data.

The age range of individuals designated as AŠ … aga_3-us_2 and AŠ … šeš-tab-ba requires broad approximation, and they probably overlapped with those notated with X_c. First, Urabzu (or perhaps Urabba) was an assistant in Š 47 and maybe AS 5 (see *Nisaba* 23 2 rev. iii 5; *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 rev. vi 11),[268] which is a span of about six years. Second, the assistant Ur-Suen had four young children notated with DIŠ (see Table 5.3) and the assistant Lu-Utu had four children, the oldest of whom is notated with AŠ (see *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 obv. v 4–9). As such, the ages of assistants probably varied by several years, and their ages may have ranged from their late teens to their early twenties.

5.2.1.3. Calculating Work Outputs

An individual's work output is the amount of work he or she performed in a given time period in comparison to an adult with a curviform notation over the same period. Therefore, individuals notated with $AŠ_c$ performed the standard amount of work, whereas those notated with $½_c$

266. See the Girsu/Lagaš text *SNAT* 145 obv. 1–4, but the formatting of this text is not clear.

267. See the Umma texts *OrSP* 47-49 324 rev. iii 8; 483 obv. ii 19–20; Snell *ASJ* 11, 182 obv. ii 5–6, v 5.

268. For the possible date of *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1, see n. 185.

performed half that standard amount of work over the same period. Determining the work outputs of individuals in younger age-brackets is challenging, though it often depends on the proportions of their barley or šuku land to the typical barley allotments or šuku land of the AŠc notation, which are 0.1.0 or gan2 for men and 0.0.3 for women.

This proportionality is almost perfectly demonstrated by the Girsu/Lagaš texts *HLC* 2 103 pl. 93 obv. 1, 2 (coll.), 3–5: ⌜8⌝ guruš sag-du 0.1.0 še lugal-ta \ 6 guruš a2 ⅔ 0.0.4-ta \ 5 guruš a2 ½ 0.0.3-ta \ 1 guruš a2 ⅓ 0.0.3 \ 2 geme2 0.0.3-ta and *HLC* 3 352 pl. 134 obv. 1–4: 8 guruš sag-du / 0.1.0 še lugal-ta \ 1 guruš ⅔ 0.0.4 \ 1 dumu 0.0.1 5 sila3 \ 1 dumu 0.0.1. According to these texts, virtually all individuals defined as adults have work outputs equivalent to the proportions of their barley allotments to the standard adult barley allotments. While 1 guruš a2 ⅓ 0.0.3 should be 1 guruš a2 ⅓ 0.0.2, this could be a minor error—the top horizontal wedge in 0.0.3 is barely visible and perhaps questionable. It is not certain whether these individuals worked for the same amount of time the standard adults did or whether they worked less time, but either way they were recorded as less productive.

This proportionality is also evident in the Umma text *YOS* 4 211, which is an unusual inspection-like text of anonymous workers with limited context. Perhaps it is a scribal exercise or some kind of note that was not intended to be complete, but this is speculation. While there are a few errors in the text, its calculations, which are given in Table 5.5, otherwise appear to be informative for a variety of age-bracket designations.[269]

269. The lines in the column "Worker(s)" are organized in descending order according to their corresponding line in the column "Matching Total." The lines of the latter column are also given in descending order, which may cause certain lines from the former column to appear out of order. For example, obv. i 3 follows obv. i 1, 4, 6–8, 11, because it is aligned with obv. i 14, whereas the other lines are aligned with obv. i 12–13. Note that the lines in the column "Matching Total" are indented and written in unruled spaces of the tablet setting them apart as totals. The indentations articulated in this transliteration are added here. Rev. ii 6–7 do not have matching totals in an unruled space just below.

Table 5.5. Work Outputs of Workers with
Age-Bracket Designations in the Umma Text *YOS* 4 211

Worker(s)		Matching Total		Calculation Remarks
Line	**Transliteration**	**Line**	**Transliteration**	
obv. i 1	AŠc gan2 guruš kurušda	obv. i 12	--- 1 guruš kurušda	• the AŠc worker counts as 1 guruš
obv. i 4	3(AŠc) gan2 guruš	obv. i 13	--- 8 ⅓ guruš aga3-us2	• all AŠc workers, regardless of allotments, count as 1 guruš each, totalling 8 guruš • AŠ guruš 0.0.2 2 counts as ⅓ guruš, probably because 0.0.2 is ⅓ of 0.1.0
obv. i 6 (coll.)	4(AŠc) guruš 0.1.0 še 4-ta			
obv. i 7	AŠc guruš 0.0.5 4			
obv. i 8	AŠ guruš 0.0.2 2			
obv. i 11	aga3-us2-me			
obv. i 3	3(AŠ) gan2 guruš šeš-tab-ba	obv. i 14	--- 3 guruš šeš-tab-ba	• the assistants count as 3 guruš, probably because they each received gan2[270]
obv. i 2	3(AŠc) gan2 guruš dub-sar	obv. i 15	--- 3 guruš dub-sar	—
obv. i 5	3(AŠ) gan2 guruš šeš-tab-ba	obv. i 16	--- 3 guruš šeš-tab-ba	
obv. i 9	1 dumu nita 0.0.1 5 1 ½	obv. i 17	--- 1 dumu nita 0.0.1 5 1 ½	
obv. i 10	1 dumu nita 0.0.1 1	obv. i 18	--- 1 dumu nita 0.0.1 1	
obv. i 20	AŠc gan2 guruš dub-sar	obv. i 23	--- 1 guruš dub-sar	
obv. i 21	AŠ gan2 guruš šeš-tab-ba	obv. i 24	--- 1 guruš šeš-tab-ba	
obv. i 22 (coll.)	4(AŠc) guruš 0.1.0 še 4-ta	obv. i 25	--- 4 guruš	
obv. i 27	AŠc gan2 guruš dub-sar gu4	obv. ii 8	--- 1 guruš dub-sar	
obv. i 28	AŠ gan2 guruš šeš-tab-ba	obv. ii 9	--- 1 guruš šeš-tab-ba	
obv. i 29	4(AŠc) gan2 guruš	obv. ii 10	--- 8 ½ guruš	• the AŠc and ½c workers count as 7 ½ guruš, including AŠc guruš 0.0.4 3 • 2(AŠ) guruš 0.0.3 3-ta count as 1 guruš, probably because 0.0.3 is ½ of 0.1.0
obv. ii 3	AŠc gan2 guruš ½c			
obv. ii 4 (coll.)	2(AŠc) guruš 0.1.0 še 4-ta			
obv. ii 5	AŠc guruš 0.0.4 3			
obv. ii 6	2(AŠ) guruš 0.0.3 3-ta			

270. The equivalency of an assistant's work output with an AŠc worker's is supported to some extent by the tendency for assistants to be listed between AŠc workers and ½c workers in contexts where they are generally ranked according to their work outputs, including in *YOS* 4 211 rev. ii 19–21, but note that this totals section is complexly organized (see also, for example, the Umma texts Snell, *ASJ* 11, 182 obv. iii 32–34; *CUSAS* 39 132 rev. ii 9–11, and the Urusagrig text *Nisaba* 15/2 33). Some examples to the contrary include the Umma text Sigrist, *RA* 73, 115-120 and Römer, *OMRO* 66, 50 17 rev. iii 5–8, iv 5–8, which has an unknown provenience.

Worker(s)		Matching Total		Calculation Remarks
Line	**Transliteration**	**Line**	**Transliteration**	
obv. i 30	4(AŠ) gan$_2$ guruš šeš-tab-ba	obv. ii 11	--- 4 guruš šeš-tab-ba	—
obv. ii 1	AŠ$_c$ gan$_2$ guruš ma$_2$-lah$_5$	obv. ii 12	--- 1 guruš ma$_2$-lah$_5$	
obv. ii 2	AŠ gan$_2$ guruš šeš-tab-ba	obv. ii 13	--- 1 guruš šeš-tab-ba	
obv. ii 7	1 dumu nita 0.0.1 5 1 ½	obv. ii 14	--- 1 dumu nita 0.0.1 5 1 ½	
obv. ii 16	AŠ$_c$ gan$_2$ guruš dub-sar udu	obv. ii 27	--- 1 guruš dub-sar	
obv. ii 17	AŠ gan$_2$ guruš šeš-tab-ba	obv. ii 28	--- 1 guruš šeš-tab-ba	
obv. ii 18	6(AŠ$_c$) gan$_2$ guruš	rev. i 1	--- 9 10 gin$_2$ guruš	• the AŠ$_c$ and ½$_c$ workers count as 8 ½ guruš • AŠ guruš 0.0.4 3 counts as ⅔ guruš, probably because 0.0.4 is ⅔ of 0.1.0
obv. ii 20	AŠ$_c$ gan$_2$ guruš ½$_c$			
obv. ii 23 (coll.)	2(AŠ$_c$) guruš 0.1.0 še 4-ta			
obv. ii 24	AŠ guruš 0.0.4 3			
obv. ii 19	4(AŠ) gan$_2$ guruš šeš-tab-ba	rev. i 2	--- 3 guruš šeš-tab-ba	• the discrepancy between these lines is probably a scribal error
obv. ii 22	AŠ$_c$ gan$_2$ guruš ½$_c$ ma$_2$-lah$_5$	rev. i 3	--- ½$_c$ guruš ma$_2$-lah$_5$	—
obv. ii 25	2(AŠ) guruš 0.0.2 2-ta	rev. i 4	--- 2 dumu nita 0.0.2 2	• the discrepancy between these lines is probably a scribal error and the lack of a distributive -ta is also problematic • no individuals with the age-bracket designation AŠ 0.0.2 2 are regarded as dumu nita in the final totals section (see le. ed. ii 2)
obv. ii 26	1 dumu nita 0.0.1 1	rev. i 5	--- 1 dumu nita 0.0.1 1	—
obv. ii 21	AŠ ama guruš	rev. i 6	--- AŠ ama guruš	
rev. i 8 (coll.)	AŠ$_c$ gan$_2$ guruš ugula	rev. i 17 (coll.)	--- 1 guruš ugula	
rev. i 9	AŠ gan$_2$ guruš šeš-tab-ba	rev. i 18	--- 1 guruš šeš-tab-ba	

Worker(s)		Matching Total		Calculation Remarks
Line	Transliteration	Line	Transliteration	
rev. i 10	4(AŠc) gan2 guruš	rev. i 19	--- 8 ⅚ guruš	• the AŠc and ½c workers count as 7 ½ guruš • this total appears to be a scribal error, though the scribe may have mistakenly counted AŠ guruš 0.0.2 2 (= 1 dumu nita 0.0.2 2), which counts as ⅓ guruš, and 4 dumu nita 0.0.1 5 1 ½-ta, which count as 1 guruš, probably because 0.0.1 5 is ¼ of 0.1.0, even though they were probably too young to work
rev. i 12	AŠc gan2 guruš ½c			
rev. i 13 (coll.)	2(AŠc) guruš 0.1.0 še 4-ta			
rev. i 14	AŠc guruš 0.0.5 4			
rev. i 11	2(AŠ) gan2 guruš šeš-tab-ba	rev. i 20	--- 2 guruš šeš-tab-ba	—
rev. i 15	AŠ guruš 0.0.2 2	rev. i 21	--- 1 dumu nita 0.0.2 2	• the discrepancy between these lines is probably a scribal error • see the comments regarding rev. i 19
rev. i 16	4 dumu nita 0.0.1 5 1 ½-ta	rev. i 22	--- 4 dumu nita 0.0.1 5 1 ½	• see the comments regarding rev. i 19
rev. i 24	4(AŠc) gan2 guruš	rev. ii 2	--- 10 guruš	• the AŠc and ½c workers count as 9 guruš • this discrepancy is probably either an error in the copy or produced by the scribe, but note that all the various workers add up to the final totals section
rev. i 26	4(AŠc) gan2 guruš ½c			
rev. ii 1 (coll.)	3(AŠc) guruš! {written after 4} 0.1.0 še 4-ta			

Worker(s)		Matching Total		Calculation Remarks
Line	Transliteration	Line	Transliteration	
rev. i 25	3(AŠ) gan$_2$ guruš šeš-tab-ba	rev. ii 3	--- 3 guruš šeš-tab-ba	—
rev. i 27	AŠ ama guruš	rev. ii 4	--- AŠ ama guruš	
rev. ii 10	6(AŠ$_c$) gan$_2$ guruš	rev. ii 12	--- 6 guruš	
rev. ii 11	AŠ gan$_2$ guruš šeš-tab-ba	rev. ii 13	--- 1 guruš šeš-tab-ba	

Overall, *YOS* 4 211 demonstrates that the proportionality of the allotments to 0.1.0 or gan$_2$ can be used to generally determine an individual's work output. Although an extensive search of this phenomenon is not attempted here, this exact proportionality should not be always assumed. The Girsu/Lagaš inspection *SAT* 1 409, for example, provides the following totals and the combined work outputs: šu-nigin$_2$ 2(AŠ$_c$) guruš 0.1.0 4 ma-na-ta \ 4(½$_c$) guruš a$_2$ 0.0.4 1 tug$_2$-ta \ AŠ 0.0.3 1 tug$_2$ \ a$_2$-bi 4 ⅓. Since the AŠ$_c$ and ½$_c$ workers count as 4 guruš, AŠ 0.0.3 1 tug$_2$ must count as ⅓ guruš, rather than ½ guruš, unless there is an error. The proportions are also slightly different in calculations observed by Koslova (2008, 180).

In lists and totals sections, individuals are often presented in descending work outputs, such that individuals designated as nu, si$_{12}$-a, šu, tu, uš$_2$, and zah$_3$ are often counted near the bottom.[271] The tendency to order them according to output rather than any other criterion, such as allotment amount, is particularly apparent when totals of elderly individuals receiving larger allotments than children are still often counted below them near the bottom.[272] Since the work outputs of the elderly were often valued lower, it is not certain how much these individuals

271. See several texts from Girsu/Lagaš (Gomi, *Orient* 16, 91 135; *HLC* 3 238 pl. 113; Maeda, *ASJ* 9, 331 7; *MVN* 6 334; *PPAC* 4 267; 5 1; *TCTI* 1 736; 2 2796), Puzriš-Dagān (Fish, *BJRL* 9, 241), Umma (*AAICAB* I/1 Ashm. 1911-228; 1911-229; *BPOA* 6 151; CDLI P429776; *LAOS* 1 2; *Nisaba* 24 28 [coll.]; *OrSP* 47-49 324; 382; *Santag* 6 384; Sigrist, *RA* 73, 115-120; Snell, *ASJ* 11, 182; *YOS* 4 232), Urusagrig (Owen, *Studies Milano*, 351 16), and unknown provenience (Römer, *OMRO* 66, 50 17), among others.

272. Several examples include texts from Girsu/Lagaš (*CT* 3 pl. 9 BM 18344; *CTNMC* 54; *HLC* 3 399 pl. 153; *HSS* 4 18; *MVN* 6 296; 17 54; 56; 22 17; *Mycenaean, Diss.*, 211 1 BM 28417; *PPAC* 5 286; *SAT* 1 422; 436; *STA* 4; Such-Gutiérrez, *CDLN* 2015, 3 §2.23; *TUT* 159; 162 [coll.]; *UNT* 18), Umma (*CUSAS* 39 132), and Ur (*UET* 3 1047).

worked, though there is certainly evidence that many, if not all, of them did some amount of work (see Wilcke 1998).

5.2.1.4. Miscellaneous Employment Terminology

5.2.1.4.1. Introduction

The following miscellaneous employment terms are included in this dissertation because they are pervasive, significant to one or more discussions here, or have new insights. These terms are arranged according to broad themes, such as bodily conditions, registration, capacity, as well as days off and unexcused absences. Note that an individual's bodily conditions often impacted his or her capacity or absence. There are, of course, terms that are not included.

5.2.1.4.2. Bodily Conditions: GAM.GAM, si$_{12}$-a, tu(-ra), and uš$_2$

There are perhaps six instances of the uncertain term GAM.GAM referring to humans, including three instances in which it seems to be linked with elderly individuals.[273] Perhaps GAM.GAM can be read as gurum-gurum ("bent over") to describe an individual, whether elderly or not, with significantly stooped posture. Note that gurum-gurum occurs in a few literary texts to articulate the bending over of a person or various objects (see Krecher 1966, 109, 197). Concerning this term's usage for aromatics (šim), Snell (1982, 234) writes: "Etymologically

273. Both Dahl (2020, 189 n. 409) and Koslova (2004, 53 n. 67, 63 n. 74) see this term as possibly related to šu(-gi$_4$) but regard its meaning as completely unknown. The six attestations are in the Umma texts *AnOr* 7 301 obv. iii' 12; *BCT* 2 288 rev. iii 15; *CUSAS* 39 134 rev. i 2 (?), ii 5 (?) (both include GAM[?] but are difficult to read); *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 rev. ix 9; *Santag* 6 384 obv. iii 7', rev. iii 3'. Note that while Mese is described as GAM.GAM in *BCT* 2 288; *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1, he is not in *Princeton* 1 556 obv. i 3, though he is elderly in all these texts. The lack of GAM.GAM in the last text, however, may not be significant.

gam-gam may be related to kin gurum$_4$(GAM)-ma = *hamadīru* ‘shriveled,’ *CAD* H:57b, *AHw*:315a.” While these comparisons may elucidate this term, this suggestion remains speculative.

The term si$_{12}$-a refers to blind or otherwise visually impaired individuals, some or many of whom were probably blinded by mutilation as prisoners of war. Many of them worked in cultivation, focusing on drawing and carrying water, or cereal grinding, among other occupations relating mainly to craft working or music (see Heimpel 2009a; Steinkeller 2013a). They could be citizens, UN-il$_2$, or slaves, though an extensive search to determine the proportion of each is not conducted here.[274]

When individuals are too ill or injured to work, they can be described as tu(-ra).[275] While the natures of these conditions are almost never specified, Heimpel (2009b, 59–60) identifies two texts that describe individuals with knee injuries who received care. It is not certain how much care they would have received while they did not work, but Heimpel (2009b, 118) notes that an ill UN-il$_2$ at GARšana received an oil allotment. One of the longest durations of an individual’s recorded illness or injury, if not the longest, is two years, as seen in the Umma text *Aleppo, Diss.*, 273 ANM 3734 obv. 1–2: 1 Lu$_2$-^{d}Suen nagar tu-ra \ mu 2-kam.

The term uš$_2$ refers to individuals who have died. If the term precedes a PN, then that individual likely died shortly before the text was produced. This is apparent in the case of a certain Geme-Nadua and her family, whose attestations in Girsu/Lagaš texts are given in Table 5.6.

274. si$_{12}$-a individuals who were citizens and UN-il$_2$ are apparent in the Umma text *SNAT* 332, for example. Examples of si$_{12}$-a individuals who were privately owned slaves are discussed in Heimpel 2009a, 46, though others who were former prisoners of war could also have been slaves.

275. A brief discussion on absence from work due to illness or injury is given in Heimpel 2009b, 59–60. For lexical comments, see Neumann 1993, 56 n. 245.

Table 5.6. The Geme-Nadua Family in *HLC* 3 238 pl. 113 and *TUT* 156

***HLC* 3 238 pl. 113 (Š [ ]/xii/- [predates *TUT* 156])**		***TUT* 156 ([-]/[-]/[-])**	
Line	**Transliteration**	**Line**	**Transliteration**
obv. vi 15	uš$_2$ Geme$_2$-^{d}Na-du$_3$-a	—	—
obv. vi 16	AŠ 0.0.2 2 Geme$_2$-^{d}Nin-mug	rev. ii 14	3 Geme$_2$-^{d}Nin-mug
obv. vi 17	uš$_2$ Nin-mu-da-mu	—	—
obv. vi 18	dumu-ni-me	rev. ii 15	dumu Geme$_2$-^{d}Na-du$_3$-a ba-uš$_2$

Based on this example, in comparison to the formula uš$_2$ PN, the formula PN ba-uš$_2$ probably refers to an individual whose death was less recent but still pertinent to include. Though the term ri-ri-ga is mostly used to describe dead animals, it is rarely used for multiple humans, as seen in the Umma sealed receipt *YOS* 4 204.

5.2.1.4.3. Registration: im-e taka$_4$-a

Although the meaning of this term is disputed, Maekawa (1998, 84) offers a helpful translation, which is "'those who have been left unregistered in the documents.'"[276] This term often refers to sons of female sex workers or individuals carrying out penal work, probably because they were not duly registered the same way as most of the conscripted workforce. This is similar to what Civil (1976, 190) suggests, though he argues that sons of female sex workers were seized because of the immorality or otherwise illicit nature of their mothers' work. Rather, they were probably seized because they could not be duly conscripted with their fathers.

276. For a summary of interpretations, see Heimpel 2010, 159. Heimpel (2010, 159) proposes "ní-e tag$_4$-a 'left-to-self.'" While he reads im as the reflexive pronoun ní, including for an example involving sheep, ní should be followed by -te for third-animate-singular antecedents and -bi for third-inanimate-collective antecedents. The phrases gurum$_2$-e taka$_4$-a and šuku-(r)e taka$_4$-a (see, for example, the Umma texts *BPOA* 1 472 rev. 2; 645 obv. 5) also support Maekawa's understanding of im-e taka$_4$-a.

5.2.1.4.4. Capacity: sag-du, sag dub(-ba), and sag-tag

sag-du, sag dub(-ba), and sag-tag refer to individuals, regardless of gender, who were working at full capacity in texts from a variety of provienences, though these terms are not always used for all such individuals.[277] sag-du is used limitedly in Girsu/Lagaš texts for men only. Although sag dub(-ba) and sag-tag were mainly used for female and male individuals, respectively, there are examples to the contrary for both.[278]

5.2.1.4.5. Days Off and Unexcused Absences: u_4 duh-(h)a | tuš-a, ab(-ba)-il_2, ama-il_2, and (lu_2) zah_{2-3}

There are various reasons why a regularly conscripted individual had days off from or was absent from conscription. Besides the bodily conditions discussed just above, the reasons considered here include regularly allotted days off, days off to support one's parents, and unexcused absences. Regularly allotted days off was described as u_4 duh-(h)a mainly in Umma and once in GARšana, whereas it was referred to as u_4 tuš-a mostly in Girsu/Lagaš, several

277. Concerning these terms, Heimpel (2009b, 85 and n. 50) offers the following comments:

> A full worker was called 'head-heaper' (saĝ-dub) when female and 'head-toucher' (saĝ-tag) when male.
> …
> My translation is based on the assumption that saĝ-dub and saĝ-tag are dub-sar formations. The usual explanation "head of the tablet" is unsupported. The assumed genitive was never expressed. Also, tag in the parallel word formation saĝ-tag can hardly be a substantive.

Although he states that there are no attestatestations of a genitive, there are numerous examples of sag dub-ba, many of which clearly do not require a genitive from the broader context. See texts from GARšana (*CUSAS* 3 234; 622), Umma (Allotte de la Fuÿe, *RA* 16, 19; *CUSAS* 39 126; *Nik.* 2 329; *SAT* 2 884; 3 1879; *YOS* 15 119 [Umma provenience is uncertain]), Ur (*UET* 3 1049), and an unknown provenience (*BCT* 2 296). Therefore, sag dub(-ba) probably means "head|top of the tablet," since these individuals are attested toward the top of a list of individuals according to their work output. sag-tag, however, may be a dub-sar formation for "head|top toucher," which probably refers to the same phenomenon as sag dub(-ba), but this is uncertain. Bartash (2020, 42) translates sag dub(-ba) as "'the heads on the tablet,'" which also makes sense, though the exact meaning of this term is not significant.

278. For male sag-dub(-ba), see texts from Girsu/Lagaš (*WMAH* 39), Puzriš-Dagān (*BIN* 3 425; *BPOA* 6 531; *Nik.* 2 493; *TRU* 379), Umma (*Nisaba* 6 30), Ur (Legrain, *RA* 30, 120 6; *UET* 3 1346), and an unknown provenience (*AAS* 197). Female sag-tag are rarely attested in the Girsu/Lagaš texts Scheil, *RT* 17, 28; *TUT* 310.

times in Ur and Urusagrig, as well as once in Puzriš-Dagān, though there may have been exceptions. The amount of regularly allotted days off depended on gender and social stratum. Male citizens typically received fifteen days off a month. Thus, they were usually conscripted half-time. Male UN-il$_2$ regularly received three days off a month, which is the minimum amount of days off, so they are considered to have been conscripted full-time. Female UN-il$_2$ and slaves working in royal and mainly institutional households generally received five or six days off a month, which is also considered full-time conscription here (see Englund 1991, 275–78; Koslova 2010, 155–59).

In addition to regularly allotted days off, male citizens and male UN-il$_2$ could be given days off temporarily to take care of their elderly parents, in which cases they are referred to as ab(-ba)-il$_2$ and ama-il$_2$ (see Steinkeller 2018).[279] During these days off, he (2018, 141) notes that they received some if not all their usual allotments and that they may have had to work at reduced rates. These individuals were often the youngest son of a conscripted family, though they had to be at least old enough to be notated with AŠ. In the Umma inspection *CUSAS* 39 130 obv. i 18 (coll.), Ur-Šulpae is notated with AŠ, and there appears to be a faint ab before his name. His father was recently deceased (uš$_2$ PN), however, so Ur-Šulpae likely took care of his father just before he passed away. The ab could be partially erased, though, perhaps indicating that his ab(-ba)-il$_2$ status had just ceased, and so the scribe might have been unsure about whether it should be recorded.

279. Note that Steinkeller (2018, 138) proposes the attestation of "(nu-mu-)su-il$_2$, 'a widow supporter,'" based on *Santag* 6 384 obv. iv 27': šu-nigin$_2$ 2(AŠ) SU.IL$_2$, which he notes "alternates with ama-il$_2$" in the same text, but Koslova (2004, 57 n. 69) has collated the line: "In SANTAG 6:384 Vs. IV:27' fehlerhaft als **SU.IL$_2$** gelesen; lies **ama-ga$_6$**." For UN-il$_2$ supporting their fathers, see *CUSAS* 39 131 rev. i 16; 135 obv. i 14 (?) (see n. 181 challenging dumu-gir$_{15}$ here); *Organisation administrative, Diss.*, 1, 202-210 6 Talon-Vanderroost 1 obv. vii 40 (?) (see Table 4.10).

For conscripted free individuals, the term zah$_{2-3}$ indicates unexcused absences, including flight, and lu$_2$ zah$_{2-3}$ refers to absentees, including fugitives. For slaves, especially in private households, zah$_{2-3}$ describes their flights from enslavement. The term zah$_3$ gu-la is uncertain (see the Umma text *Syracuse* 36 and the Urusagrig texts *CUSAS* 40/2 47; 308; 472), but it may describe a lengthy absence or flight, and it may be contrasted with one attestation of lu$_2$ zah tur in the Girsu/Lagaš text Szlechter, *RA* 59, 111 S 1, which is also uncertain.

There is some debate, however, about whether zah$_{2-3}$ refers exclusively to flight (see Englund 1990, 160–61; Reid 2015, 581; Snell 2001, 31, 48–54) or to various kinds of absence more generally (see Feliu and Millet Albà 2017, 113; Sallaberger 1999, 310; Sharlach 2008, 181). In response to this debate, Koslova (2013a, 318 n. 14) acknowledges that while the circumstances of such absentees are not clear, "they were fugitives in the classical sense of this word and had to be captured and returned to their working place." Though the evidence is limited, and more study is needed, it is possible that the term could refer to a variety of unexcused absences besides flight, since there could have been several unexcused reasons why an individual did not work in addition to the excused reasons described just above, such as illness or parental care. It is certainly possible that zah$_{2-3}$ does not have a single meaning, just as is the case for arad$_2$ and geme$_2$. One indication that zah$_{2-3}$ may not always mean flight is the term dam eren$_2$ zah$_3$, which refers to citizen women who were conscripted on behalf of their absent husbands or other relatives (see pp. 248–50). It seems unnecessary to assume that every one of these absent husbands or relatives fled, leaving their wives and possibly children or other relatives behind to work on their behalves. In his discussion on flight in Middle Babylonian Nippur, Jonathan Tenney (2011, 109) argues that male household heads were extremely unlikely to flee:

> This evidence, bolstered by the information provided in Appendix 1, suggests that the conjugal family or lack thereof played a significant role in a worker's decision to flee. Over 99% of runaway males are not listed as having a spouse or offspring and so were presumably single adults or children. There is only a single clear instance of a male head of household or father of a conjugal family unit (in this case, he is both) who runs away leaving his family behind and even he eventually returns. As many as eight, but no more than fifteen, escaped males come from work groups who also list an escaped female as a member; and it is possible, although not stated in the text, that these escaped males and females formed a romantic pair. In total, the data suggest that somewhere between 8 and 11 of the 156 male escapees had a female partner and that, in all but one case, the pair escaped together.

While his data differ significantly in terms of context and quality from the Ur III data, his observations may nevertheless support the notion that males were not likely to flee and leave behind their wives and children.

The locations to which individuals might have fled is another factor to consider. There is some third-millennium evidence that individuals could flee to villages (see, for example, Richardson 2012, 31 and n. 82), but they would have probably been noticed within the smaller populations. The Puzriš-Dagān text *TCL* 2 5481 documents two unsuccessful flights of a female slave from one house to another within the same city. There is also an example of a slave who fled to Anšan (see the Umma text Molina, *Studies Sigrist*, 131 4), but he was found even there. All these examples deal with individuals who were found, of course, so it is challenging to prove which strategies would have been the most successful for those fleeing. Perhaps flight to distant cities may have been the most successful though probably also the most challenging.

As these examples and several more demonstrate, individuals who fled or were otherwise absent could be pursued and punished with imprisonment or possibly mutilation. In some instances, the duration of the absence is documented (see Heimpel 2009b, 60–63; Molina 2008a; Molina and Such-Gutiérrez 2004). One example of an individual who was absent or fled,

imprisoned, and then returned to work as usual is Nannakiag, son of HeDU.DU, who was probably an UN-il$_2$ and whose attestations are given in Table 5.7.[280]

Table 5.7. Nannakiag, Son of HeDU.DU, in the Umma Texts
AnOr 7 268; *Nisaba* 24 5; *StOr* 9/1 31 pl. 12; and *Torino* 2 704

***StOr* 9/1 31 pl. 12 (AS 1/-/- [may postdate *AnOr* 7 268])**		***AnOr* 7 268 (AS 1/vii*/- [may predate *StOr* 9/1 31 pl.12])**	
Line	**Transliteration**	**Line**	**Transliteration**
rev. 19	AŠc zah$_3$ ^{d}Nanna-ki-ag$_2$ dumu He$_2$-DU.DU	obv. 1 (coll.)	1 ^{d}Nanna-ki-[ag$_2$]
…		obv. 2	dumu He$_2$-DU.DU
rev. 21	gurum$_2$ ak e$_2$-GIR$_3$-ka	obv. 3	iti min$_3$-eš$_3$-ta
		obv. 4	Ur-ama-na i$_3$-dab$_5$
***Nisaba* 24 5 (AS 2/ix/20)**		***Torino* 2 704 (AS 7/vii/-)**	
Line	**Transliteration**	**Line**	**Transliteration**
obv. ii 10	AŠc 0.1.0 1 ^{tug2}bar ^{d}Nanna-ki-ag$_2$ dumu He$_2$-DU.DU	obv. ii 5	AŠc 0.1.1 5 4 ^{d}Nanna-ki-ag$_2$ dumu He$_2$-DU.DU
…		…	
rev. ii 1	he$_2$$^{!}$(HE)-dab$_5$-me	rev. ii 2'	zi$_3$-ba siki-ba
rev. ii 2	ša$_3$ en-nu-ga$_2$	rev. ii 3'	giri$_3$-se$_3$-ga e$_2$-^{r}gal^{1}

These texts demonstrate that shortly after Nannakiag was designated as an absentee or fugitive, he was performing penal work as a prisoner (see 5.2.2.6. Penal Work). About five years later, he appeared to be conscripted as usual with a higher allotment rate that was probably due to his age progression. Unfortunately, it is not possible to determine how long he would have been a prisoner engaged in penal work, but the duration was probably no more than five years and likely far briefer.

It is difficult to determine the percentage of the workforce that fled or was otherwise absent at any given point, though the Umma text Snell, *ASJ* 11, 182, which is fairly demonstrative of the conscripted male workforce of Umma (see pp. 217–19), may be instructive. Based on Snell's (1989, 200) calculation, about 2 percent of the workforce was designated as

280. Nannakiag was likely an UN-il$_2$ because he is notated as full-time in the sealed receipt *AnOr* 7 268 and because *Torino* 2 704 list mostly undesignated UN-il$_2$ and a few designated citizens (see pp. 105–6). Note that these texts are arranged roughly in chronological order from left to right, top to bottom. The sequencing of the first two texts is difficult, because it is unclear whether Nannakiag was missing before or after he was documented in *AnOr* 7 268.

zah$_3$, but the percentage was probably lower due to damage. This does not take into account female UN-il$_2$ or any slaves though. Overall, zah$_{2-3}$ and its related terms require further investigation and should be considered more on a case-by-case basis.

5.2.2. Conscription and Allotments

5.2.2.1. Introduction

Conscription, which was compensated with allotments, was the most substantial employment arrangement in terms of documentation and volume. The regularly conscripted workforce was dependent mainly on gender and social stratum. In terms of citizens, only male individuals were regularly conscripted, and they were typically conscripted part-time. As for UN-il$_2$, both male and female individuals were conscripted full-time, though females typically received a few more days off per month. The conscription of slaves is difficult to assess, however. Female slaves and their children in royal and institutional households were conscripted and given allotments at the same rates as female UN-il$_2$, but the forced work and sustenance of privately owned slaves is virtually undocumented. There are a few examples of privately owned slaves working as substitutes for their owners in conscription (see 5.2.2.5. Substitutions), but most of their work is otherwise not well known. Besides being subjected to forced work, privately owned slaves were used as collateral for their owners (see Richardson 2019).

Conscripts were often engaged in various industries focused on resource extraction and manufacturing, in infrastructure projects requiring construction, whether on a provincial scale or more state-wide scale, and in military service (see Koslova 2008, 175; Steinkeller 2013c, 347–53). It is thoroughly evident that families were conscripted together, some of whom acted as

supervisors for their family members.[281] While this dissertation does not exhaustively cover the documentation of conscription, the province of Umma, including GARšana, is thoroughly discussed as a model for conscription in southern Babylonia. The provinces of Girsu/Lagaš and Urusagrig are also addressed in the order of the quantity and quality of their data.[282] Note that unless otherwise stated, all texts referenced in these subsections are from their respective provinces. Following this survey of provinces, discussions on substitutions and penal work are offered.

5.2.2.2. Umma (including GARšana)

This lengthy discussion on Umma focuses on conscription rates and allotments before a brief treatment of GARšana. The discussion on conscription rates and allotments also draws attention to inequalities across various occupations and their categories. It is important to note that determining conscription rates can be challenging, and data from especially balanced accounts, sealed receipts, and work rosters must be compared with those from inspections.

Balanced accounts, sealed receipts, and work rosters document the overall conscription rates of various individuals, especially male citizens and UN-il$_2$. Thus, in these genres, male

281. This phenomenon is treated in Steinkeller 1987. For a recent discussion, see Borrelli 2020, 15–17.

282. There is some appreciable evidence from Nippur, but much of it is fragmentary (see Zettler 1992, 149–176). While a lengthier discussion on this material is needed, only some brief comments are provided here. D. Patterson (2018, 287) observes that "the **eren$_2$** of Nippur, making up the city's primary body of citizens, were traditionally subject to corvée labor and military service." Besides eren$_2$, there were UN-il$_2$, of course (see *BBVO* 11, 266 5N-T464; 271 6N-T190+; *BE* 3/1 83; 107; 170; *NATN* 228; *NRVN* 1 300; *TMH NF* 1-2 237; 238; 239; 242). Note that there is also one questionable attestation of dumu-gir$_{15}$ in *NATN* 905 as well as one attestation each of dumu uru and dumu Nibru^{ki} in *BBVO* 11, 283 6N-T432 and *TMH NF* 1-2 351, respectively. Virtually all conscripted adults were notated with AŠ$_c$ (see, for example, *BBVO* 11, 261 4N-T213; 283 6N-T432; 286 6N-T455; 288 6N-T482; *BE* 3/1 107; 108+109; 110; 170; *NATN* 104; *Nisaba* 32 212), but there is one known use of the notation ½$_c$ (*NATN* 92 obv. ii 7'). The allotment of šuku land is attested to some extent (see Zettler 1992, 130–32). The thoroughly documented use of hired work suggests that certain individuals, many of whom were presumably citizens, were conscripted part-time so that they could be available to hire themselves out (see 5.2.3. Hired Work and Wages).

citizens are often notated as ½ PN for half-time conscription and male UN-il$_2$ are generally notated as 1 PN for full-time conscription.[283] However, because male citizens may have been conscripted half-time for only certain months and full-time for others, whereas male UN-il$_2$ typically had three days (1/10-rate) off per month, either for certain months or the whole year, male citizens and UN-il$_2$ were not always conscripted for exactly half of or exactly all of the administrative year, respectively. The variability of when male citizens were conscripted half-time and when male UN-il$_2$ had days off depends on the kind of work they performed, which is evident in balanced accounts. Concerning the half-time versus full-time tendencies for male citizens and male UN-il$_2$ as well as this variability, Koslova (2008, 173) outlines the following patterns:

> Aus den Abrechnungen kennen wir die Option dumu-gi$_7$ mit *halber* oder mit *voller* Leistung, die damit zusammenhängt, ob ein dumu-gi$_7$ bei den Frondiensten eingesetzt oder an eine Pflüger-Einheit gebunden war. lch möchte hier die Vermutung äußern, daß auch in den Musterungslisten die Option eren$_2$-Arbeiter der A-Klasse mit *halber* oder mit *voller* Leistung davon abhängt, ob ein Arbeiter Frondienst leistete (halbe Zeit) oder bei einer Institution richtig angestellt war (volle Zeit). Die Tatsache, daß die Halbzeitarbeiter im Gegensatz zu den Vollzeitarbeitern keine Hilfskräfte zur Verfügung hatten, mag auch für diese Vermutung sprechen.
>
> …
>
> Im Frondienstbereich unterscheiden sich die Arbeiter des dumu-gi$_7$-Status von den des uĝ$_3$-ga$_6$-Status dadurch, daß die ersten grundsätzlich nur für die Hälfte des Jahres zum Frondienst verpflichtet waren. Außerhalb des Frondienstbereiches konnten die Personen des dumu-gi$_7$-Status auch als Vollzeitarbeiter angestellt werden, z.B. im Rahmen der landwirtschaftlichen Organisation oder in der handwerklichen Betrieben.[284]

Koslova's observations about the conscription rates of male citizens for bala work and cultivation are valid, but their conscription rates for craft working is more complicated. An

283. Note that *MVN* 1 106; *Nisaba* 24 30, which are balanced accounts of foresters, notated all individuals as 1 PN, but they do not include any workday calculations for the work of the groups as a whole, so these notations may not have the same meaning as they do in balanced accounts that do have these kinds of calculations.

284. See also Koslova 2006, 44; 2013a, 316; 2013c, 157.

overview of all balanced accounts that are intact enough and that include documented days off for either both male citizens and UN-il$_2$ or just one of the two is presented in Table 5.8.[285]

285. All the balanced accounts in Table 5.8 or the following discussion are well analyzed in Koslova 2008, except *BPOA* 6 1183; Civil, *Studies Sigrist* 36; *CUSAS* 39 155; 156; *L'uomo* 49; Pomponio, *AION* 64, 41. Note that BDTNS 196886 is omitted because the obverse is unavailable, whereas *AAS* 13; *MVN* 10 102; *Torino* 2 697 are omitted because they are too fragmentary. *MVN* 10 102 is nearly intact enough to utilize, but it is difficult to exactly calculate the total duration of the conscription period and the days off, but this may be resolved with further study.

Table 5.8. Durations and Rates of Days Off
for Male Citizens and UN-il$_2$ in Umma Balanced Accounts

Balanced Account	Total Duration (Period)	Main Kind of Work	⅒-Rate Days Off for UN-il$_2$		½-Rate Days Off for Citizen	
			Duration (Period)	Percent of Total Duration	Duration (Period)	Percent of Total Duration
AAICAB I/1 Ashm. 1924-665	13 months (i–xiii)	bala work	13 months (i–xiii)	100%	13 months (i–xiii)	100%
BIN 5 272	12 months (i–xii)	cultivation	3 months (x–xii)	25%	3 months (x–xii)	25%
BPOA 6 1183	40 days (—)	reed cutting	40 days (—)	100%	40 days (—)[286]	100%
Civil, *Studies Sigrist* 36	13 months (i–xiii)	cultivation	4 months (x–xiii)	~30.77%	4 months (x–xiii)	~30.77%
CUSAS 39 155 (coll.)	12 months (i–xii)	cultivation	4 months (ix–xii)	~33.33%	4 months (ix–xii)	~33.33%
CUSAS 39 156 (coll.)	12 months (i–xii)	cultivation	4 months (ix–xii)	~33.33%	4 months (ix–xii)	~33.33%
Englund, *CDLJ* 2003: 1 1 Erlenmeyer 152	12 months (i–xii)	bala work	12 months (i–xii)	100%	12 months (i–xii)	100%
L'uomo 49	12|13 months (i–xii|xiii) (?)[287]	fishing	—	—	12|13 months (i–xii xii|xiii) (?)	100%
MVN 21 199	13 months (i–xiii)	bala work	13 months (i–xiii)	100%	13 months (i–xiii)	100%
NATN 25[288]	X months	textile production (?)	—	—	X months	100%
Pomponio, *AION* 64, 41	X months	fishing	—	—	X months	100%
Snell, *ASJ* 9, 242 19	13 months (i–xiii)	cultivation	3 months, 20 days[289]	~28.21%	4 months (x–xiii)	~30.77%
TCL 5 5674	8 months (v–xii)	bala work	8 months (v–xii)	100%	8 months (v–xii)	100%
TCL 5 5675	13 months (i–xiii)	cultivation	4 months (x–xiii)	~30.77%	4 months (x–xiii)	~30.77%
TCL 5 5676	12 months (i–xii)	cultivation	4 months (ix–xii)[290]	~33.33%	4 months (ix–xiii)	~33.33%
TCL 5 6036	13 months (i–xiii)	basketry and carpentry	13 months (1–xiii)	100%	13 months (1–xiii)	100%

286. The half-time rate off is inferred. Obv. 1 reads: 10 ½ guruš dumu-gir$_{15}$, which is understood as twenty-one citizens conscripted half-time.

287. Obv. 3–6 reads: 14 guruš a$_2$ ½ \ iti 12-še$_3$ \ a$_2$-bi 3930+-bi \ iti še-KIN-ku$_5$-ta iti diri-še$_3$. These guruš are inferred to be citizens since they were all conscripted half-time for the entire year, and because fishermen were typically citizens (see Appendix 5). This reasoning also applies to Pomponio, *AION* 64, 41. There appears to be a discrepancy in the total duration of the conscription period, which was either twelve or thirteen months. The total workdays for this period is potentially damaged and difficult to reconcile with the amount of workers and the uncertain total duration of the conscription period.

288. This text is quite fragmentary, but it is clear that citizens (see obv. iii 17' [coll.]) were conscripted half-time for the entire work period. There do not appear to be any UN-il$_2$, but there could be some in the lost sections. Concerning the main kind of work, Koslova (2008, 186) suggests "*Weberei(?)*." Pomponio, *AION* 64, 41 is also fragmentary, but some of its details are clearer.

289. For this calculation, see Koslova 2008, 183.

290. There is a scribal error concerning the months for the days off, which is noted in Koslova 2008, 185.

Note that *AnOr* 1 85 is not included because it is unusual. It documents two years, totaling twenty-five months, in which reed harvesting and canal work were performed during the first year. For this entire period, citizens were conscripted half-time, whereas the rate of the UN-il$_2$ is unique. For the first year, they had 274 days off per 1755 days of work, which is a rate of about 0.16 or essentially ⅙. Their days off for the second year are not recorded, but the details of the second year are mostly omitted (see Koslova 2008, 180). They would have presumably had days off at the same rate as their first year or perhaps at the usual ⅒-rate.

As Table 5.8 demonstrates, male citizens and UN-il$_2$ were given days off according to their usual rates throughout the conscription period, which was usually a twelve- or thirteen-month year, for every kind of work except cultivation. When they were conscripted for cultivation, they had documented days off for around 25 to 33.33 percent of the year. Whereas the days off for UN-il$_2$ are always specified in these balanced accounts, the days off for citizens are only documented when they had days off for only part of the year. Otherwise, they had assumed days off throughout the year. Besides documented days off, individuals in these various balanced accounts may have had intermittent days off otherwise for festivals or inclement weather, as is documented at GARšana (see pp. 231–32). Based on the example of Abbamu, son of Šešani (see pp. 214–16), at least some of the individuals conscripted for cultivation in one year were conscripted for bala work in another year so that they could have more days off throughout the year.

Of all the balanced accounts in Table 5.8, *BPOA* 6 1183 accounts for the briefest conscription period by far, as seen in obv. 1–4: 10 ½ guruš dumu-gir$_{15}$ \ 6 guruš UN-il$_2$ \ u$_4$ 40 la$_2$ 1-še$_3$ \ a$_2$-bi u$_4$ 643 ½-kam. While the citizens are not named, there were probably twenty-one such citizens, all of whom worked for twenty of the forty days of

conscription. This can be determined from the mention of days off for the UN-il$_2$ only (obv. 11–rev. 3), meaning that the days off for the dumu-gir$_{15}$ are simply half of the total work period. This text also demonstrates that the number of citizens may not reflect the actual number of individual citizens.[291] As such, it is not certain whether citizens were conscripted full-time or half-time in certain contexts. See, for example, Koslova's (2008, 158–59) position on dumu-gir$_{15}$ conscripted full-time in a particular context:

> In allen ugula-Abrechnungen werden dumu-gi$_7$, anders als uĝ$_3$-ga$_6$, mit halber Leistung verbucht, was durch das Zeichen MAŠ markiert ist und aus allen Berechnungen sowohl im Soll als auch im Haben deutlich hervorgeht. Das einzige Gegenbeispiel wäre der Eintrag im Text 1 Rs. V:3-6: "10 uĝ$_3$-ga$_6$-Arbeiter, 6 dumu-gi$_7$-Arbeiter – Arbeitsleistung der im bala-Dienst stehenden Hilfskräfte (šeš-tab-ba) ist daraus abgebucht – für 35 Tage: im bala-Dienst gestanden, zum bala-Dienst gegangen und aus dem bala-Dienst zurückgekehrt; die Arbeitsleistung davon beträgt 560 Tage;" d.h. 10x35 = 350, 6x35 = 210, 350+210 = 560, hier wird also mit voller Leistung von dumu-gi$_7$ gerechnet. Grundsätzlich verfügte aber ein ugula nur über die Hälfte der Arbeitszeit von den ihm unterstellten dumu-gi$_7$-Arbeitern.

While it is possible that six citizens were conscripted full-time for thirty-five days, it is perhaps more likely that twelve citizens were conscripted half-time, especially since there were presumably thirteen citizens conscripted for the entire period (see Koslova 2008, 176). The likelihood that these citizens were conscripted half-time is also bolstered by the similarly structured *BIN* 5 222 obv. 1–5: 31 ½ guruš dumu-gir$_{15}$ \ u$_4$ 50-še$_3$ \ a$_2$-bi 1575 \ a$_2$ eren$_2$-e bala-a \ šeš-tab-ba gub-ba, which probably recorded the half-time conscription of sixty-three citizens, and *UTI* 3 1860 obv. 1–4: 8 guruš a$_2$ ½ \ u$_4$ 33-še$_3$ \ a$_2$-bi u$_4$ 132 \ bala-a gub-ba bala-še$_3$ gen-na u$_3$ bala-ta gur-ra, which could have documented the half-time conscription of eight citizens.

It is important to note that there are a few balanced accounts for potters (*MVN* 21 203; Waetzoldt, *WO* 6, 25 1; 34 2) not included in Table 5.8, which are difficult to understand due to

291. See also *Farmer's Instructions* 5.4 obv. 1–2: 8 ½ guruš ša$_3$-sahar-ra \ 4 {erasure} UN-il$_2$, which may likewise document undesignated citizens conscripted half-time versus full-time UN-il$_2$.

damage and unusual formatting. *MVN* 21 203 lists twenty-four individuals, of whom nineteen are notated with 1, one is notated with ⅔, three are notated with ½, and one was deceased. Only one of these individuals is designated as a citizen in obv. i 16, so the rest were probably UN-il$_2$ (see pp. 105–6), including those with fractional notations corresponding to their work who were presumably younger.[292] This would not be surprising, since many potters at Umma were UN-il$_2$ (see Appendix 5). None of these individuals had documented days off, however, for the entire eleven-month conscription period. Perhaps they had days off according to their usual rates during the last month of the year, but the lack of documented days off is still highly unusual. Though the other two balanced accounts are more fragmentary, they appear to also lack documented days off for the entire year each. In his discussion on these texts, Dahl (2010) offers helpful restorations and prosopographical connections, but his lack of distinction between citizens and UN-il$_2$ is problematic. Based on his prosopographical connections, he (2010, 285–86) notes that many of these workers, not including the one citizen, were given annual barley allotments that were slightly larger than the usual amounts. Perhaps these larger amounts can be considered a kind of over-time compensation. While he sees this evidence as an affirmation of Struve's position on the slavelike nature of Ur III society to some extent (see pp. 74–76), he (2010, 290–91) notes that these specific potters may not have been representative of all potters and certainly not all craft workers. Although he compares the structure of these balanced accounts of potters to *TCL* 5 6036, a balanced account of basket makers and carpenters (see Table 5.8), he does not discuss the documented days off in the latter account for citizens and UN-il$_2$ according to their usual

292. Young UN-il$_2$ could perhaps be notated with fractions corresponding to their work outputs in balanced accounts. See, for example, the use AŠ for a few young UN-il$_2$ in *AAICAB* I/1 Ashm. 1924-665, whereas the other conscripted individuals, including citizens and UN-il$_2$, were notated with ½ and 1, respectively. Virtually all these undesignated potters are attested in *Nisaba* 24 28, which also lacks social-stratum designations. However, several individuals in this text are known to be UN-il$_2$ elsewhere. Some examples include the sailors (ma$_2$-lah$_5$) Peš (?), Anbaba, Ur-E'e, Šaramutum, Anebabdu, Uramana, Ur-Saman, Urgigir, and Ur-Halmuša (obv. vi 28'–29', 32'–36', 38'–39'), who were all explicit UN-il$_2$ in Sigrist, *RA* 73, 115-120 rev. i 27–28, 33–35, ii 5–6, 8–9.

rates for the entire year. As such, given the time-off patterns in accounts of craft working, in addition to the other accounts, in Table 5.8, these three balanced accounts of potters, who were almost all probably UN-il$_2$, are more likely exceptional.

There are also several balanced accounts of geme$_2$, which include mainly female UN-il$_2$ and slaves, though limited amounts of female citizens could be rarely included. Whereas the kind of work performed played a significant role in the days-off patterns for male citizens and UN-il$_2$, geme$_2$ generally received five days (⅙-rate) or six days (⅕-rate) days off per month regardless of their work for their entire conscription periods, which were usually whole years. In instances where geme$_2$ were conscripted half-time rate (a$_2$ ½), meaning either that they were female citizens or that they were older or younger than the geme$_2$ receiving 0.0.3, they were also given extra days off amounting to a ⅗-rate. While several balanced accounts are too damaged or have seemingly irreconcilable numbers, all fairly reconcilable balanced accounts are given in Table 5.9 with the durations and rates of their days off.[293]

293. Balanced accounts that are omitted due to various issues that are not reconciled here include *AAS* 135; *AnOr* 1 250; Boson, *Aegyptus*, 21 159; *Frühe Schrift*, Abb. 10i, Kat. 10.14; Abb. 13k, Kat. 13.13; *MVN* 21 204; *SET* 274; *STA* 2; 5. These texts would certainly benefit from further study.

Table 5.9. Durations and Rates of Days Off for geme$_2$ in Umma Balanced Accounts

Balanced Account	Total Duration (Period)	Days Off for geme$_2$					
		⅙-Rate Days Off		⅕-Rate Days Off		⅗-Rate Days Off	
		Duration (Period)	Percent of Total Duration	Duration (Period)	Percent of Total Duration	Duration (Period)	Percent of Total Duration
MVN 21 200	13 months (i–xiii)	13 months (i–xiii)	100%	—	—	—	—
MVN 21 201 (coll.)	12 months (i–xii)	—	—	12 months (i–xii)	100%	12 months (i–xii)	100%
Nisaba 11 29	10 months, 14 days (Š 48/iii/23 –AS 1/ii/7)	10 months, 14 days (Š 48/iii/23 –AS 1/ii/7)	100%	—	—	—	—
TCL 5 5668	8 months, 20 days (iv–xii/20)	8 months, 20 days (iv–xii/20)	100%	—	—	—	—
TCL 5 5669	12 months (i–xii)	12 months (i–xii)	100%	—	—	—	—
TCL 5 5670	10 months, 14 days (Š 48/iii/23 –AS 1/ii/7)	10 months, 14 days (Š 48/iii/23 –AS 1/ii/7)	100%	—	—	—	—

Based on these balanced accounts the ⅙-rate is the most common, but more clear data would help. The presence of geme$_2$ with the ⅗-rate in *MVN* 21 201 is particularly interesting, and their rate is demonstrated in Table 5.10.

Table 5.10. Calculations of Days Off in the Umma Text *MVN* 21 201

Line	Transliteration	Calculation
obv. i 3	126 15 gin$_2$ geme$_2$ 0.0.3	• 126.25(geme$_2$ 0.0.3) × 30(days/month) × 12(months) + 2(geme$_2$ a$_2$ ½) × 30(days/month) × 12(months) = 45810(workdays)
obv. i 4 (coll.)	2 geme$_2$ a$_2$ ½	
obv. i 5	iti-12-še$_3$	
obv. i 6	a$_2$-bi u$_4$ 45810-kam	
…		
obv. ii 14	[91]62([72]00+1800+120+42) geme$_2$ u$_4$ 1-še$_3$	• 126.25(geme$_2$ 0.0.3) × 6(days off / month) × 12(months) + 2(geme$_2$ a$_2$ ½) × 3(days off / month) × 12(months) = 9162(days off)
obv. ii 15	[a$_2$] u$_4$ duh-a	

Whereas the full-time geme$_2$ were given six days (⅕-rate) off per month, the half-time geme$_2$ were given three days off per month. Combining these three days off with the fifteen days per month that they were not conscripted, thus resulted in eighteen days (⅗-rate) off per month. Since geme$_2$ were given documented days off during their entire conscription periods,

regardless of their strata or the work they performed, it is unclear why male citizens and UN-il$_2$ were not given documented days off the entire year depending on their work. The only clear factor is the demanding priority and schedule of cultivation work.

In terms of sealed receipts and work rosters, both offer broad overviews with few details about conscription periods. In sealed receipts, social strata may not be designated, but individuals notated with ½ were overwhelmingly citizens, whereas those notated as 1 were mostly UN-il$_2$. As for work rosters, Koslova (2008, 155 and n. 25) draws attention to the half-time dumu-gir$_{15}$ versus full-time UN-il$_2$ in the work rosters Englund, *ASJ* 14, 101 3 and Gomi, *Orient* 16, 65 79, though *BPOA* 2 2557 is also structured in a similar way. Note that *CUSAS* 40/2 736 lists the same individuals as *BPOA* 2 2557 (see Sigrist and Ozaki 2019, 2:155) but does not appear to notate dumu-gir$_{15}$ differently than UN-il$_2$. Moreover, the dumu-gir$_{15}$ in *BPOA* 2 2557 rev. 11 and CUSAS 40/2 736 rev. 12 are counted as individuals, whereas the dumu-gir$_{15}$ in Englund, *ASJ* 14, 101 3 obv. 10, rev. 7, 10 are counted according to their half-time conscription (two half-time dumu-gir$_{15}$ are counted as one guruš), though none of these discrepancies challenge the general distinctions between half-time dumu-gir$_{15}$ versus full-time UN-il$_2$.

The notations used for individuals performing or owing bala work are more complicated. There are a couple of texts that name eren$_2$ performing or owing bala work for unspecified periods or durations, who are all summarized as ⌜eren$_2$ bala-še$_3$⌝ e$_3$-e$_3$ (*AnOr* 1 88 rev. vii 27' [translit. mine]),[294] eren$_2$ bala-še$_3$ e$_3$-a-me (*MVN* 4 25 rev. 12), la$_2$-i$_3$ eren$_2$ bala-a-ka (*Nisaba* 23 4 rev. ii 29), eren$_2$ bala-še$_3$ gub (*Nisaba* 23 53 rev. ii 2), and eren$_2$ bala-še$_3$ e$_3$-

294. This transliteration is similar to Neumann 1993, 115 n. 638; Steinkeller 2017a, 542.

e_3 (*TCL* 5 6038 rev. v 1).[295] However, as demonstrated in n. 82, at least some of these individuals are designated as UN-il_2 elsewhere. The notations, which include mostly ½, 1, 1 ½, and 2, do not distinguish half-time from full-time conscripts or citizens from UN-il_2. Rather, they probably indicate the amount of bala work comparable to 1 guruš that they must perform during the unspecified conscription period. It is not clear why some individuals were notated with 1 ½ or 2, though several of these individuals in *TCL* 5 6038, for example, engaged in management. In that text, one of the two supervisors is notated with 1 ½ or perhaps 2 (rev. ii 41 is unclear in the image), and all the na-gada's are notated with 2 (rev. i 8–9 [both CDLI], 10–11, 19). Though the other individuals notated with 2 also had pastoral occupations, many of those with pastoral occupations were not notated with 2, so the fact that all the na-gada were notated with 2 appears to be linked to their managerial work. In *AnOr* 1 88, it is difficult to detect a similar pattern, though several gardeners (nu-^{giš}kiri$_6$) are notated with 2 (rev. vi 2–3, 5, 18, 37–39, 46, 49, 54–55), so this notation appears to be at least linked to certain kinds of occupations. Overall, the reasons for these notations in texts concerning bala work remain uncertain.[296]

The complications of performing bala work are also apparent in *MVN* 15 390. This text is an enormous record of the bala work owed by the province of Umma for the construction of a royal palace and other structures at Tummal.[297] The majority of the text enumerates the amounts

295. For similar texts concerning named individuals owing bala work from Umma, see *AnOr* 7 236; 247; *BPOA* 1 606; CDLI P370981; P405496; Deimel, *OrSP* 26, 63 IB 183; *MVN* 14 298; 18 525; 21 209 (?); *Nisaba* 23 68; 122; 141; 31/2 58; *PPAC* 4 171; *SNAT* 377.

296. There are also unusual distinctions between ½ PN and 1 PN in a few inspections, some of which deal with the mar-sa structure and at least one of which concerns bala work (see, for example, *Nisaba* 23 7; 86).

297. For discussions on these construction projects at Tummal, see Steinkeller 2013, 362–72; Steinkeller 2015, 156–81.

of workdays performed and owed by various individuals, which Steinkeller (2013c, 366) summarizes as follows:

> Very importantly, the named and titled individuals contributing labor in the present text, who, as already noted, undoubtedly classed as éren, were required to provide 100 man-days each. This information is obtained if one calculates all the man-days that are assigned to each individual in this text; quite regularly, they add up to 100 days. … While the overwhelming majority of these individuals were liable for 100 man-days, some among them are assigned higher quotas. These elevated figures, which seem to oscillate around 200 man-days, are usually associated with high administrative officials, such as sabra, "majordomo," and pisan-dub-ba, "head of the accounting." It is possible, therefore, that another, higher rate, existed that amounted to 200 man-days.

Although many of these individuals were certainly citizens, a few were UN-il$_2$.[298] As Steinkeller (2013c, 366–67) notes, a wide variety of occupations are documented, in addition to several notable relatives of the governor of Umma. In terms of the 100- and 200-workday-obligation rates, Table 5.11 records all the rates per occupation that are preserved enough.

298. A few known UN-il$_2$ include the supervisor Agubana (obv. v 4, vii 39, xi 80, rev. iii 31, viii 22, xi 3, 34), the unu$_3$ Lugalšunire (obv. v 55, rev. i 50, ix 3), the supervisor Zamu (obv. vi 7, vii 36, rev. i 68, iii 25, ix 19, x 55), and the ŠIM Lugalbad (obv. vi 19, rev. i 72, ix 31). Agubana's name is fairly rare, given that all seventeen attestations of the name probably refer to the same individual (see those given above in addition to *BIN* 5 243 rev. 5; *BPOA* 1 514 rev. 4; *CUSAS* 39 135 rev. iv 43; 140 obv. i 3'; Foxvog, *ASJ* 18, 77 10 obv. i 8, ii 11; *MVN* 16 1177 seal 2; *Nisaba* 6 12 obv. i 17; *SAT* 2 441 rev. 5; 444 obv. 6). His UN-il$_2$ stratum is apparent in *CUSAS* 39 135 rev. iv 41, 43, in which case it is inferred from his son Kugani, and in *CUSAS* 39 140 obv. i 3', rev. iii 1, in which case he is likely one of the UN-il$_2$ listed in the inspection. Note that Agubana is listed alongside a certain Arad (*MVN* 15 390 obv. v 4), who appears in proximity to him in *CUSAS* 39 135 rev. iv 40, Foxvog, *ASJ* 18, 77 10 obv. i 12, ii 6, but Arad does not seem to be an UN-il$_2$ based on these attestations. As for Lugalšunire, his UN-il$_2$ stratum can be confirmed in *CUSAS* 39 129 obv. iv 32 and CDLI P251598 obv. iii 36. Zamu's UN-il$_2$ stratum is given in *CUSAS* 39 135 rev. iii 7. In terms of Lugal-bad, he is known to be an UN-il$_2$ in *BPOA* 7 2457 obv. 1. It is interesting to see that he is considered elderly in that text, which is dated to AS 2/vii/-, whereas *MVN* 15 390 is dated to Š 37/vii/-, about thirteen years earlier. Although there is a certain Kuli designated as an UN-il$_2$ in *MVN* 15 390 obv. viii 63, rev. iv 73, UN-il$_2$ is collated as ga-il$_2$ in obv. viii 63 and g[a-il$_2$] in rev. iv 73.

Table 5.11. Total Workdays Owed according to Occupation in the Umma Text *MVN* 15 390

Total Workdays Owed	Occupation (No. of Persons)
100	aga$_3$-us$_2$ (4)
	agar$_4$-nigin$_2$ (8)
	dam-gar$_3$ (4)
	dub-sar (11)
	dub-sar kaš (1)
	gab$_2$-sar (1)
	gala-mah Zabalam$_3^{ki}$ (1)
	gudu$_4$ (3)
	gudu$_4$ ^{d}Du-du (1)
	gudu$_4$ Gir$_{13}$-giš^{ki} (1)
	gudu$_4$ ^{d}Šara$_2$ (4)
	gu-za-la$_2$ (2)
	i$_3$-du$_8$ (1)
	kinkin (2)
	ku$_3$-dim$_2$ (1)
	kurušda (coll.) (4)
	muhaldim (1)
	nu-banda$_3$ gu$_4$ (15)
	sagi (1)
	santana (2)
	sipa (15)
	šabra (1)
	ŠIM (1)
	šu-ku$_6$ (2)
	tir (3)
	tug$_2$-du$_8$ (1)
	ugula (7)
	ugula kinkin (3)
	ugula UN-il$_2$ (1)
	unu$_3$ (9)
129	sipa (1)
133	šabra (1)
143	dub-sar (1)
200	dub-sar (1)
	GA$_2$-dub-ba (1)
	gudu$_4$ ^{d}Šara$_2$ (1)
	šabra (7)
	šuš$_3$ (1)

As can be seen, virtually everyone with the higher workday-obligation rate held a managerial role. In light of the typically 100- and 200-workday obligation rates, Steinkeller (2013c, 368–69) also raises several questions:

> As we have seen earlier, 100 days was also the period that Umma's institutional economy contributed to the Tummal project in total. It would seem, therefore, that those 100 days represented the corvée contribution that Umma's institutional economy owed to

> the crown. Was it a yearly contribution? Or was it an extraordinary obligation, which had been imposed on all the provinces because of the national character of the project? At this time I would favor the second solution.
>
> At any rate, it appears that those 100 days of corvée were not directly related to the obligation that an individual éren owed personally to his institutional economy (in this particular case, the governor of Umma his organization). Assuming that the latter obligation was 180 man-days per year, during that particular year (Šulgi 37), a typical éren would still need to supply 80 man-days of work to the institutional economy.

Following this he (2013c, 382, 400–6) addresses the issue of whether royal eren_2 were compensated for work performed on behalf of their local province, noting that governors probably did compensate them as evidenced by examples of antichretic loans.

In order to demonstrate the wide variety of conscription periods and rates that male citizens experienced across multiple contexts, an extensive compilation of multiply attested male citizens notated with any combination of ½, 1, $½_c$ and AŠ_c in Umma texts is given in Appendix 1 (see Observation No. 2). The PINs of these individuals are sorted with regard to their notation combinations in Table 5.12. Note that if the number of days of the conscription period for those notated with ½ or 1 is known, they are given parenthetically.

Table 5.12. Combinations of the Notations ½, 1, ½c, and AŠc
among Multiply Attested Male Citizens (according to their PINs) in Umma

Notation Combination		PIN(s)
½[x2]	½[x2]	259–260
	½, ½ (240 days)	101
	½, ½ (360 days)	256–257
	½, ½ (750 days)	144–145, 147
	½ (90 days), ½ (120 days)	106–110
½[x3]	½[x3]	193
	½, ½ (210 days), ½ (240 days)	100
	½, ½ (360 days), ½ (750 days)	146
	½ (90 days), ½ (120 days), ½ (390 days)	29
½[x3], ½ (390 days)		122
½, ½c	½, ½c	3, 5, 7, 9, 12–16, 45, 105, 141–143, 202–204
	½ (240 days), ½c	111–112, 116–120
	½ (390 days), ½c	39, 246–254
	½ (750 days), ½c	41–42
½, ½c[x2]	½, ½c[x2]	47, 128
	½ (240 days), ½c[x2]	114
½[x2], ½c	½, ½ (240 days), ½c	102–104, 121
	½, ½ (750 days), ½c	38, 40
	½ (240 days), ½ (300 days), ½c	113
½[x2], ½ (240 days), ½ (360 days), ½ (750 days), ½c		44
½, AŠc	½, AŠc	4, 6, 8, 10–11, 174
	½ (390 days), AŠc	30
	½ (600 days), AŠc	27
	½ (750 days), AŠc	149
½, AŠc[x2]	½, AŠc[x2]	184, 212
	½ (390 days), AŠc[x2]	31
	½ (750 days), AŠc[x2]	150
½, ½ (750 days), AŠc		148
½ (240 days), ½c, AŠc		115
1 (100 days), ½c		173
1 (100 days), ½c, AŠc[x2]		162
½c[x2]		32, 46, 48, 51, 54–56, 123, 130, 135, 139, 188–192, 194–196
½c[x3]		193
½c, AŠc		52, 53, 185–186, 258
½c, AŠc[x2]		58
AŠc[x2]		1–2, 21–26, 28, 33–37, 60–62, 65–84, 86–87, 90–99, 151–161, 175–176, 180, 182–183, 187, 210–211, 214, 216–219, 223–225, 228, 230–231, 233, 235–236, 242, 243
AŠc[x3]		57, 59, 63, 85

While the frequencies of these notation combinations are probably not representative of Umma overall, the wide variety is certainly demonstrative. It is important to note that there are several examples of individuals who were conscripted half-time or part-time in some contexts versus

full-time in others. An instructive example is Abbamu, son of Šešani (see PIN 115), who is notated with ½ in a balanced account of mainly bala work for eight months in AS 3, whereas he is notated with AŠc and ½c in two inspections from AS 5 and AS 6, respectively. In the former he was a sesame cultivator (engar giš-i$_3$-ka), and in the latter he probably performed construction work. Thus, individuals, probably male citizens mostly, could be conscripted for various kinds of work that would change their conscription rate from year to year to ensure that they had days off from cultivation, which was the most demanding conscription. This variety in work performed from one year to the next was also possible for UN-il$_2$ (see p. 227), though they would have remained full-time regardless of their work changes.

Whereas balanced accounts, sealed receipts, and work rosters use work-rate notations, inspections mostly use age-bracket designations. The most important age-bracket notations for half-time and full-time work are ½c and AŠc, of course. The periods of conscription in inspections are difficult to determine, however. In his study on Umma foresters, Steinkeller (1987, 86) offers the following conclusions about the seasonality of their work:

> Aside from the uncertain 6th month this evidence seems to indicate that the foresters worked during the 7th through the 12th months and perhaps into the 1st month. The reference to forest work being done in the 3rd month is dissonant with this picture and may reflect an unusual situation. …
>
> Our conclusion that the Umma foresters worked during the second half of the year, i.e., during the interim phase of the agricultural cycle, between sowing (6th month) and harvesting (1st month), is corroborated by contemporary data on "soldiers/workers" [eren$_2$] from Lagaš, who performed corvée work and received barley rations during the same part of the year.

As such, depending on the kind of work documented in an inspection, its corresponding conscription period may vary seasonally and may not be a whole year. If this is the case, then the ½c and AŠc notations do not necessarily apply to an individual for an entire year. As indicated by the example of Abbamu, an individual can be notated with ½c and AŠc for different kinds of work from one year to the next.

Despite this challenge, the proportions of adult workers notated with ½$_c$ and AŠ$_c$ in any given text according to their social strata and occupations are significant. An exemplary text for studying the proportions for male citizens and UN-il$_2$ is Snell, *ASJ* 11, 182 (see Sigrist 1980, 13–26; Snell 1989, 182–200). Although the text is unfortunately lost, and the final columns of the text are unknown, it records hundreds of anonymous male citizens and UN-il$_2$ conscripted in every occupational category, belonging to giri$_3$-se$_3$-ga gu$_4$ ^{giš}apin (obv. iv 5), giri$_3$-se$_3$-ga ensi$_2$ (rev. i 14), and giri$_3$-se$_3$-ga zi-gum$_2$-ma (rev. iii 33). It also includes thirty-six geme$_2$, one of whom is notated with ½$_c$. In order to condense the use of the ½$_c$ and AŠ$_c$ notations, all such notated male citizens and UN-il$_2$ are organized in Table 5.13 according to occupational category, social stratum, and notation (see Appendix 5 for details).[299]

Table 5.13. ½$_c$ Notation vs. AŠ$_c$ Notation among Male Citizens and UN-il$_2$ according to Occupational Category in Snell, *ASJ* 11, 182

Occupational Category	Social Stratum	Conscription Notation		Percentage of Category	Percentage of Social Stratum	Percentage of Total
		½$_c$	AŠ$_c$			
Resource Extraction	Citizen	7 (~6.42%)	102 (~93.58%)	~37.46%	~43.95%	~64.24%
	UN-il$_2$	—	182	~62.54%	~89.22%	
Construction and Manufacturing	Citizen	6 (~21.43%)	22 (~78.57%)	~73.68%	~11.29%	~8.39%
	UN-il$_2$	—	10	~26.32%	~4.9%	
Nonproductive Activities	Citizen	3 (~4.29%)	67 (~95.71%)	87.5%	~27.82%	~17.66%
	UN-il$_2$	—	10	12.5%	~4.9%	
Management	Citizen	1 (~2.38%)	41 (~97.62%)	~95.45%	~16.94%	~9.71%
	UN-il$_2$	—	2	~4.55%	~0.98%	

It is not surprising that over half of the individuals tabulated above were engaged in resource extraction, and almost all of them were conscripted full-time, which is expected based on the balanced accounts of cultivation work. It is also expected that UN-il$_2$ would constitute a major

299. Note that obv. v 23–24, 27, 39, vi 3, rev. ii 8, iii 13 (see n. 243) are omitted.

portion of this occupational category, though there could be substantially more citizen ša$_4$-gu$_4$, given the damage in obv. i 29. As for those involved in construction and manufacturing, about a fifth of the male citizens were conscripted half-time, which is the highest percentage for any of the occupational categories by far. For managerial workers, almost none of them were conscripted half-time, which may be because they were needed throughout the year to supervise. There were very few managerial UN-il$_2$, of course.

While Snell, *ASJ* 11, 182 is instructive and provides a cohesive context, an extensive compilation of all male citizens and UN-il$_2$ who had known occupations and who were notated with ½$_c$ or AŠ$_c$ is presented in Table 5.14 (see Appendix 5 for details).

Table 5.14. ½$_c$ Notation vs. AŠ$_c$ Notation among
Male Citizens and UN-il$_2$ according to Occupational Category in Umma

Occupational Category	Social Stratum	Conscription Notation		Percentage of Category	Percentage of Social Stratum	Percentage of Total
		½$_c$ (Percentage)	AŠ$_c$ (Percentage)			
Resource Extraction	Citizen	10 (~2.52%)	387 (~97.48%)	~58.3%	~54.68%	~56.47%
	UN-il$_2$	—	284	~41.7%	~59.17%	
Construction and Manufacturing	Citizen	96 (~66.21%)	49 (~33.79%)	~52.16%	~19.97%	~23.05%
	UN-il$_2$	—	133	~47.84%	~27.71%	
Nonproductive Activities	Citizen	4 (~5.26%)	72 (~94.74%)	~62.81%	~10.47%	~10.03%
	UN-il$_2$	—	45	~37.19%	~9.37%	
Management	Citizen	1 (~0.93%)	107 (~99.07%)	~85.71%	~14.88%	~10.45%
	UN-il$_2$	—	18	~14.29%	3.75%	

Although Table 5.14 includes about 1,200 counts from a variety of contexts, the percentages of those engaged in the various occupational categories are fairly similar to those in Table 5.13. The most substantial difference is that the amount of individuals involved in construction and manufacturing is much higher as well as the percentage of those that were conscripted half-time. The UN-il$_2$ were also understandably more likely to be engaged in resource extraction as well as

in construction and manufacturing in comparison to nonproductive activities and especially management.

In her treatment on inspections, Koslova (2008, 166–67) discusses the compensation of male citizens and UN-il$_2$ for conscription, which includes standardized allotments of barley or šuku land as well as garments or wool. As Gelb (1965) demonstrates, male and female individuals across the strata also received allotments of oil, among other foods and drinks, though these allotments are not as frequently documented, and they are not studied in depth here. In agreement with Sallaberger (1999, 328), Koslova assumes that if an individual, particularly a male child in these texts, does not have explicit allotments, then that individual was supported by the explicit allotments of his father or an elder brother.[300]

With regard to šuku land, Koslova (2008, 167) clarifies some important points as follows:

> Bei Versorgungsfeldern geben die Musterungslisten die Größen der einzelnen Felder nie an, was dafür spricht, daß es sich um Standardgrößen handelt, oder eher dafür, daß es einem Verfasser der Musterungsliste nicht darauf ankam, wie groß die Parzellen sind. lch würde außerdem vermuten, daß die Feld-Versorgung hauptsächlich für zwei bestimmte Kategorien der Arbeitskräfte typisch war (s. unten 4.4 und Anhänge 4/1-2); wenn man bei Personen dieser Kategorien mal keine Angaben zur Versorgungsart findet, dann dürfte man wohl annehmen, daß der Verfasser bloß das Wort gana$_2$ ausgelassen hat, weil es für diese Kategorien selbstverständlich war, Felder zu haben.

In terms of the various šuku-land sizes, there were some fairly standard amounts, which are documented in Graph 5.1. As for the assumption that the term gan$_2$ can be omitted in several instances, this appears to be valid, especially in Snell, *ASJ* 11, 182. In this text, many citizens

300. See, for example, *OrSP* 47-49 382 obv. ii 16–iii 1: AŠ$_c$ gan$_2$ Šeš-kal-la ugula \ AŠ Inim-ma-ni-zi dumu-ni \ AŠ$_c$ gan$_2$ Lugal-hi-li \ AŠ ^{d}Šara$_2$-zi-da \ DIŠ Lu$_2$-^{d}Ab-u$_2$ \ dumu Al-lu-me. If the assumption about sharing allotments is valid, then Inimanizi is supported by his father Šeskala, whereas Šarazida and Lu-Abu are supported by their elder brother Lugalhili.

have no allotments listed,[301] which means that it was probably understood that they received šuku land. As for the UN-il$_2$, their allotments are generally listed, which is likely because their allotments cannot be easily assumed given their variety, as is demonstrated in Table 5.17. This phenomenon is also apparent in *CUSAS* 39 133, in which only the first individuals notated with AŠ$_c$ or designated as AŠ … šes-tab-ba for large sections of the text were explicitly allotted šuku land (see *CUSAS* 39 133 obv. i 1, 12, iii 30–31, rev. ii 13). *SAT* 2 77 is a good example of a text in which no allotments are specified, though all those usually eligible were probably allotted šuku land.[302]

While it is likely that individuals without stated allotments could have received šuku land, this may not be the case in every instance. The inspection *StOr* 9/1 31 pl. 12 lists male individuals, many or all of whom could have been citizens, with age-bracket designations, but no allotments are given on an individual basis. There is a note on the left edge that the total amount of allotted barley was 86.0.0. This kind of inspection without any individual allotments is very unusual, and the reason for its formatting is not certain. However, their individual barley allotments are reported in *AAICAB* I/2 Ashm. 1971-398, which is dated two years later and which has a total of 88.0.0, as seen in Table 5.15.[303]

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301. While there are a few lines that seem to document šuku land for citizens, as suggested by Snell (1989, 197) in his note on rev. i 39, "Sigrist, p. 22, emends to GÁ-dub-ba by analogy to viii 13 [rev. ii 13] below; but perhaps one should read GÁ as gána as in ix 39 [rev. iii 39] and translate 'scribe with a field allotment' by analogy to gána-guruš." This suggestion does not work, however, for three reasons. First, the signs in rev. i 39, iii 39 appear to be GA$_2$, though the copy could be inexact. Second, it does not seem reasonable to list šuku land for only two citizens out of hundreds. Third, the term GA$_2$-dub-sar in rev. i 39, iii 39 appears to be an occupation and perhaps an error for GA$_2$-dub-ba. This is supported by rev. ii 13: [GA$_2$]-dub-ba i$_3$-dab$_5$, which probably refers back to the GA$_2$-dub-sar since throughout the text various groups of workers are conscripted by a worker with an occupation listed at or near the top of such groups.

302. The omission of gan$_2$ can probably be assumed for *AnOr* 7 301; *OrSP* 47-49 324, among others.

303. Note that the name Sahar-du$_{11}$-ge, which should be Suhuš-ge, is only attested here. The copy of *StOr* 9/1 31 pl. 12 does not easily support the reading Suhuš-ge, however. The names La-NI and Puzur$_4$-^{d}IŠKUR in *AAICAB* I/2 Ashm. 1971-398 obv. 3, 5 have been changed from their BDTNS transliterations La-ni and Puzur$_4$-^{d}Iškur. *AAICAB* I/2 Ashm. 1971-398 rev. 10 is changed from 4.0.0 NE-da-AŠ$^?$ to 4.0.0 Bi$_2$-da x. The final sign looks like ME, but its usage here is uncertain.

Table 5.15. Parallel Male Individuals in the Umma Texts
AAICAB I/2 Ashm. 1971-398 and *StOr* 9/1 31 pl. 12

***StOr* 9/1 31 pl. 12 (AS 1/-/-)**		***AAICAB* I/2 Ashm. 1971-398 (AS 3/-/-)**		
Line	**Transliteration**	**Line**	**Transliteration**	**Occupation (Line)**
obv. 3 (coll.)	šu Ur-^{d}Sue[n](EN.Z[U])	rev. 8	˹3˺.0.0 Ur-^{d}Suen	u_2-il_2 (rev. 11)
obv. 4 (coll.)	$AŠ_c$ Lu_2-sa_6-i_3-zu	obv. 1	5.0.0 še-ba Lu_2-sa_6-i_3-zu	kir_4-dab_5 (obv. 7)
obv. 5	$MAŠ_c$ Sahar-du_{11}-ge	rev. 3	4.0.0 Suhuš-ge	u_2-il_2 (rev. 11)
obv. 6	DIŠ ^{d}Šara$_2$-a-mu	—		
obv. 7	dumu-ni-me			
obv. 8	$AŠ_c$ A-ab-ba	obv. 12	4.0.0 A-ab-ba	u_2-il_2 (rev. 11)
obv. 9 (coll.)	$AŠ_c$ Gu_4-KU	rev. 1	4.0.0 Gu_4-KU	u_2-il_2 (rev. 11)
obv. 10	DIŠ Lu_2-^{d}Nin-ur_4-ra dumu-ni	—		
obv. 11	$AŠ_c$ Ur-^{d}$ŠE_3$-da	rev. 2	4.0.0 Ur-^{d}$ŠE_3$-da	u_2-il_2 (rev. 11)
obv. 12	DIŠ Ur-^{d}Nu-muš-da dumu-ni	—		
obv. 13 (coll.)	$AŠ_c$ Ur-zikum-ma	rev. 6	4.0.0 Ur-zikum-ma	u_2-il_2 (rev. 11)
obv. 14	DIŠ Inim-ma-ni dumu-ni	—		
obv. 15	$AŠ_c$ $Puzur_4$-i_3-li_2	obv. 4	5.0.0 $Puzur_4$-i_3-li_2	kir_4-dab_5 (obv. 7)
obv. 16	$AŠ_c$ Ur-^{d}Šara$_2$ dumu La-NI	obv. 3	5.0.0 Ur-^{d}Šara$_2$ dumu La-NI	kir_4-dab_5 (obv. 7)
obv. 17	$AŠ_c$ I-di_3-a	obv. 2	5.0.0 gur I-di_3-a	kir_4-dab_5 (obv. 7)
obv. 18	DIŠ ^{d}Ir_3-ra-ba-ni dumu-ni	—		
obv. 19	$AŠ_c$ $Puzur_4$-^{d}IŠKUR	obv. 5	5.0.0 $Puzur_4$-^{d}IŠKUR	kir_4-dab_5 (obv. 7)
obv. 20	DIŠ Šu-^{d}IŠKUR dumu-ni	—		
…				
rev. 2	$MAŠ_c$ Šu-^{d}Nin-šubur	obv. 11	3.0.0 Šu-^{d}Nin-šubur	u_2-il_2 (rev. 11)
rev. 3	DIŠ $Puzur_4$-hi-num_2 dumu-ni	—		
rev. 4	$MAŠ_c$ I_3-li_2-ki-ib-ri_2	obv. 8 (CDLI)	3.0.0 I_3-li_2-ki-ib-ri_2	u_2-il_2 (rev. 11)
rev. 5	$MAŠ_c$ U-bar-um	obv. 9	3.0.0 U-bar	u_2-il_2 (rev. 11)
rev. 6	$MAŠ_c$ Lugal-ma_2-gur_8-re	obv. 10	3.0.0 Lugal-ma_2-gur_8-re	u_2-il_2 (rev. 11)
rev. 7	dumu E-la-ak-šu-qir-me	—		
rev. 8	$AŠ_c$ Bi_2-da dumu He_2-su_3-e	rev. 10 (translit. mine)	4.0.0 Bi_2-da ME$^{?}$	u_2-il_2 (rev. 11)
		rev. 7	3.0.0 He_2-eb-su_3-e	u_2-il_2 (rev. 11)
rev. 9	$MAŠ_c$ A-da-lal_3 šeš-a-ni	rev. 5	4.0.0 A-da-lal_3	u_2-il_2 (rev. 11)
rev. 10 (coll.)	$AŠ_c$ Ku_3-sig_5 dumu $Puzur_4$-^{d}Šara$_2$	rev. 4	4.0.0 Ku_3-sig_5	u_2-il_2 (rev. 11)
…		—		
rev. 15	$AŠ_c$ Ku_5-da	obv. 13	4.0.0 Ku_5-da	u_2-il_2 (rev. 11)

These individuals, who were grass carriers and grooms, were allotted barley amounts that were large enough to sustain them for an entire year, with monthly rates ranging from 75 to 125 $sila_3$ that would have been shared by more than one member of their families (see 5.2.5. Sustenance from Mainly Allotments, Wages, and Rented Land). This text also indicates that individuals notated with $MAŠ_c$ were allotted the smallest amounts, though they sometimes received more if

they had children. Note that Hebsue received 3.0.0, which is the same amount that the elderly Ur-Suen received. In the inspection from an earlier date, however, he was not conscripted, though he may have been conscripted elsewhere at that time. If he was not conscripted elsewhere then, this may suggest that he was too old to work but still supported with a barley allotment for the year. The fact that he had an occupation in the allotment report may have been for his identification rather than to indicate his current work, especially since children too young to work regularly had occupations (see, for example, Steinkeller 1996, 240).

Koslova (2008, 174) raises an important question about the allotments individuals received while conscripted for work documented in balanced accounts: "Die Frage, ob die mit Feldern versorgten $eren_2$-Arbeiter während ihrer Dienstzeit auch Rationen bekämen, wie es P. Steinkeller behauptet hat, kann ich zur Zeit nicht beantworten." This is a difficult question to answer because the balanced accounts do not provide these kinds of details, and there may have been multiple possibilities. Citizens performing bala work for several months per year at Girsu/Lagaš received monthly barley allotments. They also could work for wages when they were not conscripted, and at least some of them may have had šuku land as well (see 5.2.2.3. Girsu/Lagaš). According to the balanced account *TCL* 5 5676, for example, šuku land was included in the land that was cultivated, so the conscripts were sustained with that land, which is noted by Dahl (2002, 335):

> As for our brief analysis, the text [*TCL* 5 5676] is important because it mentions ten cultivators (engar) and their sons (or subordinates (dumu-ni)), and also the fields termed "the sustenance field of the cultivators" (GAN_2 shuku engar). Without manipulating the sources, it seems reasonable to suspect that the sustenance fields of the cultivators refer to the same cultivators mentioned in the debit section of the account.
>
> The sustenance fields of the cultivators amount to 2 bur_3 1 $eshe_3$ and 3 iku, which gives an average of 4 ½ iku per cultivator (and/or assistant).

Since this group of ten workers included seven citizens and three UN-il_2, and only some unspecified amount of these workers were cultivators, the šuku land would probably not have

been evenly divided. For example, five could have been allotted 3 iku, and the other five could have been allotted 6 iku, which were typical šuku-land sizes at Umma, including for engar (see just below). Additionally, the citizens were conscripted half-time for four months, so at least some of them probably worked for wages at 6 sila$_3$ a day (obv. i 24) during much of that time.

Koslova (2008, 194–97) also tabulates allotments for male citizens and UN-il$_2$ according to their age-bracket designations. Each rate is summarized as standard ("Standard"), an exception ("Ausnahme"), or nonexistent ("—"), and her findings are thus translated, condensed, and rearranged in Table 5.16.

Table 5.16. Allotments of Barley or šuku Land as well as of Garments or Wool corresponding to Age-Bracket Designations for Male Citizens and UN-il$_2$ in Various Umma Inspection Texts (adapted from Koslova 2008, 194–97)

Age-Bracket Designation (Koslova's Classification)	**Allotments**	**Citizens**	**UN-il$_2$**
šu ("D-Klasse")	gan$_2$	Standard (?)	—
	0.0.5 tug$_2$	Exception	Standard (?) (see n. 168)
	0.0.4 tug$_2$	—	Standard (?)
	—	Standard	Exception
AŠ$_c$ or ½$_c$ ("A-Klasse mit *voller* und *halber* Leistung")	gan$_2$	Standard	Exception
	0.1.1 5 4	—	Standard
	0.1.0 tug$_2$|4	— (see n. 146)	Standard
AŠ ("B-Klasse")	gan$_2$	Standard for šeš-tab-ba (see n. 147)	—
	0.0.4 tug$_2$	Exception (see n. 150)	Standard
	0.0.3 tug$_2$	Exception	Standard
	0.0.2 2	— (see n. 153)	Standard
	—	Standard (see n. 156)	Exception
DIŠ ("C-Klasse")	0.0.2 2	Exception (see n. 159)	Standard
	0.0.1 5 1 ½	Exception	Standard
	0.0.1 1	—	Standard (?)
	—	Standard (see n. 166)	Exception

In order to build upon this work, these allotment rates are counted and cited in Appendix 6 to determine their frequency in all relevant Umma texts. For the sake of comparison, the counts of these allotment rates are consolidated in Table 5.17, which does not include garment or wool

allotments. Note that allotment rates are clustered according to their age-bracket designation (šu, $AŠ_c$, etc.) and arranged in descending amounts, assuming that šuku land produced more barley than any fixed amount and that those supported by the šuku land and barley allotments of others (indicated with parentheses) may have received more or less than any of the other amounts but are arranged near the bottom arbitrarily. Those allotted 0.0.4 or 0.0.3 are combined because they are often difficult to differentiate. This table also highlights the counts of these allotment rates for *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 (Text 1), *CUSAS* 39 129 (Text 2), 135 (Text 3), and *LAOS* 1 2 (Text 4). These are among the largest of all the texts included and they deal mainly with cultivation (Text 1), pastoral work (Text 2), construction (Text 3), as well as manufacturing and nonproductive activities (Text 4).

Table 5.17. Allotments of Barley or šuku Land corresponding to Age-Bracket Designations for Male Citizens and UN-il_2 in Umma

Age-Bracket Designation and Allotment	Text(s)	Citizens		UN-il_2	
		Count	Percentage of Age-Bracket Designation	Count	Percentage of Age-Bracket Designation
šu gan_2	1	0	0%	0	0%
	2	0	0%	0	0%
	3	1	~11.11%	0	0%
	4	0	0%	0	0%
	All	2	~2.38%	0	0%
šu 0.0.5	1	0	0%	0	0%
	2	0	0%	0	0%
	3	0	0%	0	0%
	4	0	0%	0	0%
	All	3	~3.57%	5	~10.64%
šu 0.0.4	1	0	0%	2	25%
	2	0	0%	0	0%
	3	0	0%	0	0%
	4	0	0%	0	0%
	All	3	~3.57%	17	~36.17%
šu (gan_2)	1	22	100%	6	75%
	2	6	100%	3	100%
	3	8	~88.89%	1	50%
	4	0	0%	1	~33.33%
	All	76	~90.48%	15	~31.91%

Age-Bracket Designation and Allotment	Text(s)	Citizens		UN-il$_2$	
		Count	Percentage of Age-Bracket Designation	Count	Percentage of Age-Bracket Designation
šu (barley allotment)	1	0	0%	0	0%
	2	0	0%	0	0%
	3	0	0%	1	50%
	4	0	0%	2	~66.67%
	All	0	0%	10	~21.28%
AŠc gan$_2$	1	114	100%	71	~97.26%
	2	60	80%	39	~90.7%
	3	4	100%	5	~12.2%
	4	15	100%	13	12.5%
	All	414	~95.61%	238	~52.19%
AŠc 0.1.4	1	0	0%	0	0%
	2	0	0%	0	0%
	3	0	0%	0	0%
	4	0	0%	1	~0.96%
	All	0	0%	1	~0.22%
AŠc 0.1.1 5	1	0	0%	0	0%
	2	0	0%	0	0%
	3	0	0%	27	~65.85%
	4	0	0%	85	~81.73%
	All	1	~0.23%	158	~34.65%
AŠc 0.1.0	1	0	0%	2	~2.74%
	2	0	0%	0	0%
	3	0	0%	9	~21.95%
	4	0	0%	5	~4.81%
	All	3	~0.69%	55	~12.06%
AŠc (gan$_2$)	1	0	0%	0	0%
	2	15	20%	4	~9.3%
	3	0	0%	0	0%
	4	0	0%	0	0%
	All	15	~3.47%	4	~0.88%
½c gan$_2$	1	0	0%	0	0%
	2	7	100%	0	0%
	3	69	100%	0	0%
	4	13	~68.42%	0	0%
	All	212	~97.25%	0	0%
½c 0.1.1 5	1	0	0%	0	0%
	2	0	0%	0	0%
	3	0	0%	0	0%
	4	6	~31.58%	0	0%
	All	6	~2.75%	0	0%
AŠ gan$_2$ … šeš-tab-ba	1	15	62.5%	0	0%
	2	0	0%	0	0%
	3	3	100%	0	0%
	4	4	100%	1	100%
	All	39	~73.58%	2	50%
AŠ gan$_2$ … aga$_3$-us$_2$	1	9	37.5%	1	100%
	2	0	0%	0	0%
	3	0	0%	0	0%
	4	0	0%	0	0%
	All	14	~26.42%	2	50%

Age-Bracket Designation and Allotment	Text(s)	Citizens		UN-il$_2$	
		Count	Percentage of Age-Bracket Designation	Count	Percentage of Age-Bracket Designation
AŠ 0.0.4|3	1	0	0%	1	~6.67%
	2	0	0%	1	~33.33%
	3	1	~9.09%	48	~63.16%
	4	0	0%	1	~5.88%
	All	10	~7.14%	202	~67.78%
(dumu) AŠ 0.0.2	1	2	~5.88%	3	20%
	2	0	0%	0	0%
	3	0	0%	25	~32.89%
	4	0	0%	15	~88.24%
	All	4	~2.86%	71	~23.83%
AŠ (gan$_2$)	1	32	~94.12%	11	~73.33%
	2	12	100%	2	~66.67%
	3	10	~90.91%	3	~3.95%
	4	3	100%	1	~5.88%
	All	126	90%	25	~8.39%
DIŠ 0.0.2	1	5	~6.49%	5	~14.71%
	2	0	0%	0	0%
	3	0	0%	3	~23.08%
	4	0	0%	1	~3.13%
	All	6	~1.94%	25	~12.2%
DIŠ 0.0.1 5	1	2	~2.6%	3	~8.82%
	2	0	0%	0	0%
	3	0	0%	9	~69.23%
	4	1	~7.14%	17	~53.12%
	All	5	~1.62%	77	~37.56%
DIŠ 0.0.1	1	0	0%	0	0%
	2	0	0%	0	0%
	3	0	0%	1	~7.69%
	4	0	0%	6	18.75%
	All	0	0%	13	~6.34%
DIŠ (gan$_2$)	1	70	~90.91%	26	~76.47%
	2	29	100%	8	100%
	3	30	100%	0	0%
	4	13	~92.86%	6	18.75%
	All	298	~96.44%	83	~40.49%
DIŠ (barley allotment)	1	0	0%	0	0%
	2	0	0%	0	0%
	3	0	0%	0	0%
	4	0	0%	2	6.25%
	All	0	0%	7	~3.41%

Overall, Koslova's table aligns well with this more extensive tabulation, though her summaries of the allotment rates for both citizens and UN-il$_2$ notated as AŠ$_c$ differ to some extent. Although the frequency for citizens notated with AŠ$_c$ receiving barley versus šuku land is minimal, it is better to summarize it as an exception, and many of those citizens were blind or otherwise

visually impaired.[304] Moreover, it appears that a substantial amount of UN-il$_2$ notated with AŠ$_c$ were allotted land, especially if they were involved in resource extraction (see Texts 1–2) as opposed to construction and manufacturing or nonproductive activities (see Texts 3–4). This might be because they were allotted some of the land they worked on, as is demonstrated with *TCL* 5 5676. Citizens notated with AŠ$_c$ who were supported by the šuku land of their relatives were rarely attested, and they were all involved in pastoral work. It is important to note that an UN-il$_2$ could receive barley allotments in one year and šuku land in another, which may have been for several reasons, including changes in the kind of work performed. While there are several examples of this, an illustrative one is Lugalurani, who received barley allotments in *Nisaba* 26 17 rev. 4; *Santag* 6 384 rev. vi 24' and šuku land in *Organisation administrative, Diss.*, 202-210 6 Talon-Vanderroost 1 obv. ix 16; 217 7 Talon-Vanderroost 2 obv. ii 14. In *Nisaba* 26 17, he was working as a plant carrier or groom, and in the last two texts, he was engaged in cultivation. Though the dates of all these texts are not given or preserved, they do not clearly share the same date.

One reason why young citizen and UN-il$_2$ sons were allotted barley was probably because of the deaths of their fathers who could have otherwise supported them with their šuku land.[305] If a father died, his family could even sell their share of šuku land, which would require the purchaser to provide the conscription owed in exchange for the land. This land could be sold

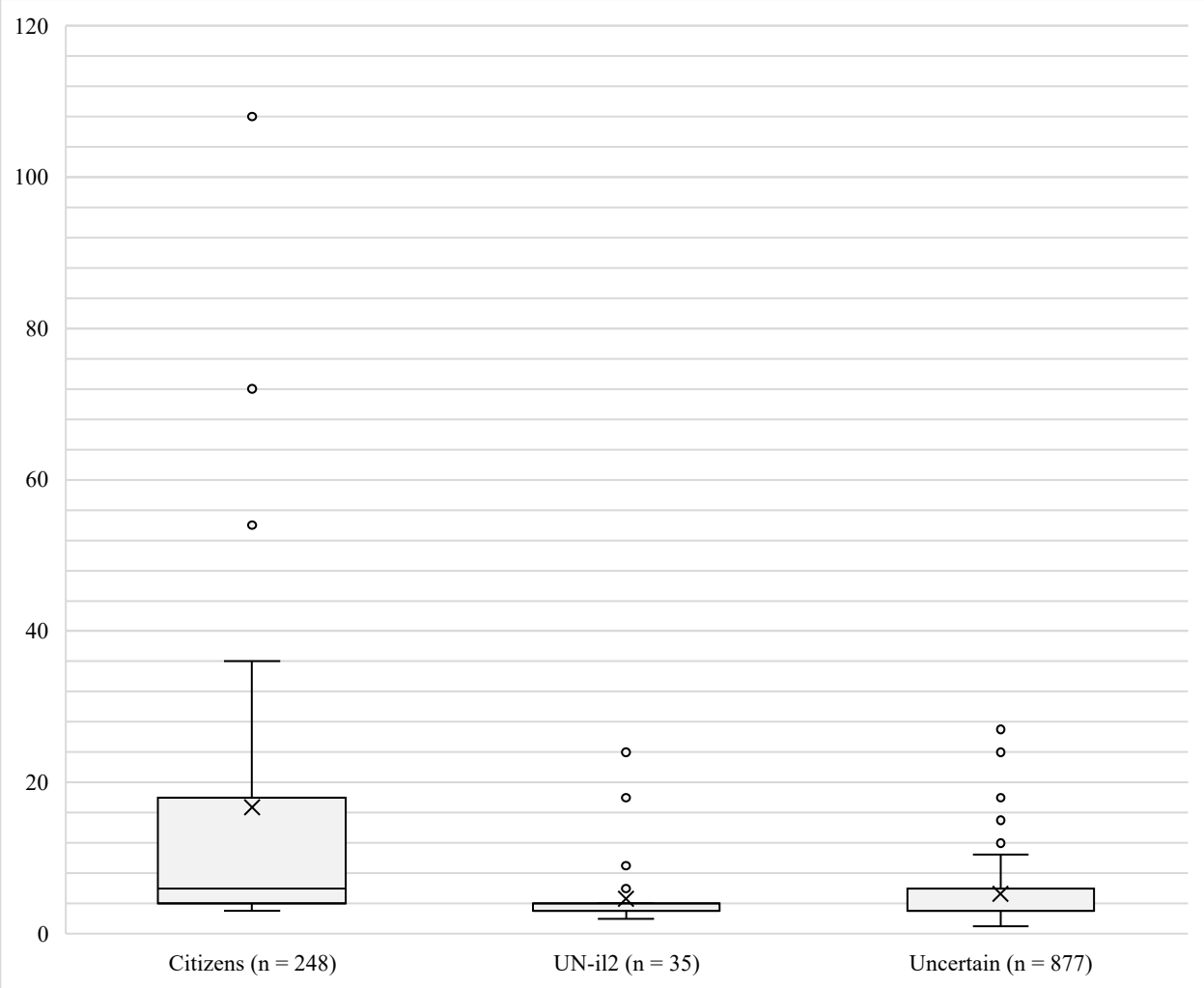
304. See, for example, CDLI P429776; *Princeton* 2 492; *SNAT* 332 (see Appendix 6 for why these texts are not counted in Table 5.17).

305. Some examples include *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 rev. iii 12' (translit. mine), 13', 14' (translit. mine), 15', vi 19 (translit. mine), 20 (coll.): dumu AŠ 0.0.2 2 ⌜Lu$_2$⌝-^{d}Sumun$_2$$^{!?}$(ŠUN$^{?}$)-zi-da \ dumu AŠ 0.0.2 2 Lu$_2$-^{d}Šara$_2$ \ DIŠ 0.0.2 2$^{?}$ U[r-^{d}]⌜Ur$_3$-bar⌝-tab \ dumu G[u]-du-du [ba]-uš$_2$-me … uš$_2$ Uru-bar-re engar$^{?}$ \ DIŠ 0.0.2 2 Šeš-a-ni dumu-ni; 217 7 Talon-Vanderroost 2 rev. i 11 (translit. mine), 12–14: DIŠ 0.0.2 2 ⌜UN⌝ nu$^{?}$ Arad$_2$-mu \ DIŠ 0.0.2 2 A-du-du \ DIŠ 0.0.2 2 A-ge-na \ dumu Lu$_2$-gu-la muhaldim ba-uš$_2$-me; and *OrSP* 47-49 324 obv. ii 15–16: uš$_2$ Gur$_4$-za-an \ DIŠ 0.0.1 5 1 ½ Ur-^{d}Šara$_2$ dumu-ni. Note that Talon-Vanderroost 2 rev. i 11–14 is nearly identical, if not fully identical, to Talon-Vanderroost 1 obv. ix 37, 38–39 (both coll.), 40, but line 37 has an unusual transliteration that is not resolved here.

for other reasons as well, though this phenomenon is rarely attested (see Steinkeller 1992, 99–100). In a few rare cases, it seems that the governor perhaps authorized allotments for certain sons, including sons whose families had šuku land (see Vanderroost 2013, 1:144 and n. 435), but it is not certain if and why this is even the case.

Although male citizens and UN-il$_2$ were often allotted šuku land of unknown sizes, the sizes of these allotments are sometimes documented elsewhere (see Observation No. 3 in Appendix 1 for various citizens in particular). Moreover, a rather exhaustive search of šuku-land sizes for known male citizens and UN-il$_2$ is presented in Graph 5.1 (see Table A7.1 for citations).

Graph 5.1. šuku-Land Sizes (in iku) for Male Citizens and UN-il$_2$ in Umma

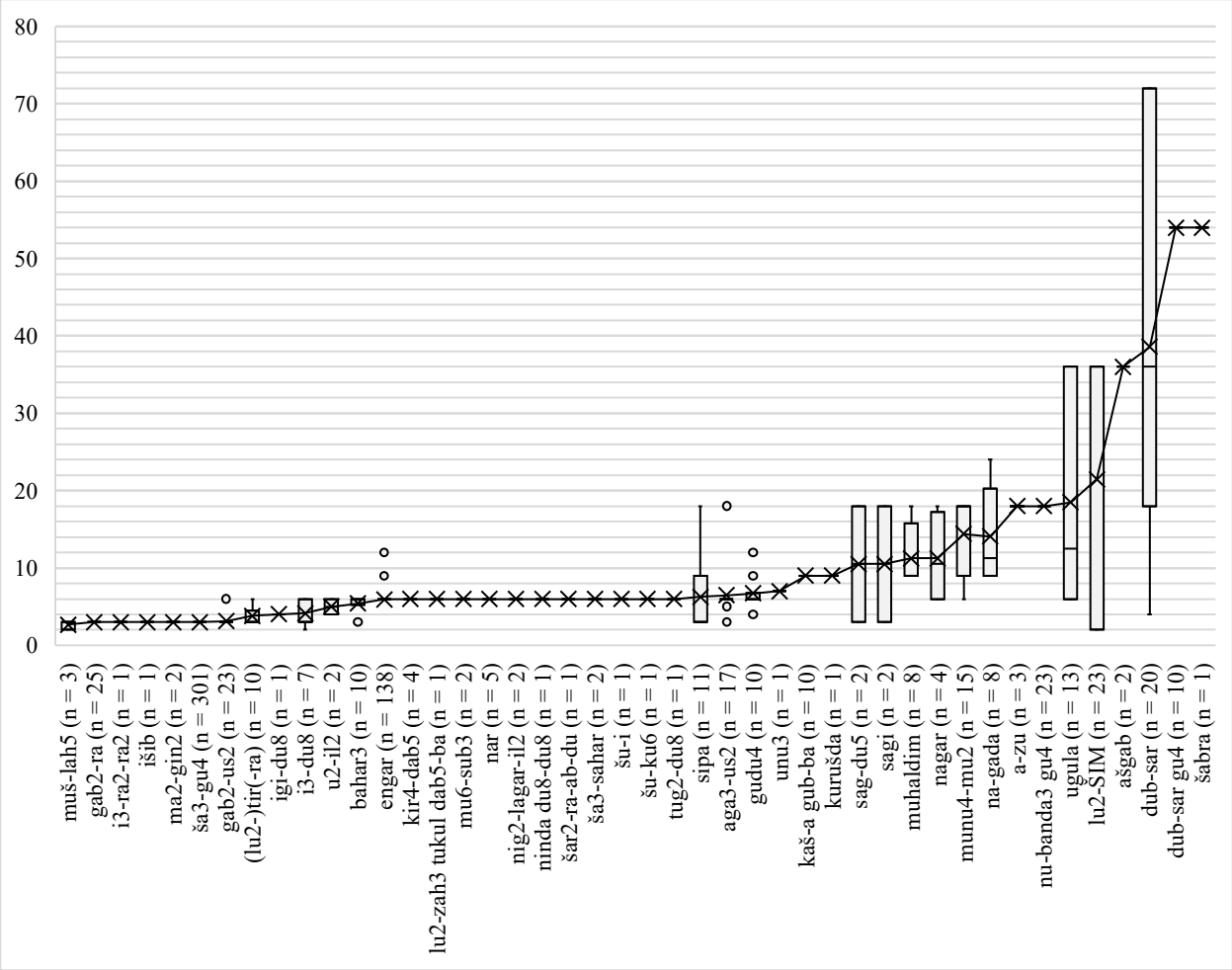


It is important to note that many of the individuals allotted šuku land have no social-stratum designations, so the data are unevenly distributed. It is assumed here that individuals allotted 36 iku or more were citizens, since 24 iku is the largest size for a known UN-il$_2$. As such, the arithmetic mean for citizens is roughly 16.7 iku, but that is rather high due to the upper end of their šuku-land sizes. The median is 6 iku, whereas the mode is 4 iku, which accounts for about 26.21 and 22.58 percent of their total, respectively. The interquartile range bounds are 4 and 18 iku, so the majority of these male citizens were allotted at least 4 iku. Since 6 iku is far more common than 4 iku for individuals whose social strata are uncertain, 6 iku is probably the actual mode and lower bound. The key measures for the male UN-il$_2$ are much tighter. Their arithmetic mean is 4.6 iku, their median and mode are both 3 iku, which accounts for about 71.43 percent of their total, and their interquartile range bounds are 3 and 4 iku. Besides the šuku-land sizes documented above, one of the princes had 540 iku, and the governor of Umma had 1080 iku (see Gomi, *Orient* 21, 1 BM 105334 rev. i 3; *Nisaba* 26 40 obv. 1–2; Steinkeller, *Studies Postgate* 2, 562 E obv. ii 1', rev. i 3'), which are not included because they are exceptionally large sizes.

The biggest factor for šuku-land size, however, was probably not social stratum but rather occupation, though these factors were related to some extent. As such, all known šuku-land sizes for individuals according to occupation are plotted in Graph 5.2 (see Table A7.2 for details relating to social strata and citations).[306]

306. Note that there are a few individuals with pastoral occupations like na-gada and especially unu$_3$ with large šuku-land sizes that are omitted because their sizes seem to have been fairly proportionate to their herd sizes (see Winters 2020).

Graph 5.2. šuku-Land Sizes (in iku) according to Occupation in Umma



While the dataset amounts for each occupation vary substantially, it is clear that many individuals with the same occupation had similar šuku-land sizes. The smallest sizes were allotted generally to those engaged in resource extraction or manufacturing, whereas those involved in management had the largest. The sizes for occupations in nonproductive activities are widely spread out, probably because of their limited data and also due to the vastly different kinds of occupations included. It is not surprising that managerial occupations had the largest šuku-land sizes, and many such occupations are not represented in Graph 5.2. For example, *TCL* 5 6047 indicates that the high-ranking individual Abī-ati, who may have been a general (see

Steinkeller 2013, 355–56), had 90 iku, and his wife had 18 iku. Concerning the governor's šuku land, Borrelli (2020, 8) offers the following comments:

> In the Umma province, the area of the governor's prebend plots was on the lower spectrum of the figures observed in Ĝirsu/Lagaš, that is 60 bur_3 [1080 iku] (= 388,8 ha), which, in comparison with the remaining prebend plots recorded in the same document, still represented the 2.6% of the available land. A fair guess would be that, in principle, governors received between 2 and 3% of the provincial institutional land.

While most women did not have their own šuku land, wives of high-ranking individuals and certain priestesses could have šuku land, many of which were large sizes. egi-zi priestesses, for example, had šuku-land sizes ranging from 4 to 36 iku, with an arithmetic mean of roughly 10.36 iku, which is among the higher arithmetic means for the occupations in Graph 5.2.[307]

While institutional economies are overall far better documented than the royal sector, the settlement of GARšana, located within the province of Umma, is certainly well attested. As a royal settlement it was not under the control of the institutional economy of Umma, except for some of its local cultic institutions, forests, and orchards (see Garfinkle 2009, 4–6; Steinkeller 2013c, 353 and n. 25). Although the details are scattered, there was a substantial amount of royal citizens in GARšana (see Steinkeller 2013c, 359–60) as well as a few mentions of male UN-il_2.[308] There were also many attestations of $geme_2$, who may have been a mixture of mainly female UN-il_2 and slaves in addition to a few female citizens.

The documentation from GARšana does not provide much evidence for part-time conscription, though there are a few inspections and expense reports that document men engaged in mainly agricultural, construction, and shipping work at one-third, one-half, and two-thirds

307. See BDTNS 059327 obv. iii 32–iv 1; *BIN* 5 277 iii 8–9, 15–16; *Nebraska* 37 obv. iv 20–29; *Nik.* 2 236 rev. ii 4–7; *Nisaba* 23 46 obv. ii 23–27, iii 7–8; *OrSP* 47-49 481 obv. i 3–4; *ŠA* 135 (pl. 74) rev. 6.

308. See *CUSAS* 3 379; 466; 545; 556; 562.

rates, some of whom were fullers and leatherworkers.[309] It is not clear, however, why such individuals were conscripted part-time, though many were probably younger, so these rates may have indicated their reduced work outputs for full-time conscription. As Heimpel (2009b, 66–67) observes, there were no documented days off for conscripts, though there were some days off due to weather and festivals. This absence of days off could be due to the lack of balanced accounts of various citizens and UN-il$_2$ workers for whom such days were often documented. Moreover, days off for citizens were generally written only when they cannot be otherwise assumed (see p. 205). Perhaps it can be inferred from certain texts detailing the allotments for only half of the year that the workers receiving these allotments were conscripted for that time period only,[310] but it is possible that they were then given allotments for the following half of the year. Though the evidence from GARšana concerning conscription is limited, there is plenty of evidence regarding hired work (see n. 245).

5.2.2.3. Girsu/Lagaš

At Girsu/Lagaš, Maekawa (1976, 20–26; 1987a, 65–67; 1988, 60) highlights the rotating shifts of eren$_2$, who were mostly if not entirely male citizens, conscripted by various temple households to perform bala work, including irrigation work for five to six months, often from the seventh to twelfth months, as well as for cultivation during the first months of the year, resulting in the conscription of each individual for an estimated sixty days (see also p. 66).[311]

309. See, for example, *CUSAS* 3 24; 203; 206; 207; 209; 226; 231; 237; 241; 242; 244; 262; 266; 271; 280.

310. See Heimpel's (2009b, 93–95) discussion on allotments given for half of the year in *CUSAS* 3 426; 1527. See also *Nisaba* 15/2 221, which records barley allotments for agricultural workers for six months.

311. With regard to the extent of the bala work owed by Girsu/Lagaš, Tonia Sharlach (2004, 160) observes that "we find that it alone of all the provinces of the Ur III state is known to have paid multiple months of bala, divided into an earlier and a later season of bala. In total, the Lagash province was assigned three or four

While he acknowledges that it cannot be proven in every case that the same individuals who were conscripted for one month were able to hire themselves out in the subsequent month, he (1976, 31) indicates that this alternation "may be observed at least in the troop led by Ur-^{d}Ba-ú (dumu-A-tu) dependent on the temple of Gá-tùm-du$_{10}$ for three months (itu-mu-šu-du$_{7}$, itu-amar-a-a-si, itu-še-gur$_{10}$-ku$_{5}$)." Additionally, Maekawa (1976, 35; 1987a, 65; 1989, 42) notes that they appear to have worked for thirty days a month while conscripted as opposed to perhaps twenty days a month while hired.

In his discussion on *OBTR* 254, Maekawa (1987a, 67) speculates about the extent to which these individuals were conscripted or hired:

> The number of each group of erin$_2$-bal-gub-ba in a particular month remains virtually the same two months later when the group again receives the same appellation, while the number decreases during the intermediate month when they are called erin$_2$-bal-tuš-a. This suggests that service was rigorously required for all members of each gang in two alternate months. In the intermediate month, labor seems to have been still compulsory, at least for some members, under the ostensible appellation of "waiting for their service" or "hired."

While he is right that some eren$_2$ bala tuš-a were conscripted, tuš-a should be understood as "sitting out" the bala work (see Steinkeller 2015a, 13 n. 20), and those that were explicitly hired were not conscripted. There are several cases in which eren$_2$ bala tuš-a were not explicitly hired, however, in which cases at least some of them were conscripted for work other than their bala work, which they were sitting out. This is evident in *TUT* 172 rev. 4: še-ba eren$_2$ bala gub-ba eren$_2$ bala tuš-a u$_3$ UN-il$_2$. This phenomenon can be further elucidated by comparing the forms and amounts of compensation for eren$_2$ bala gub-ba and eren$_2$ bala

months of bala service per year." For further details on the timing and extent of the bala work owed by Girsu/Lagaš, see Sharlach 2004, 101, 336–37. Details on the timing of bala work owed by each province are given in Sharlach 2004, 364–69.

tuš-a. The forms of compensation are either ša$_3$-gal, (a$_2$) hun-ga$_2$, or unspecified, and the amounts span a wide range, which are all presented in Table 5.18.[312]

Table 5.18. Forms and Amounts of Compensation
for eren$_2$ bala gub-ba and eren$_2$ bala tuš-a in Girsu/Lagaš

Barley Amount (in sila$_3$)	**bala gub-ba**		**bala tuš-a**		
	ša$_3$-gal	**Unspecified**	**(a$_2$) hun-ga$_2$**	**ša$_3$-gal**	**Unspecified**
5	—	—	—	—	*ITT* 4 7268
10	—	*TCTI* 2 2782	—	*MVN* 5 171	*SAT* 1 453; *TCTI* 2 2696; 2782
15	*TUT* 171	—	—	—	*TCTI* 2 4287
15 (per 20 days)	—	—	—	—	*OBTR* 254
18	—	—	—	Maekawa, *ASJ* 20, 99 2	—
20	*OBTR* 17	*ITT* 4 7268	Gomi, *ASJ* 3, 164 139	*CM* 26 148; *TCTI* 2 4219	—
20 (per 20 days)	—	—	*OBTR* 254	—	—
21 (per 20 days)	—	—	—	—	*OBTR* 254
24 (per 12 days)	—	—	*PPAC* 5 298; *TCTI* 1 649	—	—
30	*CM* 26 149; *Nisaba* 33 882	*ITT* 4 7381; Maekawa, *ASJ* 10, 92 5; 20, 97 1; *MVN* 6 216; *PPAC* 5 659; *Princeton* 1 566; *TUT* 177	—	*ITT* 2 4216; Maekawa, *ASJ* 20, 99 2; *TCTI* 2 2715; 3285; 3836	*ITT* 4 7381; Maekawa, *ASJ* 10, 92 5; 20, 97 1; *MVN* 6 216; *PPAC* 5 659; *Princeton* 1 566; *TÉL* 246
30 (per 20 days)	—	—	*OBTR* 254	—	—
40	—	*AAICAB* I/3 Bod. A 37; Gomi, *ASJ* 3, 166 144; Maekawa, *ASJ* 20, 97 1	—	*Nisaba* 33 853; *TUT* 170	*AAICAB* I/3 Bod. A 37; Maekawa, *ASJ* 10, 92 5; 20, 97 1; *MVN* 12 65
40 (per 20 days)	—	—	—	—	*CST* 881
50	*HLC* 1 184 pl. 13; *MVN* 12 51; 59; *Nisaba* 13 28; *OBTR* 69; *PPAC* 5 1126	*PPAC* 5 195	—	Maekawa, *ASJ* 20, 99 2	Maekawa, *ASJ* 10, 92 5; 20, 97 1

312. Note that še-ba is only clearly used to describe this compensation in *TUT* 172 (see just above), which also includes UN-il$_2$. Because this text does not itemize the amounts or kinds of compensation for eren$_2$ bala gub-ba and eren$_2$ bala tuš-a, it is omitted. Note that the allotment is specified as dabin in *TCTI* 2 2782 and zi$_3$ sig$_{15}$ in *TCTI* 2 2715.

Barley Amount (in sila$_3$)	bala gub-ba		bala tuš-a		
	ša$_3$-gal	**Unspecified**	**(a$_2$) hun-ga$_2$**	**ša$_3$-gal**	**Unspecified**
60	*LAOS* 1 16a+b; Maekawa, *ASJ* 11, 138 66; 20, 99 2 (coll.); *MVN* 12 45; 51; 54; 59; 113; 19 96; *Nisaba* 13 28; 18 107; *OBTR* 69; *PPAC* 5 1056; 1126; *SAT* 1 14; *UDT* 23; *WMAH* 72	*AAICAB* I/3 Bod. A 37; Gomi, *ASJ* 3, 166 144; Maekawa, *ASJ* 10, 92 5; 20, 97 1; *MVN* 12 65; *Nisaba* 10 26; *PPAC* 5 195; 659; Römer, *OMRO* 66, 54 19; *TÉL* 246; *TUT* 142	*CM* 26 104; 147; *MVN* 12 47	*CM* 26 105; Gomi, *BAOM* 2, 27 37; *MVN* 12 109; 110; 123; Maekawa, *ASJ* 11, 138 66; 20, 99 2; *Nisaba* 13 10; 33 853; *PPAC* 5 1056; *TCTI* 2 3904; *TUT* 170; *WMAH* 72	*AAICAB* I/3 Bod. A 37; Maeda, *ASJ* 9, 345 19; Maekawa, *ASJ* 10, 92 5; 11, 140 67; 20, 97 1; *MVN* 6 221; *PPAC* 5 659; *SAT* 1 295
60 (per 20 days)	—	—	*OBTR* 254	—	*CST* 881
80	—	—	—	—	*MVN* 12 65
90	Maekawa, *ASJ* 20, 99 2; *MVN* 12 90; 96; *OBTR* 9; *SAT* 1 25; *WMAH* 72	Maekawa, *ASJ* 10, 92 5; 20, 97 1	—	*MTBM* 234; *MVN* 12 95; *SAT* 1 352; *UDT* 48; *WMAH* 72	Maekawa, *ASJ* 10, 92 5; 20, 97 1; 99 2; *OBTR* 91; *PPAC* 5 1571
100	—	—	—	—	Maekawa, *ASJ* 20, 97 1
100 (per 20 days)	—	—	*CST* 881	—	—
120	—	—	—	—	Maeda, *ASJ* 9, 345 19

While there are several details that can be gleaned from these data, it appears that the compensation amounts that are either unspecified or explicitly ša$_3$-gal for both eren$_2$ bala gub-ba and eren$_2$ bala tuš-a tend to be fairly equivalent and often commensurate with conscription allotment rates. There are even a few examples that clearly indicate that this form of compensation is the same for both groups.[313] It is important to note that many of the lower rates may not have been monthly, as is indicated in *ITT* 4 7268 obv. 2–3, rev. 1: 20 eren$_2$ bala gub-ba 0.0.2-ta \ 20 eren$_2$ bala tuš-a 5 sila$_3$-ta … še dah-ha, which indicates that the amount was added barley rather than the total amount of barley. As for explicit wages for known periods, they range from 1 sila$_3$ a day, which is fairly low, to 5 sila$_3$ a day, which is more

313. See *PPAC* 5 659 obv. 1–4: [12] guruš 0.1.0 še lugal-ta \ [8] guruš 0.0.3-ta \ še-bi 3.1.0 gur \ eren$_2$ bala gub-ba eren$_2$ bala tuš-a-me; *Princeton* 1 566 obv. 1–3: 51 guruš 0.0.3 še lugal-ta \ še-bi 5.0.3 gur \ eren$_2$ bala gub-ba eren$_2$ bala tuš-a; *TCTI* 2 3727 obv. 1–2: 23.0.0 še gur-lugal \ ša$_3$-gal eren$_2$ bala gub-ba bala tuš-a; 4168 obv. 1, 3 5–8, rev. 4: 5.3.0 še gur … 3.3.0 gur … 4.4.0 gur ugula Šu-Eš$_4$-tar$_2$ \ dumu dab$_5$-ba-me \ 6.3.0 gur \ ša$_3$-gu$_4$-me … ša$_3$-gal dumu dab$_5$-ba ⌜bala⌝ gub-ba bala tuš-a-še$_3$; *TUT* 172 (see just above).

typical. In *TÉL* 246, many of the same individuals received 0.1.0 while they were eren$_2$ bala gub-ba and 0.0.3 while they were eren$_2$ bala tuš-a. Why the latter received less is not clear, but they may have been conscripted or hired for less time than the former.

In his study on the organization of work in Girsu/Lagaš, Studevent-Hickman (2006, 1:322) concludes that "half-time status was attached above all to the eren2 worker, who appeared in all economic households."[314] Nevertheless, he (2006, 1:138–40) draws attention to the predominantly full-time conscription of male citizens and UN-il$_2$, at least for the duration of such conscription periods, mainly for cultivation. His (2006, 1:276–78) in-depth analysis of *Priests and Officials*, 77, 96 App. 1a-b also clearly distinguishes between full-time and half-time conscripts. As can be seen from the text, those engaged in cultivation or managerial work were mainly but not exclusively full-time conscripts, whereas several involved in construction and manufacturing as well as nonproductive activities were conscripted half-time. While this text lists anonymous workers with age-bracket designations like Snell, *ASJ* 11, 182, it does not clearly designate every individual according to his social stratum, though it does specify certain individuals as male citizens and UN-il$_2$. Interestingly, according to the copy, there are several UN-il$_2$ notated with AŠ$_c$ who worked at ⅔, ½, and ⅓ rates (rev. i 7–10) when the AŠ notation is generally expected. In other texts, there are a few rare instances of workers involved in cultivation notated as ½$_c$, such dumu da-ba (*SAT* 1 414 obv. ii 4, 10), dumu-gu$_4$-gur (*SAT* 1 414 obv. ii 7), and engar (*MVN* 13 346 obv. iv 17', v 4').

With regard to certain balanced accounts dealing with agricultural work, Studevent-Hickman (2006, 1:300) observes that "they even record days off for UN.IL2 workers, as seen

314. Concerning one example of half-time conscripted eren$_2$, Studevent-Hickman (2006, 1:133) highlights *Amherst* 84, which he considers to be a list of "'hirelings of the governor in Gir2-su^{ki},'" but note that this text is collated and is a list of conscripted fullers and presumably one doorkeeper, including probably thirteen half-time conscripts (½$_c$ notation), along with elderly individuals and children.

routinely in the Umma^{ki} corpus." As noted on p. 205, the days off for male citizens were only recorded when they had days off for just part of the year. Accordingly, given that the balanced accounts *ITT* 2 621; Maekawa, *ASJ* 13, 222 69; *PPAC* 5 291; *TCTI* 1 742,[315] which all detail mainly cultivation for a few months each, only enumerate days off for UN-il$_2$ workers, it can be inferred that citizens were probably conscripted for half of the entire conscription period. The balanced account *MVN* 11 106 records the conscription of fishermen and related workers, including citizens, who were probably conscripted half-time, and a few UN-il$_2$, who had their typical days off, for thirteen months.[316]

geme$_2$ and their children were conscripted for their usual work in cereal grinding and especially textile production. In his discussion of a few balanced accounts of cereal grinding, Heimpel (2009, 70–71) observes that the ⅕ rate for days off was used, which apparently included some sick days. The balanced accounts *BCT* 2 49 and *TIM* 6 4 use this rate, however, for male and female individuals, which is unusual. Many of them were conscripted at the ½ rate, meaning that they would have had even more days off with the combination of the ⅕ rate or that they were not working at full output (see pp. 208–10). At least some of these individuals could have been citizens. The texts also itemize the numbers of various workers, including those who were not conscripted, for months or even briefer periods of time, so at least some of these individuals could have had gaps in their conscription periods, though they may have been conscripted in other accounts during those times.

The province of Girsu/Lagaš supported an enormous textile industry that included around ten thousand geme$_2$ and their children as well as other individuals, especially at Guabba where

315. *TCTI* 1 742 rev. i 3 may read: [u$_4$ tuš-a (igi-10-gal$_2$)] UN-il$_2$.

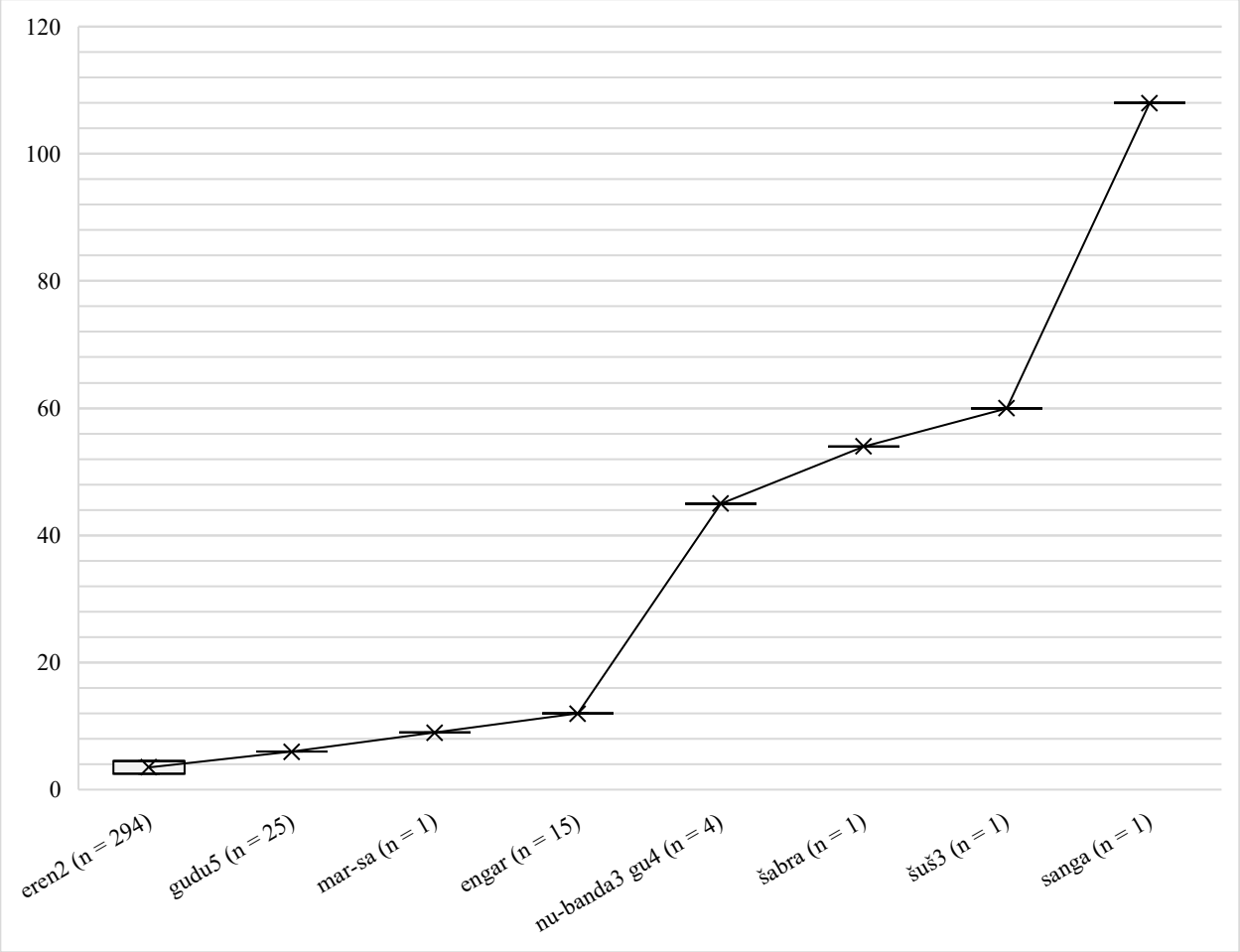
316. Obv. i 2 can perhaps be restored as [eren$_2$]-me.

textiles could be shipped across the Gulf region (see Steinkeller 2013e, 420–21; Waetzoldt 1972, 91–99). Waetzoldt (1972, 93) notes that these women were a mixture of free women (dumu-gir$_{15}$), donated women, and slaves, including prisoners of war. Based on the discussion of donated individuals here (see pp. 119–20), many of the donated women were probably female UN-il$_2$. In *TUT* 162, which is mostly intact, female citizens constituted a little less than 10 percent of the total count of women with age-bracket designations or who were recently deceased. These female citizens may have been conscripted because of penal work they owed or perhaps because they needed work to sustain themselves. None of them were notated with ½c, but this does not necessitate that all female citizens were conscripted full-time, as is indicated in *CT* 7 pl. 32 BM 18395; *STA* 10 (see 5.2.2.6. Penal Work). Studevent-Hickman (2006, 1:125–26) provides a helpful summary and tabulation of the various workers and their allotments in this textile industry overall, according to *Mycenaean, Diss.*, 211 1 BM 28417. Of the 6,423 extant women, not including elderly women, about 96.19 percent received either 0.0.3 or 0.0.4 whereas the small remainder received 0.0.5, 0.1.0, or even 0.1.4. Concerning their allotments as well as those for women grinding cereals, Maekawa (1980, 96) observes that "female millers received not 40 but 30 sìla in the last years of Šul-gi, while the majority of female weavers were given 40 sìla rather than 30."

Given the extensive study on šuku land in Umma, a few highlights concerning Girsu/Lagaš are added here. *CT* 9 pl. 47 BM 20015 is completely intact and offers a broad view of šuku land for eren$_2$ with unspecified occupations to various temple managers, such as a sanga and a šabra, the sizes of which are given in Graph 5.3.[317]

317. The šuku land for royal cooks in this text, which totaled 108 iku, is not included because it is not distributed according to each individual.

Graph 5.3. šuku-Land Sizes (in iku) in *CT* 9 pl. 47 BM 20015



As is expected, the managerial occupations had far larger šuku-land sizes than the rest. The size of 12 iku for fifteen cultivators is rather high in comparison to their sizes at Umma since their largest size was 12 iku and their arithmetic mean was roughly 5.92 iku. The increments of 2 ½ and 4 ½ iku for the eren$_2$, who were mostly citizens and possibly some UN-il$_2$, are a little smaller than the data at Umma, given that the modal sizes there were 3 iku for UN-il$_2$ and 6 iku for citizens. Perhaps they were smaller because many of these individuals may have received barley allotments during the months they performed bala work. šuku-land sizes for explicit male UN-il$_2$ are rarely attested, though there is some evidence in *CUSAS* 16 3 and *MVN* 6 300. *CUSAS* 16 3 rev. iv' 1–3 reads: [… U]N-il$_2$ \ [šu-nigin$_2$] UN-il$_2$ 1.0.0 gan$_2$ 4.0.0 gur \

šu-nigin$_2$ 4 UN-il$_2$ 0.2.0 gan$_2$ 4.0.0 gur. Since the distributive -ta is utilized for totals elsewhere in this text, perhaps the four UN-il$_2$ with a total of 12 iku may have had 3 iku each. If these UN-il$_2$ did receive sizes of 12 and 18 iku each, that would still be within the known range for their sizes at Umma. As for *MVN* 6 300 obv. ii 8, there are eight UN-il$_2$ who received 6 iku each.

5.2.2.4. Urusagrig

The data from Urusagrig concerning conscription are limited and unique, particularly because of the unusual social-strata designations utilized there and the presence of the royal household. Its northern location also distinguishes it from Girsu/Lagaš and Umma. Terms for citizens include eren$_2$ and nu-dab$_5$, the latter of which is used for male and female individuals and may not always refer to citizens. MAŠ.EN.GAG refers to individuals who do not fit well into the tripartite system in southern Babylonia. Male UN-il$_2$ are attested in a few dozen texts, and the term geme$_2$ is also widely attested, though its specific meaning is ambiguous as usual. The term arad$_2$ is used frequently for individuals in a variety of subservient statuses, including citizens functioning as servants, and slaves, many of whom were prisoners of war. In Owen, *Studies Milano*, 351 16, which is a large inspection of cultivation personnel, male individuals and their sons are either nu-dab$_5$, MAŠ.EN.GAG, or arad$_2$. Perhaps at least some of the arad$_2$ were servants, especially because there were over seventy-five of them organized in two- and three-generation families.

There is not much evidence about the part-time or full-time conscription of male citizens and UN-il$_2$. MAŠ.EN.GAG appear to have been always conscripted full-time, often as assistants or with specifically agricultural and pastoral occupations, among a few others, but the periods of

such conscription are not given.[318] The phenomenon of days off for UN-il$_2$ is attested,[319] but not their rates or their durations over conscription periods. The use of ½$_c$ and AŠ$_c$ notations for nu-dab$_5$, many of whom happened to be citizens, varies according to occupation in much the same way as in Umma (see pp. 214–19), which is evident in Table 5.19.

Table 5.19. ½$_c$ Notation vs. AŠ$_c$ Notation for nu-dab$_5$ in Urusagrig according to Occupation

Occupation	Conscription Notation	
	½$_c$	**AŠ$_c$**
ašgab	*CUSAS* 40/2 1572 obv. 1, 3 (both coll.)	—
azlag$_7$	*CUSAS* 40/2 503 obv. 1, rev. 1	—
dub-sar gu$_4$ 10	—	Owen, *Studies Milano*, 351 16 obv. i 1
engar	—	*Nisaba* 15/2 165 rev. iv 16';[320] Owen, *Studies Milano*, 351 16 rev. iii 19 (CDLI)
eren$_2$ diri	—	*Nisaba* 15/2 236 obv. 1–2, 6–7, rev. 4
gab$_2$-us$_2$	—	*Nisaba* 15/2 240 obv. 1, rev. 2
kir$_4$-dab$_5$	—	*Nisaba* 15/2 374 obv. 1, 7; 377 obv. 1, 4
kisal-luh	—	*Nisaba* 15/2 400 obv. 3, 7
lu$_2$-mun	*CUSAS* 40/2 752 obv. 1, 5; *Nisaba* 15/2 33 rev. 3[321]	*Nisaba* 15/2 33 obv. 4, 9
nagar	—	Owen, *Studies Milano*, 351 16 rev. iv 15
nu-banda$_3$ gu$_4$	—	Owen, *Studies Milano*, 351 16 obv. i 10, iii 21
šabra	—	*Nisaba* 15/2 165 obv. i 1, rev. iii 3'[322]
ša$_3$-gu$_4$	—	*CUSAS* 40/2 253 obv. 1, rev. 1; *Nisaba* 15/2 400 obv. 1, 7; 444 obv. 1; Owen, *Studies Milano*, 351 16 rev. iv 3[323]

318. See *CUSAS* 40/2 114; 503; 1566; *Nisaba* 15/2 146; 150; 164; 165; 234; 273; 276; 356; 395; 524; 1084; Owen, *Studies Milano*, 351 16. Though *Nisaba* 15/2 1026 does not specify work rates, it documents several MAŠ.EN.GAG as engar (obv. i 3, 8, 12, 16–17, ii 3, 11, 15, 20).

319. See *CUSAS* 40/2 18; 25; 46; 433; 609; 744; 1397; 1732; 1834; *Nisaba* 15/2 114a+b; 571 (?); 616.

320. There are other cultivators in this text (rev. iv 17'–18'), but their notations are difficult to confirm due to the quality of the tablet.

321. For lu$_2$-mun, see rev. 7 (coll.).

322. Note that šabra-[me] (rev. iii 9') should be šabra [i$_3$-dab$_5$].

323. While this line is transliterated as ⌜šu-nigin$_2$⌝ ⌜x⌝ guruš, it is clear that the individuals are notated with an uncertain number of AŠ$_c$ wedges.

Whereas many of these occupations are conscripted full-time, their conscription periods are not known. *Nisaba* 15/2 73; 291;[324] 292; 658 indicate that the conscription period for cultivation could be a twelve- or thirteen-month year. Due to damage or formatting, these texts do not document any days off, but there may have been days off at rates and durations like those in Umma texts for the same kind of work, especially since male UN-il$_2$ had days off. While some of these craft workers were conscripted half-time, they could also be conscripted for brief periods of mainly cultivation and construction, including bala work.[325] Since various individuals, probably mostly or only male citizens, could hire themselves out, they could not have been conscripted full time.

While the evidence concerning conscription rates is difficult and limited, there is plenty of information about allotments, which are also unique. Owen (2013, 96) elaborates upon the allotment of food and drinks as follows:

> The unique rationing system utilized at Iri-Saĝrig is one of the many surprises found in the archive. The hundreds of royal messengers, officials and functionaries present in Iri-Saĝrig were supplied with a generous diet of meat (usually but not exclusively mutton), soup/stew and fish along with breads, sweets, and beer. …
>
> Aside from the numerous messengers and officials, various rations were provided in Iri-Saĝrig for weaver-women (géme-uš-bar), sesame presser-women (géme-ì-sur-sur), blind (si$_{12}$-a) male and female workers, etc., who elsewhere usually receive meager rations, but are supplied in Iri-Saĝrig with seemingly generous amounts of beef, mutton, pork, lard, fowl, and fish. … In addition, blind workers (si$_{12}$-a) digging canals (*Nisaba* 15/2 78) or in gardens (*Nisaba* 15/2 78) receive bowls of soup/stew. Male and female singers/musicians (nar-munus/níta) are recorded in different contexts. In one text female singers/musicians receive sesame oil (*Nisaba* 15/2 1004), while in another text 20 male singers/musicians receive 10 shekels each of sesame oil (*Nisaba* 15/2 309). Šuruš-kin, an ordinary singer/ musician, is provided with roast mutton (*Nisaba* 15/2 211) and in a messenger text Naplis-Ea, a royal singer/musician, receives soup/stew and fish (*Nisaba* 15/2 868). Šu-Suen-naram-Eštar, a senior singer/musician (nar-gal), receives 15 liters of beer and 15 liters of bread (*Nisaba* 15/2 887: 42), and elsewhere, he receives one *malaku*

324. IM 226991 (BDTNS 198827) lists the same individuals in *Nisaba* 15/2 291 but does not specify the conscription period.

325. See *CUSAS* 40/2 595; 1538; *Nisaba* 15/2 494; 547; 740; 914; 915.

> of mutton (*Nisaba* 15/2 738: 92'), and hundreds of sheep and goats (*Nisaba* 15/2 971: 31). … I know of no other contemporary archival source that provides such data.

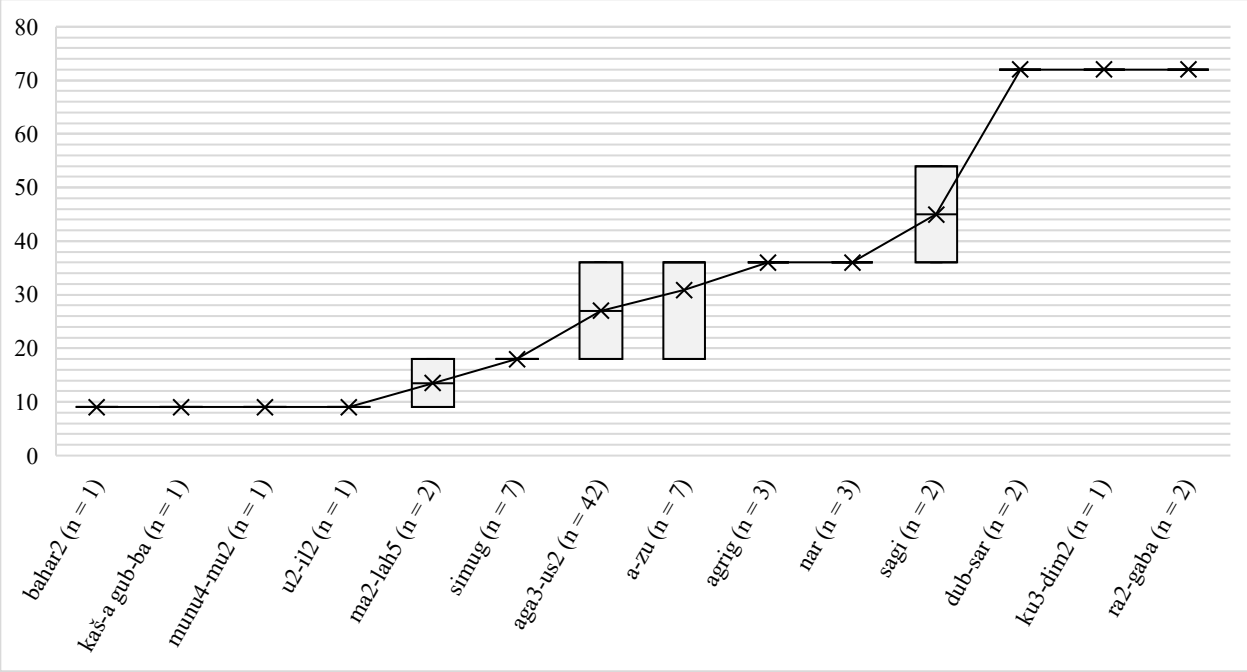
While Owen singles out certain groups of individuals that received these diverse and unique rations, $eren_2$, MAŠ.EN.GAG, male UN-il_2, and $arad_2$ in various contexts also received these kinds of allotments.[326]

In addition to allotments of foods and drinks, many individuals, mostly male citizens probably, received šuku land. While gan_2 is not used to indicate šuku land in inspections and similar texts, the terms gan_2 dab_5-ba and šuku dab_5-ba indicate such allotments. The former term is attested, for example, with regard to servants in a royal household in *Nisaba* 15/2 877 obv. i 9–10: $arad_2$ e_2-gal-me \ gan_2 dab_5-ba-me. The latter term is seen in *Nisaba* 15/2 797 rev. i 14, in which case it applies to a variety of male individuals notated with $AŠ_c$. There are also several texts that provide specific sizes for individuals, many of whom with known occupations.[327] *Nisaba* 15/2 892 is mostly intact and includes sizes for a variety of occupations, which are given in Graph 5.4.

326. Several examples include *CUSAS* 40/2 18; 106; 128; 134; 146; 324; 433; 620; 659; 675; 815; 849.

327. See, for example, BDTNS 173167; 197168; *Nisaba* 15/2 269; 688; 1065.

Graph 5.4. šuku-Land Sizes (in iku) according to Occupation in *Nisaba* 15/2 892



Note that the wife of one of the scribes received šuku land significantly larger than her husband's that was 108 iku (rev. i 19 [coll.]). While the general sequence of these sizes from smallest to largest seems reasonable, many of these sizes are rather large in comparison to similar data from Umma, perhaps due in part to the lack of large temple households. *Nisaba* 15/2 918 also provides enormous šuku-land sizes for managerial occupations, such as 1080 and 497 iku for two šabra's and 497 iku for a dub-sar gu_4 (obv. ii 4–rev. i 2).

5.2.2.5. Substitutions

Steinkeller (2013c, 367) suggests that the "administrative officials and the high-status individuals such as merchants" in *MVN* 15 390 (see pp. 211–14) could have provided substitutes, such as "junior kinsmen of the individuals in question, or their servants or chattel slaves, or perhaps even hired menials [UN-il_2]," to perform their bala work on their behalfs, though he notes that

evidence is sparse. Similarly, Miki Ishikida (1999, 63–65, 84) notes that individuals could pay silver to satisfy their obligations or hire substitutes for themselves to perform *ilkum* work during the Old Babylonian period.[328] Studevent-Hickman (2006, 1:250) highlights the usage of the phrase PN_1 sag PN_2(-$še_3$) in certain contexts, meaning that PN_1 is a substitute for PN_2,[329] and the phrase PN_1 mu PN_2(-$še_3$) also functions the same way.[330] The phrase PN_1 lu_2 PN_2 may also indicate substitutions in some contexts, not including texts from Puzriš-Dagān.[331] Depending on context, PN_1 $arad_2$ PN_2 may indicate the substitution of a slave (PN_1) for his owner (PN_2). It is probably the case that mostly, if not only, male citizens could provide substitutes for themselves, but the social strata of several individuals in the examples below cannot be easily determined.

Three possible examples of substitution for bala work are the Umma texts *AnOr* 1 88 obv. iii 10, rev. vii 27: 1 $Arad_2$ lu_2 La-a-mu … ⌜$eren_2$ bala-$še_3$⌝ e_3-e_3 (see n. 141), Deimel, *OrSP* 26, 63 IB 183 obv. 1–2, rev. 2: la_2-i_3 1 Ur-^{d}Ma-mi \ mu Lu_2-^{giš}gigir-re-$še_3$ … la_2-i_3-am_3 ki bala-a; Englund, *CDLJ* 2003, 1 1 Erlenmeyer 152 obv. i 12: gab_2-ra ^{giš}Apin-du_{10} mu Ku_3-ga-ni-$še_3$ (see Table 5.8 for bala work) and *Nisaba* 24 28 obv. ii 31, 32 (translit. mine), 33, rev. vi 2: $AŠ_c$ 0.1.1 5 Ur-^{d}En-ki \ <DIŠ$^{?}$> 0.0.1 dumu $nita_2$-ni \

328. For further evidence of silver payments or substitutes for conscription in the Early Dynastic and Old Babylonian periods, see Bartash 2020, 31 n. 6, and Stol 1995, 298–300, respectively.

329. Note, however, that in his comment on *DAS* 266 obv. 2, Studevent-Hickman (2006, 1:250 n. 271) understands the phrase to be PN_1 sag PN_2 when it is actually PN_1 sag PN_2-$še_3$). He (2006, 1:250) also translates sag Ur-^{d}Hendur-sag-$še_3$ (*TCTI* 2 4078 obv. 3) as "as a replacement for Ur-^{d}Hendur-sag" but sag Lugal-ra-gaba-<$še_3$> (*TCTI* 2 4078 rev. 1) as "As a slave <for> Lugal-ra-gaba."

330. See Loding 1974, 208–9 and n. 24. See also, for example, Molina's (2020c, 7) translation of a list of workers from Girsu/Lagaš, namely 1 Lugal-pa-e_3 mu Ur-sa_6-ga-$še_3$ \ 1 Nig_2-$ša_3$-ge mu Ur-gu-la-$še_3$ \ 1 Ur-^{giš}gigir mu Ur-^{d}Utu$^{?}$-$še_3$ (*LDAS* 8, 13 2 rev. ii 7–9) as "Lugal-pa'e, on behalf of Ursaga; Niĝ-šage, on behalf of Urgula; Ur-gigir, on behalf of Ur-Utu$^{?}$." The phrases PN_1 mu PN_2(-$še_3$) and PN_1 sag PN_2(-$še_3$) are also used for substitutes of deceased individuals, as seen in texts from Girsu/Lagaš (*BPOA* 2 1904; *Nisaba* 33 310; *PPAC* 5 1487) and Urusagrig (*CUSAS* 40/2 253).

331. I am indebted to Eric Aupperle for this suggestion.

sag Šeš-kal-la-še$_3$ … še-ba giri$_3$-se$_3$-ga bala-a. Unfortunately, the relationships between these individuals and the circumstances of these possible substitutes are uncertain. There may also be a few examples of the substitution of slaves for their owners for bala work, including the Umma texts *AnOr* 1 88 obv. iii 10, 30–31: 1 A$_2$-nin-ga$_2$-ta arad$_2$ Ša$_3$-a[d]-da \ 1 E$_2$-ur$_2$-bi arad$_2$ Ha-la and *TCL* 5 6038 obv. iii 14: 1 Lugal-a$_2$-mu arad$_2$ Ma-an-sum a-ga-am.[332]

In one instance there could be a substitution of a known UN-il$_2$ for a possible citizen in *Santag* 6 384 rev. v 14': AŠ$_c$ 0.1.1 5 4 UN Lugal-he$_2$-gal$_2$ mu Šeš-kal-la-še$_3$ \ DIŠ 0.0.1 5 1 ½ Lu$_2$-^{d}Šara$_2$ dumu-ni. If this is the case, then the UN-il$_2$ Lugalhegal and his son may have been dependent on Šeškala to some extent, but this is not clear. Since citizens can donate UN-il$_2$ in various contexts, perhaps they could have provided them as substitutes. It is interesting to note that in *Nisaba* 24 28 documented just above, Ur-Enki and his son may have been UN-il$_2$. While the social strata of the various individuals in this text are not certain, several are known elsewhere to be UN-il$_2$ (see n. 292).

There are also a few possible examples of substitution, including slaves for owners, in terms of military service as well as several others in various contexts.[333] In *Nisaba* 24 23 obv. iii 18–19, which lists eren$_2$ conscripted for military service (see rev. iv 7), Urgigir, son of

332. See also the Umma text *YOS* 15 115 obv. 26–27: AŠ$_c$ 0.1.0 Lugal-a$_2$-mu \ arad$_2$ Ma-an-sum a-ga-am. While it is not very clear, another example may be *HLC* 2 104 pl. 94 rev. 6–7: šu-nigin$_2$ 10 la$_2$ 1 eren$_2$ šu-nigin$_2$ 10 la$_2$ 2 arad$_2$ \ eren$_2$ bala gub-ba.

333. For examples involving eren$_2$ attached to temple households in Girsu/Lagaš, see Römer, *OMRO* 66, 41 10; *SNAT* 209; 213; *TCTI* 1 723 rev. iii 48. Some examples with damaged or uncertain contexts include texts from Girsu/Lagaš (*BPOA* 2 1910; *HLC* 2 56 pl. 74 obv. i 8–9; *MVN* 9 118; *SAT* 1 414 obv. ii 10–12), Umma (*BPOA* 2 2557 obv. 7; *CUSAS* 40/2 736 obv. 7 [lists the same individuals in *BPOA* 2 2557 as stated on p. 210]; *SNAT* 325 [note that I$_3$-tur-ra in obv. 3 is a name rather than an uncertain phrase according to Civil 2011, 277 n. 119]; *YOS* 4 232 obv. ii 10–11 [may deal with "Frondienste (?)" according to Koslova 2008, 175]), and Ur (*UET* 9 532; 552 [?]; 585 [see Loding 1974, 208–9 and n. 24; Neumann 1993, 56 n. 245]). As for possible substitutions of slaves for owners, see several texts from Girsu/Lagaš (*AAICAB* I/3 Bod. B 22 (129) obv. 8, rev. 10; *MVN* 13 321 rev. i 5', 7'–8'; *PPAC* 4 282 obv. ii 7') and Umma (*Princeton* 1 556 obv. i 16; *Santag* 6 384 obv. ii 28'–30'; *YOS* 4 232 obv. ii 8).

Urabbasig, appears to serve as a substitute for the cook Ludingira.[334] One limitedly traceable example of the possible substitution of a slave for an owner in various Umma texts is given in Table 5.20.[335]

Table 5.20. Urmes, Slave of Lugalezem, in the Umma Texts
BIN 5 272; *SAT* 2 749; and *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1

***SAT* 2 749 (AS 3/-/-)**		***BIN* 5 272 (AS 3/xii*/-)**		***Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 ([-]/[-]/[-])**	
Line	**Transliteration**	**Line**	**Transliteration**	**Line**	**Transliteration**
obv. 1 (coll.)	200 guruš u_4 1-$še_3$	rev. ii 1'	200 guruš u_4 1-$še_3$	—	
obv. 2 (coll.)	a_2 Ur-mes	rev. ii 2' (translit. mine)	a_2 Ur-mes $arad_2$ [Lugal-ezem(-ka)]	rev. iv 13'	$uš_2$ Ur-mes $arad_2$ Lugal-ezem
obv. 3	$arad_2$ Lugal-ezem-ka				
obv. 4	ki Lugal-gu_4-e-ta	—		—	
obv. 5	Lugal-mu-ma-ag_2	rev. ii 3'	kišib Lugal-mu-˹ma˺-[ag_2]		
obv. 6	i_3-dab_5	—			

While the details of this possible substitution are limited, it is at least coincidental that the two hundred workdays provided by Urmes over the course of a year is equivalent to the higher rate of workdays owed in *MVN* 15 390. It is even more coincidental that one individual who owed two hundred workdays in that text was the šabra Lugalezem (see obv. i 31–32, viii 8–9, rev. iv 13–14). Besides these possible substitutions, there are numerous examples structured like these in parallel texts of prisoners (see p. 251).

334. Note that this Ludingira the cook may also be listed in *Nisaba* 11 19 obv. ii 16 with a house size of 3 sar (see pp. 140–44).

335. The connection between *BIN* 5 272 rev. ii 1'–3'; *SAT* 2 749 is observed in Studevent-Hickman 2006, 1:41–42. For the date of *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1, see n. 185.

5.2.2.6. Penal Work

For a variety of reasons, male and female individuals of the various social strata could be conscripted for penal work. The main reasons were probably unexcused absences and unpaid debts to royal and institutional households. When engaging in penal work, these individuals are often referred to as prisoners (he$_2$-dab$_5$), and their social strata are rarely specified.[336] *Nisaba* 24 5, for example, lists about two dozen conscripted prisoners engaged in penal work. None of them have social-stratum designations, though several are known to be UN-il$_2$ elsewhere.[337] Several individuals were explicitly returned from their unexcused absences (zah$_3$ ba-al-la-ta). As is noted on p. 183, this text may indicate that prisoners had smaller allotments than they otherwise would have had. In a recent unpublished study, Eric Aupperle and Taha Yurttas estimate that there were 300 to 600 prisoners in Girsu/Lagaš.

While delinquent individuals were often directly penalized, their relatives or slaves could also be subjected to penal work. When male citizens were absent from work, their wives and sometimes daughters or sisters could be forcibly conscripted (^{giš}tukul-e dab$_5$-ba-me) on their behalves, as indicated by the phrase dam eren$_2$ zah$_3$, which is attested in several texts from Girsu/Lagaš, three of which are presented in Table 5.21.[338]

336. The social strata of prisoners are specified in *CT* 3 pl. 9 BM 18344; *Mycenaean, Diss.*, 220 8 BM 13661, *SAT* 1 434, among possible others.

337. Several examples include A(ya)kala, Munusam, Šuimbi, Abbagena, and Ur-Bilgames (obv. i 1, ii 1–2). Note that while *Nisaba* 24 5 obv. i 1 is difficult to collate, IR$_3^{l}$(NIN).AN could be Munus-am$_3$ or a similar name. A(ya)kala and Munusam were UN-il$_2$ in *BPOA* 6 35 obv. 3–4, Šuimbi was an UN-il$_2$ in *CUSAS* 39 132 rev. ii 2, and Abbagena and Ur-Bilgames were UN-il$_2$ in *CUSAS* 39 135 obv. v 26, among other texts.

338. See also *HLC* 2 33 pl. 68 rev. i 2, ii 1–2: AŠ$_c$ Gu$_4$-KU dam Lu$_2$-ga im-e taka$_4$-a mu ba-zah$_3$-še$_3$ … AŠ$_c$ Nin-nam-ha-ni \ dam Lugal-pa-e$_3$ eren$_2$ mu ba-zah$_3$-še$_3$ and Maekawa, *ASJ* 20, 106 6 in which it is attested numerous times.

Table 5.21. Examples of dam eren$_2$ zah$_3$

HLC 1 30 pl. 29		*HLC* 3 374 pl. 141		*PPAC* 4 282	
Line	**Transliteration**	**Line**	**Transliteration**	**Line**	**Transliteration**
rev. ii 8'	AŠ$_c$ 0.0.3 SI.A-tum dam Ur-nigar$_x^{gar}$ mu zah$_3$-še$_3$	rev. i 6	AŠ$_c$ 0.0.3 Geme$_2$-^{d}Nun-gal	—	
		rev. i 7	mu Lu$_2$-^{d}Nin-šubur dam-ni ba-zah$_3$-še$_3$		
rev. ii 9'	i$_7$ BAD-^{r}ta^1				
rev. ii 10'	AŠ$_c$ 0.0.3 Nin-ur$_2$-ra-ni dam Ur-^{d}Lamma eren$_2$ mu zah$_3$-še$_3$	rev. i 8	AŠ$_c$ 0.0.3 ^{d}Ba-u$_2$-nin-am$_3$		
		rev. i 9	mu Nig$_2$-^{d}Ba-u$_2$ šeš-a-ni ba-zah$_3$-še$_3$		
rev. ii 11'	AŠ$_c$ 0.0.3 Nar-zi dam Ur-^{d}Ba-u$_2$ eren$_2$ mu ba-zah$_3$-še$_3$	rev. i 10	AŠ$_c$ 0.0.3 Nin-inim-ge-na		
		rev. i 11	mu Lugal-^{r}x^1 dam-ni ba-zah$_3$-še$_3$		
rev. ii 12'	Du$_6$-lugal-DU-ta				
rev. ii 13'	AŠ$_c$ 0.0.3 A$_2$-li$_2$ dam Arad$_2$ zah$_3$	rev. i 12	AŠ$_c$ 0.0.3 Geme$_2$-^{d}A-gi-^{r}mu$_2$^{1}	rev. ii 5	AŠ$_c$ 0.0.3 Geme$_2$-x x x dumu Lugal-ma$_2$-gur$_8$-^{r}re^1 giri$_3$ Nu-banda$_3$-zi mu ba-zah$_3$-še$_3$
		rev. i 13	mu Ur-e$_2$-bar$_6$-bar$_6$ dam-ni ba-zah$_3$-še$_3$		
rev. ii 14'	AŠ$_c$ 0.0.3 Ši-la$^?$-x dumu Nig$_2$-bi	rev. i 14	AŠ$_c$ 0.0.3 Geme$_2$-eš$_3$-ku$_3$-ga	rev. ii 6	AŠ$_c$ 0.0.3 Geme$_2$-e$_2$-kar-re dumu Nam-ha-ni eren$_2$ mu ba-zah$_3$-še$_3$
		rev. i 15	mu E-la-ak-šu-qir$^!$ dam-ni ba-zah$_3$-še$_3$		
rev. ii 15'	E$_2$-duru$_5$-sipa-e-ne-ta	rev. i 16	a$_2$ im-ta		
		rev. i 17	----------	==========	
rev. ii 16'	dam eren$_2$ zah$_3$-me	rev. i 18	dam eren$_2$ zah$_3$-me	rev. ii 7	dam eren$_2$ zah$_3$-a-me
…					
rev. iii 7	uš-bar-še$_3$	rev. i 19	uš-bar-še$_3$		
…		…			
		rev. ii 3	šu-nigin$_2$ 10 la$_2$ 1 geme$_2$ dumu-gir$_{15}$		
		…		…	
rev. iii 22	^{giš}tukul-e dab$_5$-ba mu-ku$_x$(DU)	rev. ii 6	[x-x] u$_3$ geme$_2$ guruš ^{giš}<tukul>-e dab$_5$-ba-me	rev. ii 9	geme$_2$ guruš ^{giš}tukul-^{r}e-dab$_5$^{1}-ba
…					
le. ed. i 1	5 dam eren$_2$ šu bar-ra 2 dumu eren$_2$-na				

In *HLC* 1 30 pl. 29, these five conscripted women appear to have been released (šu bar-ra), but this is unclear. Perhaps their penal work ended around the time they were documented in the text. In *HLC* 3 374 pl. 141, these five conscripted women are designated as geme$_2$ dumu-gir$_{15}$, along with four other women designated as dumu-gir$_{15}$ (see obv. ii 15–20), which further establishes that they and their husbands and relatives were all citizens. There are also three

mentions of dam eren$_2$ in Girsu/Lagaš texts presumably referring to conscripted wives and relatives (see Gomi, *ASJ* 3, 173 169 obv. 3; Maekawa, *ASJ* 10, 92 5 obv. ii 18'; 20, 97 1 rev. i 19), but it is not clear whether they are substituted in the same manner documented above.

As for unpaid debts to royal and institutional households, there are a few instructive examples of relatives of delinquent individuals subjected to penal work. Three examples specify that livestock were owed, which are the Girsu/Lagaš text *STA* 10 and the Umma texts *BPOA* 2 2553; *TIM* 6 55. In *STA* 10, several women, who were probably citizens, were conscripted because of livestock owed by their fathers or husband, as seen in rev. ii 17–24 (translit. mine): ½$_c$? 0.0.3 Az-am$_3$ \ dumu Ur-^{d}Lamma engar \ AŠ$_c$ 0.0.3 Geme$_2$-^{d}Suen \ dam NINA^{ki}-du$_{10}$-da \ ½$_c$? 0.0.3 Nin$_9$-NE-mu \ ½$_c$? 0.0.3 Nin-lu$_2$-sa$_6$-sa$_6$ \ dumu Ur-temen-na unu$_3$ \ mu gu$_4$ la$_2$-i$_3$-še$_3$.[339] In *TIM* 6 55, the wife and daughter of an assumed citizen were conscripted as weavers on account of the livestock he owed, as seen in obv. ii 9–12: 1 ab$_2$-mu-3 \ 1 gu$_4$ giš \ su-su Lugal-^{giš}gigir-re nu-su \ mu-bi-še$_3$ Nin$_9$-ab-ba-na dam-ni Ama-ge-na dumu-ni uš-bar-še$_3$ ba-ab-dib. The formatting of *BPOA* 2 2553 is less clear, but still similarly structured, as seen in obv. 11–12: 1 gu$_4$ giš su-ga engar mu-bi-še$_3$ \ Geme$_2$-^{d}Utu dam-ni uš-bar-še$_3$ ba-ab-dib. These debts could be repaid, of course, as is noted by Wilcke (2006, 109 and n. 126) in his discussion of *STA* 7 obv. i 15'–16': 3 gu$_4$ Ur-temen-na unu$_3$ \ mu dumu munus-a-ni 2-am$_3$ e$_2$-HAR.HAR ba-gen-na-še$_3$. Here an individual provided livestock on behalf of his two daughters who were grinding cereals as penal work.

Besides these examples dealing with owed livestock, there are also a few instances of unspecified debts, such as *CT* 7 pl. 32 BM 18395 obv. 17–rev. 8: ⌜½⌝ 0.0.3 Geme$_2$-^{d}Šul-pa-

339. The notation ½$_c$? is ½ according to the copy, but ½$_c$? is suggested due to its juxtaposition to AŠ$_c$. Note that not all individuals given in this excerpt may apply to this penal-work situation.

e$_3$ \ dam Si-du$_3$ \ ½ 0.0.3 Geme$_2$-munu$_4$-ku$_3$-ga \ dam Lugal-^{giš}gigir-re \ Ur-^{d}Šul-pa-e$_3$ i$_3$$^{!}$-dab$_5$ \ ½ 0.0.3 Ha-la-^{d}Ba-u$_2$ dumu Lu$_2$-^{d}Nanna \ A-ba-ne$_2$-si$_3$-ge i$_3$-dab$_5$ \ mu la$_2$-i$_3$-še$_3$ and *CT* 10 pl. 24 BM 14313 rev. ii 22 (translit. mine): 6$^{?}$.0$^{?}$.0$^{?}$ Geme$_2$-Nin-banda$_3$^{da} geme$_2$ Lu$_2$-^{d}Nin-šubur ma$_2$-lah$_5$ mu la$_2$-i$_3$. In the first example, all the women are probably citizens, and they were conscripted half-time in comparison to all but one of the other individuals in their text. As for the second example, Geme-Ninbanda is conscripted on behalf of her owner, but the preceding 6$^{?}$.0$^{?}$.0$^{?}$ is uncertain and could be 6(AŠ), though that does not seem to work either.

There are also apparent substitutions in numerous parallel texts from Girsu/Lagaš concerning prisoners grinding cereals in Sagdana.[340] While the circumstances of the substitutions are not clear, it appears that many of the substitutions were consistent over several months. In addition to these substitutes, there are several slaves who were probably substitutes for their owners (see Uchitel 1984, 86).

5.2.3. Hired Work and Wages

The hiring of citizens to fulfill mainly agricultural, construction, and transportation tasks that were not completed with conscription was integral to the royal and institutional economies, which regularly experienced worker shortages, and was therefore widely attested (see Steinkeller 2015a, 19–24).[341] According to Maekawa's (1989, 49) survey, the typical wage, at least in

340. There are at least thirty-two such texts, twenty-five of which are discussed in Uchitel 1984 (Texts A–Y). The seven additional texts are *CDLB* 2021: 5 §4.7; CDLI P210006; *PPAC* 5 620; Subastas Durán - Ifergan 875304; *PPAC* 5 8; *Nisaba* 33 306; Uchitel, *ASJ* 18, 226 HSM 6453.

341. Hired individuals are attested perhaps between 2,000 and 3,000 times in numerous proveniences, including Adab, the Aradmu archive, GARšana, Girsu/Lagaš, Nippur, Puzriš-Dagān, Sippar (Tell Abū Ḥabba), the Šāt-Eštar archive, Šuruppag, the Tūram-ilī archive, Umma, Ur, and Urusagrig.

Umma, was 6 sila$_3$ per day for male individuals, though wages could be paid in silver as well. Although it is difficult to determine who exactly was hired and how, Steinkeller (2015a, 22) lays out several important elements of the hiring process accordingly:

> How and from where was the hired labor obtained? This question is not easy to answer, since the information about the hirelings usually is limited to their numbers and the volumes of their wages. Certain facts are clear, however. In the context of provincial economies, many of the hired workers were subordinates of temple households and other local organizations (such as the households of the governors), who, as described earlier, were liable for corvée. After this corvée service (bala) was over, during the remaining part of the year these individuals routinely hired themselves out for wages, most commonly, to the same institution they were associated with, and to which they owed their corvée. While this was one important source of hired labor, it may be conjectured that significant numbers of hirelings were additionally recruited from among the free populations of other provinces, either those associated with institutional economies or the members of the royal sector.

As discussed above (see pp. 66, 232–33), Maekawa demonstrates that citizens tended to hire themselves out during their days off from conscription. In addition to texts treated by Maekawa, there are numerous others that to appear to contrast work provided by hired individuals with that provided by UN-il$_2$, which likewise suggests that citizens were mainly able to hire themselves out.[342] There are, however, a few texts that may document hired UN-il$_2$.[343] There are also a few instances of hired geme$_2$ receiving generally 3 sila$_3$ per day, whom Steinkeller (2015a, 23) considers to be female UN-il$_2$ and "loaned by their home institutions to other temple households in exchange for wages." Whether these hired UN-il$_2$ or their home institutions received these wages is not certain.

In order to clarify several details about hired individuals, an investigation of prosopographical data is illustrative. While the vast majority of documented hired workers are

342. See texts from Girsu/Lagaš (*CUSAS* 16 69; 379; 556; *MVN* 6 417; *Mycenaean, Diss.*, 220 8 BM 13661; *PPAC* 5 244; *RTC* 409; *TCTI* 2 2787; 3796+3801; *TUT* 101) and Umma (*BE* 3/1 83; Civil, *Studies Sigrist*, 36; *CUSAS* 39 155; 156; Fish, *MCS* 8, 52 Liv 51 63 13; *Nisaba* 24 7; 10; *TCL* 5 5675; 5676; TIM 6 1; *UTI* 4 2883).

343. For evidence from Garšana, see Heimpel 2009b, 64, 226. See also texts from Girsu/Lagaš (Lecompte and Pariselle, *Iraq* 79, 117 15; *PPAC* 5 354; 1149; *SNAT* 121) and Umma (*Nisaba* 9 109 obv. 1). Several of these texts may need collations and further consideration. The Girsu/Lagaš text *PPAC* 5 88 is likewise ambiguous.

anonymous, there are several texts that name such individuals.[344] Although it is difficult to identify many of these hired individuals in other texts, several can be traced in *Nisaba* 23 56, which names male individuals hired for excavation. Those discussed here are the salt collectors Lu-Enlila and Gu'ugu (obv. i 2–3),[345] the builders Gibaba, Inim-Šara, and Ur-Šulpae (obv. i 6, 12), the smith brothers Lugalinimgena and Urediri (obv. ii 5, 7), the silversmith Ur-Šulpae and his brother Ludingira (rev. i 6, 8), and the archivist Ur-Šara (rev. ii 5). Lu-Enlila and Gu'ugu (or Gu'ugug) are attested, sometimes in proximity, in other texts carrying out their work as salt collectors as well as in various other contexts.[346] In other texts, Gibaba (or Gimama) received a gur of barley in Puzriš-Dagān (*AUCT* 3 453),[347] sold a house (*MVN* 3 213), was listed among other workers in an unclear and somewhat broken context (*Nisaba* 23 34), and received a barley allotment of 3 ban$_2$ (*OrSP* 47-49 326). Elsewhere Inim-Šara was conscripted full-time for ten months twice for work as a builder (*SAT* 3 1663 obv. 1; *YOS* 4 177 obv. 1). The builder Ur-Šulpae was likewise conscripted in other texts full-time for two and five months for work as a builder (*UTI* 3 2087 obv. 1; *YOS* 4 178 obv. 2) and received garments (*MVN* 15 160 obv. ii 8; *Nisaba* 33 699 obv. 7; *Rochester* 108 obv. ii 3). Lugalinimgena and Urediri are both documented during their conscription, the former as an assistant (AŠ … šeš-tab-ba) receiving gan$_2$ and the

344. See texts from GARšana (*CUSAS* 3 350), Girsu/Lagaš (*BPOA* 1 125; *CTPSM* 1 80; *NYPL* 218; *TCS* 1 218; *TCTI* 2 3525; *Trouvaille* 60; *YOS* 4 30 [uncertain provenience]), Nippur (*BE* 3/1 118; *MVN* 15 295; *NATN* 873; *NRVN* 1 270; *TMH NF* 1-2 86), Puzriš-Dagān (*AUCT* 1 580; Rochester 89), Sippar (*Cat RSM* 1909.405-15 2), Umma (*AAICAB* I/2 Ashm. 1971-372; *Nisaba* 23 56; *OrSP* 47-49 487), and Ur (*UET* 3 1468), among possible others. Note that there are discussions of *TCS* 1 218; *UET* 3 1468 in Neumann 1993, 65 n. 311, 108, as well as of *NRVN* 1 270; *TMH NF* 1-2 86; *YOS* 4 30 in Steinkeller 2002, 129 n. 8.

345. Although Lu-Enlila is not specified as a salt collector in *Nisaba* 23 56 obv. i 2, his proximity to Gugu there and in other texts in which Lu-Enlila is a salt collector establishes this connection.

346. For a discussion on these individuals, see Steinkeller 2004, 107 n. 59. Texts relating to Lu-Enlila and Gugu that are not included in his treatment are *MVN* 5 70 obv. 2; 13 619 rev. i 8; *Nisaba* 23 50 obv. i 8 (?), 13; 87 obv. 9; 26 4 rev. ii 2, 4; 103 obv. ii 14; *Santag* 6 205 rev. 1; *SAT* 3 1275 obv. 2, *UTI* 5 3188 obv. i 22 (?), among possible others.

347. This text's provenience is either Puzriš-Dagān or Umma, according to BDTNS and CDLI, respectively, which is not resolved here.

latter as full-time (AŠc) receiving gan2 (*BCT* 2 288 rev. iv 4–5; *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 rev. ix 41–42 [coll.]), and Urediri is furthermore known to pay a tax for the rental of a field (*MVN* 21 343 obv. ii 12), participate in what appears to be a different excavation project (*Nisaba* 26 22 rev. 19), and receive a garment (*Nisaba* 33 1086 obv. ii 5). As for Ur-Šulpae and Ludingira, they performed bala work (*AnOr* 1 88 rev. iv 6–7). Moreover, Ur-Šulpae was perhaps hired for a separate project, though the context is fragmentary (*AnOr* 7 348 obv. 6'), and there are numerous texts detailing various aspects of his silversmith work, including a balanced account of his.[348] Otherwise, records show that he provided a sheep (*BPOA* 7 2466 obv. 3), received garments (*Nisaba* 33 1117 obv. 9; *Studies Tadmor*, 209-220 2 obv. ii 7), and witnessed an oath regarding a slave (Molina, *Studies Sigrist*, 130 3 obv. 7).[349] Ur-Šara was a widely attested individual, appearing in nearly 175 texts (not including seals), which do not need to be examined in detail here. Overall, these examples here clearly demonstrate that individuals could be hired for work while still having time for their conscription and their occupations. It also appears that all these individuals were male citizens, which means they would have had more time available to hire themselves out.[350]

As *Nisaba* 23 56 demonstrates, many of the hired citizens were craft workers.[351] This text also indicates that all these hired individuals, regardless of their occupation, were hired for

348. See *AOS* 32 KK26; *BRM* 3 148; *CST* 546; *MVN* 1 240; *Nisaba* 33 400; RSO 83 350 40; *Santag* 6 119; *SAT* 3 1309; 1530; STA 22; *UCP* 9/2-2 77; *WMAH* 23, among possible others.

349. He also appears in *SAT* 3 1849 obv. i 7, which perhaps documents financial losses (ku3 i3-bi2-za ku3-sig17), but this is uncertain.

350. Another text that names hired individuals who may be found elsewhere is *TCTI* 2 3525 from Girsu/Lagaš. Four of the hired individuals are ša3-gu4, including Ur-Numušda, Utu-Lagaše, and Ur-Nanše (obv. 2–4), who may be in Römer, *OMRO* 66, 41 10 obv. i 20, ii 12, 17. Moreover, Ur-Nanše could be attested in one or more of the following texts: Frame, Frayne, and McEwan, *ARRIM* 7, 13 10 obv. iii 6'; *Nisaba* 33 305 rev. i 19'; 1039 rev. 5; *PPAC* 5 289 obv. i 16; *TCTI* 1 627 obv. ii 2; 2 3816 rev. 11'. All the hired individuals appear to be citizens, and these possible attestations support the observations drawn from *Nisaba* 23 56.

351. For several references to the hiring of a variety of craft workers, see Steinkeller 2015a, 22.

mainly cultivation and construction, which was a common phenomenon for hired workers. Of course, individuals could hire themselves out according to their typical occupations, which was often the case for craft workers. With regard to the hiring of craft workers in Ur, Neumann (1993, 65–66) provides the following analysis:

> Es wurde schon oben erwähnt, daß zur Arbeit in den Werkstätten des 'Handwerkerhauses' noch zusätzliche Arbeitskräfte gemietet worden sind. Dabei handelt es sich um Lederarbeiter (ašgab) sowie um 'Filzhersteller' (túg-du$_8$), die ebenfalls in den Handwerkerpräsenzlisten aufgeführt werden, jedoch mit der Zusatzbezeichnung -ḫun-gá versehen sind. In der Regel wurden die gemieteten Arbeitskräfte nicht in die Summe am Ende der Liste einbezogen, da sie im Gegensatz zum ständigen Personal in den Werkstätten, das aus Rationenempfängern bestand, einen Lohn (á) zu erhalten hatten. Von den gemieteten Handwerkern ist namentlich nur ein gewisser Da-da-an-né, der túg-du$_8$ war, bekannt. Ansonsten finden sich in den Handwerkerpräsenzlisten nur die Berufsbezeichnungen ašgab-ḫun-gá bzw. túg-du$_8$-ḫun-gá ohne Angabe des PN. Es ist sicher kein Zufall, daß zu den gemieteten Arbeitskräften nur Handwerker gehörten, die sich nicht in erster Linie mit der Herstellung von Luxusgütern zu befassen hatten. Im Gegensatz zu den vor allem Metall, Stein und Holz verarbeitenden Handwerkern war ihr Einsatz in den Werkstätten offensichtlich nicht täglich erforderlich, worauf ja schon die erheblichen Schwankungen in der Summe der in die Abrechnung der Handwerkerpräsenzlisten einbezogenen Handwerker der zweiten Gruppe hindeuteten. Die Verwaltung des 'Handwerkerhauses' zog es daher wahrscheinlich vor, bei konkreten Arbeitsanforderungen an diese 'Berufsgruppen' im Bereich der Luxusgüterherstellung zusätzlich auf gemietete Arbeitskräfte zurückzugreifen, zumal es sich bei ašgab und túg-du$_8$ um Berufe gehandelt haben dürfte, die in großer Zahl auch außerhalb der Palast- und Tempelwirtschaft vertreten waren.

Although Neumann's observations about employment distinctions between craft workers based on the rarity of their raw materials seem fairly certain in the case of Ur, this distinction was probably not universally applicable. One of the reasons why craft workers hired themselves out was because they tended to have more available time due to their frequent half-time conscription, even in inspections (see pp. 214–19).

In addition to hired work expressed with the verb hun, there are texts documenting the compensation of voluntary work, which can also be considered hired work. This is the case for antichretic loans for which work was provided in lieu of interest payments. This phenomenon is noted by Garfinkle (2004; 2012, 60–65) and Steinkeller (2001; 2002), both of whom indicate that

the implicit wages could be very high, amounting to 20 sila$_3$ per day in several instances. Antichretic loans were often issued by wealthy individuals for their own interests, though they could be issued by heads of royal and institutional households, such as governors, and the debtors could work themselves or provide their dependents or slaves to work instead. The implicit wages were probably this high due to perennial worker shortages and the time-sensitive demands of harvest work. These high wages were probably shared by multiple workers as well, as is probably the case when colonels borrowed from governors (see *AUCT* 3 492; *CST* 688, for example). Overall, all the evidence provided here illuminates how mainly male citizens, among others, from a variety of occupations were able to hire themselves out while they were not conscripted.

5.2.4. Self-Employment and Profits

As is noted on p. 178, there is no clear terminology for self-employment and profits. Rather, they can be recognized in various texts based on their context or deduced from what is reasonably undocumented. This discussion focuses on various specific occupations, such as merchants and craft workers, then addresses women, particularly citizens, before considering rented land. There is compelling evidence for the self-employment of merchants and those with whom they interacted. There are two ways in particular that merchants could be self-employed, including when they bought and sold their wares as well as when they issued loans, both of which could result in personal profits. The process of buying and selling their wares probably functioned to some extent in a "triangular arrangement," which is detailed by Steinkeller (2004, 108) thusly:

> The merchant bought from the producer the bulk of his product, including the share the producer owed to the state. The equivalent of that share, converted into silver was subsequently paid — either by the producer himself or (more likely) the merchant — to

> Umma's Fiscal Office. As for the merchant's purchases, only the state's share of the product he acquired in this way represented his true investment, since the balance of it he would "resell" to the Fiscal Office, apparently for the same price he had paid to the producer. To describe it more correctly, he would be reimbursed for those purchases by the Fiscal Office.

Based on this reconstruction of the process, both the "producer," whom Steinkeller (2004, 106) identifies as those engaged in resource extraction, and the merchants profited from this arrangement. [352]

Although there is some disagreement about whether merchants could personally profit from such business, which is well summarized by Wilcke (2006, 73–76), the lack of documented profits or losses in merchant balanced accounts does not rule them out, which he (2006, 76) clarifies.[353] When merchants issued loans, especially interest-bearing loans without explicit antichretic clauses, it appears that they were able to profit from collecting interest or from acquiring land or work secured as pledges. In some instances, it can be demonstrated that merchants used silver from their balanced accounts, thus further profiting from their work as merchants (see Garfinkle 2012, 85; Steinkeller 2004, 105). Moreover, Neumann (1999, 53) highlights other means by which merchants issued loans for personal profits:

> In addition, there are a number of indications that the merchants also conducted privately initiated and financed transactions. In the case of loan transactions for which there is abundant evidence in Nippur at least in some cases it must be assumed that these were not consumer but investment loans. Also the earliest examples of *kasap tappûtim* transactions, which also come from Nippur, point in this direction. The sworn declaration of a merchant, which can be found in a loan document, to pay back the amount lent "if he gets back from his commercial journey (kaskal)", may also be mentioned as evidence for a privately financed enterprise.

352. To validate his reconstruction, Steinkeller (2004, 100–2) also illustrates how merchants owned their wares, which they kept in storage facilities that they likewise owned or otherwise possessed.

353. See also Wilcke's (2006, 112–14) conclusions about the ability to profit generally during the Ur III period. A more recent treatment on such undocumented potential profits is given in Garfinkle 2012, 94–95.

It is important to note, however, that such profitable loans could be issued by a variety of wealthy individuals besides merchants, including the well-documented na-gada SI.A'a, who held a managerial role.[354] Moreover, though Englund (1990, 13–55) questions the ability for merchants to profit based on their balanced accounts, he (1991, 264) suggests that supervisors could have personally benefited from their surpluses.

In addition to the evidence involving primarily merchants, there is also support for the self-employment of craft workers, which has been traced particularly by Neumann and Steinkeller. In several of Neumann's (1992; 1993, 151–54; 1996; 2000) treatments on craft workers, he draws attention to admittedly limited and indirect documentation, including legal texts, of work that appears to be independently initiated.[355] In his extensive book on the subject, Neumann's (1993, 152) position on the existence of self-employed craft workers is useful to consider here:

> Es ist daher nicht gerechtfertigt, aus dem Fehlen von Urkunden über die private Handwerkstätigkeit auf eine Bedeutungslosigkeit der handwerklichen Produktion außerhalb der Palast- und Tempelwirtschaft in der Ur-III-Zeit zu schließen. Die Notwendigkeit eines privaten Handwerks ergab sich allein schon aus dem Bedarf der kleinen agrarischen Produzenten an Produktionsinstrumenten und anderen handwerklichen Produkten, wie z. B. Rohrkörben und Matten. … So wird in den Urkunden mehrfach die Miete von Handwerkern gegen Zahlung eines Lohnes durch die staatliche Verwaltung erwähnt, was die Existenz eines freien, nicht in die Palast- und Tempelwirtschaft eingebundenen Handwerks voraussetzt. Handwerker, die nicht zum unmittelbaren Personal der Palast- und Tempelwirtschaft gehörten, scheinen darüber hinaus für die staatliche Verwaltung auch Auftragsarbeiten ausgeführt zu haben, wofür sie die notwendigen Rohstoffe und Materialien aus den Händen von Verwaltungsangestellten in Empfang nahmen.

Steinkeller's work on self-employed craft workers has reached similar conclusions, as can be seen in his 1996 study on potters (see pp. 71–72). In his discussion on the potential for merchants

354. For further discussions on loans offered by merchants and SI.A'a especially, see Garfinkle 2004; 2012; Steinkeller 2001; 2002.

355. For a discussion on the independence of metal workers in Nippur, see Zettler 1992, 227–31.

to engage in independent economic activity, Steinkeller (2004, 95) also addresses the prevalence of undocumented economic activity based on the self-employment of craft workers, among others.

> There is no written evidence that the potters or, for that matter, any other category of craftsmen, actually sold or bartered their products. But, in fact, one does not expect to find such records, since it is difficult — if not impossible — to imagine any circumstances that would occasion the recording of such transactions. This notwithstanding, the conclusion that the commercial activity of this kind did exist, and that it was in fact exceedingly common, is unavoidable — and even necessary — since otherwise there is no way of explaining how ordinary people obtained their household goods, such as pots and furniture, various personal articles, such as shoes and garments, and foodstuffs other than cereals, such as vegetables, fruits, dairy products, meat, and spices. This follows from the simple fact that none of the above products were distributed in any fashion by the central authorities. Thus, the only explanation possible is all these products were obtained through purchase or barter in a local market setting. As we shall see later, there are even grounds to think that some of these goods were held on hand and sold by professional traders.[356]

As such, the evidence for self-employed craft workers is overall indirect or deduced from its lack of documentation, but that should not rule out its existence.

Besides the examples of self-employment possible for a variety of occupations held by male citizens, another important dimension to consider is the undocumented work of female citizens in their private households, which was not based on conscription or hired work but was self-initiated to some extent. The importance of recognizing the wide-ranging work of women and their daughters in private households is highlighted by Brigitte Lion and Cécile Michel (2016) as well as by Lafont (2016, 149–53), the latter of whom explores this topic during the Ur III period. Although his treatment is fairly brief, partly due to available data, some of Lafont's (2016, 151 [ellipsis his]) conclusions are offered here:

> Therefore, during the Ur III period, the domestic arena was clearly the place of productive and economically significant activities for women, enabling them to provide members of the household – great or small – with their basic needs. But in this regard, it must be noted that we never see any surplus of goods produced at home by women that could have fed

356. While there is some evidence that a variety of foods and drinks were provided as allotments (see pp. 242–43), these resources would have been more prevalent beyond those allotments.

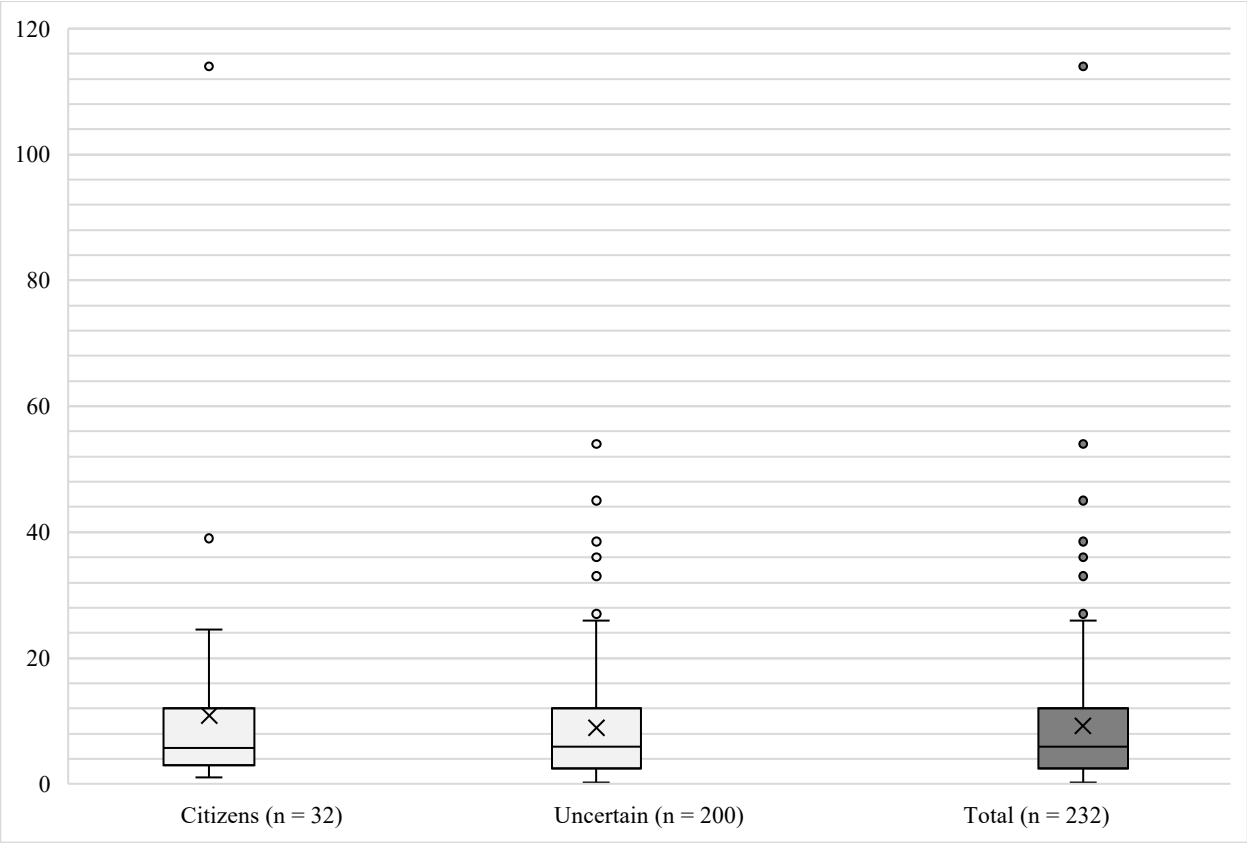
> external economic channels. Furthermore, there is no information in any of our texts regarding the potential participation in market activities of women belonging to family households. But on that point, attention must be paid of course to the argument that silence and the lack of documentation does not necessarily mean that there was no surplus sold in local markets …

Whereas male citizens were conscripted and hired throughout the year, female citizens were predominantly self-employed, though they could be conscripted as substitutes for their male relatives. They may have also been conscripted in some circumstances to improve their income. This potential for substitution is itself evidence that female citizens were not generally conscripted, which enabled them to work mainly in their private households. Besides working in their private households, female citizens could be self-employed as brewers, midwives, and sex workers.

Rented land, expressed as apin-la$_2$ and sometimes gan$_2$ nig$_2$-gal$_2$-la (see Borrelli 2013, 28), played a significant role in the overall income of many households. This is considered a form of self-employment here because individuals used their own resources to rent land in order to increase their incomes (see Zettler 1992, 219–20). The rental costs are sometimes partly documented, but they are rather complicated and may have amounted to about ⅓ or ½ of the total yield (see Borrelli 2013, 28–29; Steinkeller 1981), meaning that the remainder of the total yield would have been the profit. Those able to rend land were mainly male citizens, though there were exceptions, such as a few women, most of whom were priestesses (see, for example, the Umma texts *AAICAB* I/3 Bod. S 307 obv. 3; *OrSP* 47-49 481 obv. i 8–10) and a few male slaves. Some evidence for male slaves renting land includes the Girsu/Lagaš texts *ITT* 2 926; Maekawa, *Zinbun* 14, 45 1 obv. iii 6, rev. ii 15, the former of which lists land rented by a šabra and two of his slaves, which may suggest that slaves of wealthy individuals were more likely to rent land. Based on some prosopographical analysis of rented land in Umma, there are no clearly known UN-il$_2$ who rented land, but this requires further study.

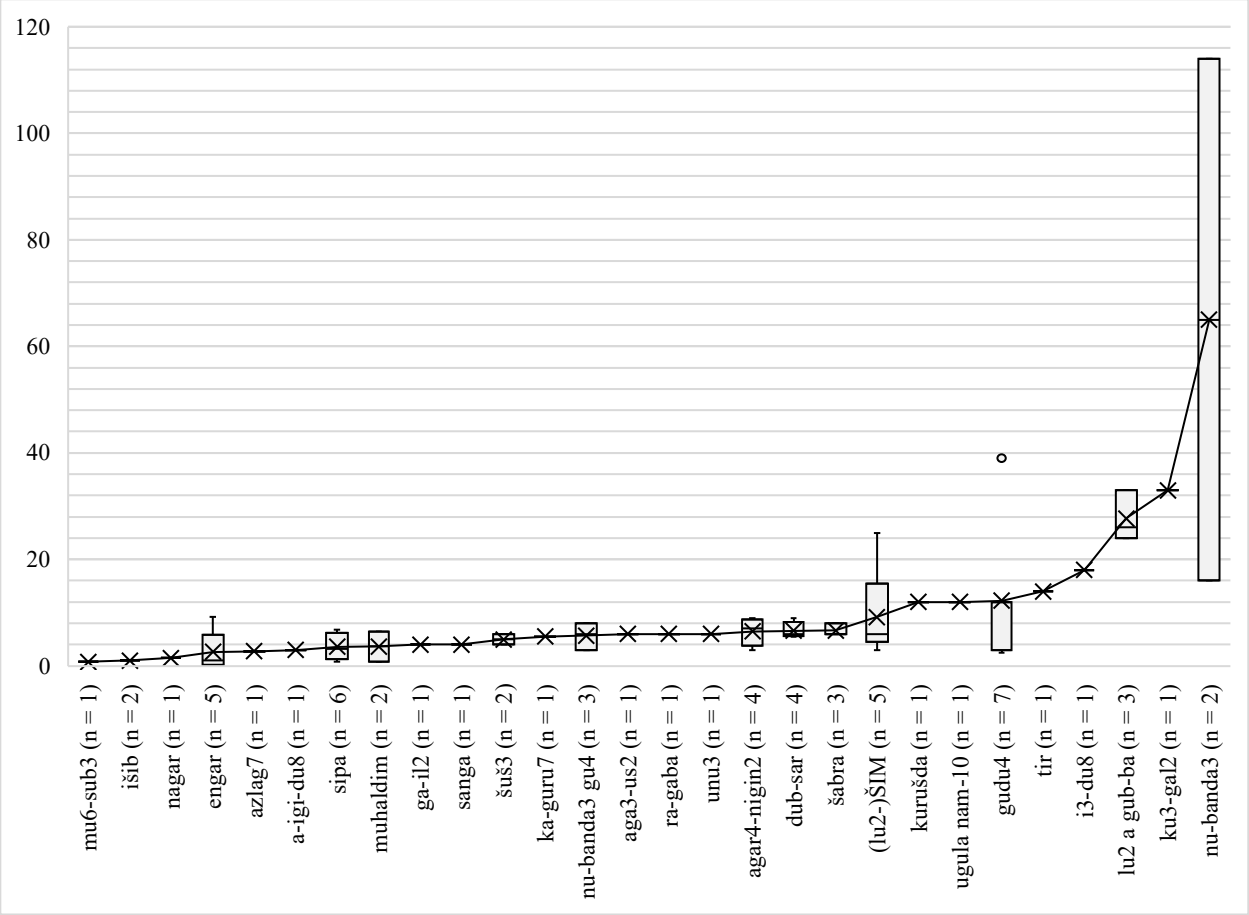
The sizes of apin-la$_2$ land throughout Umma texts, with possible exceptions, for male individuals, many or all of whom were citizens are presented in Graph 5.5 (see Table A7.3 for citations).

Graph 5.5. apin-la$_2$-Land Sizes (in iku) for Male Citizens in Umma



Assuming that the vast majority of the total count were citizens, their arithmetic mean is about 9.18 iku, which is fairly high because of the substantial outliers. The median is 5 ⅞ iku and the mode is 6 iku, the latter of which amounts to about 14.22 percent of the total, whereas the interquartile range bounds are 2 ½ iku and 12 iku. It is important to note, however, that an individual's total rented land for a given time period may not have been documented in the same text (see Borrelli 2013, 30), so some of the smallest sizes were probably portions of an individual's total rented land. Based on these same texts, the sizes of apin-la$_2$ land according to occupation are given in Graph 5.6 (see Table A7.4 for citations).

Graph 5.6. apin-la$_2$-Land Sizes (in iku) according to Occupation in Umma



While some of the smallest sizes belong to those in resource extraction as well as construction and manufacturing, whereas some of the largest sizes were for those in management, the data have some complications. Again, the smallest sizes may not have been the total amounts rented by any one individual. Moreover, there are not many individuals per occupation, which limits the representation of their arithmetic means. Nevertheless, based on these data, the amount of apin-la$_2$ land could be substantially larger than the amount of šuku land for the same occupation, as seen with the forester, among several others. This particular forester was a dub-sar (see n. 575), so that may explain the large size of his apin-la$_2$ land. While it should not be assumed that everyone of the same occupation would have had similar sizes of apin-la$_2$ land, these data demonstrate that their šuku land was only part of their annual barley income.

5.3. Sustenance from Mainly Allotments, Wages, and Rented Land

There were various means by which families sustained themselves. Virtually all families, excluding mainly high-ranking individuals and privately owned slaves, received standard allotments of mostly barley or šuku land, garments or wool, and oil, in addition to other foods and drinks in some circumstances. In at least Umma and probably other cities of southern Babylonia, nearly all citizen families were allotted šuku land, and many of them would have also had income from wages or rented land profits, if not both.[357] Most families of UN-il$_2$, however, would have received only allotments, though about half or more of these families would have been allotted šuku land. In order to estimate the total barley income by which a family could be sustained, a few factors need to be approximated. The average nuclear citizen families and UN-il$_2$ are assumed to include two parents as well as two and three children (see pp. 127–34), and a family size of five is utilized here. Adults are counted as full consumers, whereas children are considered to consume half as much, which is a broad estimate that accounts for the fact that the youngest children would have consumed far less. As such, a family five is considered here to have three and a half consumers. Estimates for šuku- and apin-la$_2$-land yields as well as total wages are discussed just below.

While the quality of all these lands varied substantially, Borrelli (2013, 27) notes that šuku land in Girsu/Lagaš may have yielded about 1 ⅑ gur per iku or less, which can be rounded down to 1 gur per iku. This rate is assumed for apin-la$_2$-land yields as well, though further study can provide more accurate estimates since many texts document actual yields for these lands, especially šuku land. Estimating the total wages an individual, particularly a male citizen, would have earned over a year is very challenging. Male citizens could typically hire

357. See, for example, Lu-Šara and Lugalkuzu in the Umma text Snell, *ASJ* 9, 248 25 obv. 5, 6 (coll.), rev. 1–2, 4, who have both šuku and apin-la$_2$ land in the same text.

themselves out for as little as three or four months a year to as much as half of the year. Assuming that these individuals did not hire themselves out every one of their days off, perhaps they hired themselves out about twelve days a month when available. This accounts for three days per month of days off when they did not hire themselves out, which is equal to the amount of days off that male UN-il$_2$ were typically given (see, for example, pp. 195–96). If this is the case, then they could hire themselves out for as few as 36 days or as much as 144 days a year, not counting 390-day years. If they earned about 6 sila$_3$ per day of hired work (see pp. 251–52), then that would be between 200 and 800 sila$_3$ a year, rounding down to the nearest hundred for both to account for possibly lower wages. Another challenge with factoring in wages is whether those who earned wages could also rent land, given their time constraints. For the purposes of these estimates, it is assumed that a family could only pursue one of these means of extra income, though in reality they may have been able to balance them.

Based on these estimates, the total annual barley income (in sila$_3$) ranges of five family types as well as the daily barley amounts (in sila$_3$) per consumer are given in Table 5.22. The first family type is a family of an unmarried geme$_2$ with an estimated two children. She and her children were probably former prisoners of war before becoming slaves of a royal or institutional household. To establish a range, her barley allotment was either 0.0.3 or 0.0.4 whereas her two children received either both 0.0.1 or 0.0.1 and 0.0.2. The second family type is a family of five UN-il$_2$ that only received barley allotments. The husband and wife received 0.1.0 or 0.1.1 5 and 0.0.3 or 0.0.4, respectively, while the children received 0.0.1 (x2) and 0.0.2 or 0.0.1 5 (x2) and 0.0.3. The third family type is a family of five UN-il$_2$ that received barley allotments from the female individuals as well as šuku land from the male individuals. The wife of this family earned 0.0.3 or 0.0.4 and could have had one daughter earning 0.0.1 or two daughters

earning 0.0.1 and 0.0.2. Their šuku land would have ranged from 3 to 4 iku, which are the interquartile range bounds from the Umma data. The fourth family type is a family of five citizens that was allotted šuku land and earned wages as well. Their šuku land could have ranged from 4 to 18 iku, which are the interquartile range bounds from the Umma data (see pp. 228–29). As for wages, only the head of the household is counted. Since this range depends on the amount of days off per year, this range may be appropriate even if others in the household earned some amount of wages. The fifth family type is a family of five citizens that was allotted šuku land and rented apin-la$_2$ land, the former of which is considered equivalent to the fourth family type. Their apin-la$_2$ land could have ranged from 2 ½ to 12 iku, which are the interquartile range bounds from the Umma data (see p. 261). Note that the yields of these apin-la$_2$ land are halved to estimate their profits. It would be beneficial to consider the income possibilities for citizen families in Girsu/Lagaš, but this requires additional consideration.

Table 5.22. Total Annual Barley Income (in sila$_3$) Ranges
for Various Family Types and Daily Barley Amounts (in sila$_3$) per Consumer

Family Type (No. of Consumers)	Annual Barley Allotment (in sila$_3$) Range	Annual šuku-Land Barley Yield (in sila$_3$) Range	Annual apin-la$_2$-Land Barley Profit (in sila$_3$) Range	Annual Barley Wages (in sila$_3$) Range	Total Annual Barley Income (in sila$_3$) Range Daily Barley Amount (in sila$_3$) per Consumer
geme$_2$ family of three (2 consumers)	600 to 840	—	—	—	600 to 840 ⅚ to 1 ⅙
UN-il$_2$ family of five with barley allotments only (3.5 consumers)	1560 to 2100	—	—	—	1560 to 2100 ~1.24 to 1 ⅔
UN-il$_2$ family of five with barley allotments and šuku land (3.5 consumers)	480 to 840	900 to 1200	—	—	1380 to 2040 ~1.1 to ~1.62
citizen family of five with šuku land and wages (3.5 consumers)	—	1200 to 5400	—	200 to 800	1400 to 6200 ~1.11 to ~4.92
citizen family of five with šuku and apin-la$_2$ land (3.5 consumers)	—	1200 to 5400	375 to 1800	—	1575 to 7200 1.25 to ~5.71

The total annual barley income ranges for all these family types could vary beyond these estimates, of course. The sizes of these family types could impact their barley allotments, especially for the first three family types. For UN-il$_2$ families, barley allotments and šuku land incomes were comparable, and the number of children receiving allotments played an important role. šuku-land yields were also more variable than barley allotments. As for citizen families, some male citizens could receive barley allotments in rare cases, at least in Umma, and the estimates for their land sizes could be a little lower or significantly larger than the estimates

utilized here. The totals for these various citizen families are also quite close, suggesting that both are viable strategies on their own, though they may have been balanced.

Based on these data, the sufficiencies of these various barley incomes can be broadly assessed. No one would have eaten only barley every day, though it would have been the main staple in their diets. Rosemary Ellison (1983, 148–49) lays out the following considerations for the consumption of barley as a staple:

> It cannot be certain that the full amounts of the rations were eaten each day. They may have been used to buy other food or household goods, clothes and so on, and some may even have been used to feed members of the family who were not working, although in many cases, women were given extra amounts specifically said to be for their small children (e.g. Reisner 1901, no. 155). On the assumption that the barley rations were all eaten each day, any man receiving 1 ⅓ SÌLA or more barley per day, and any woman with 1 SÌLA or more a day (e.g. Chagar Bazar: Loretz 1969, no. 42) had an energy intake as high or higher than that recommended by the Food and Agricultural Organization of the United Nations (Passmore, Rao and Nicol 1974, Table I). If 1 SÌLA is taken to equal 1 litre, 1 ⅓ SÌLA barley would provide 3600 calories, and even after allowing for as much as 20% wastage, which is probably a little on the high side, this comes to 2880, close to the 3000 calories recommended by the F.A.O. for an adult male. On the other hand, any adult, male or female, with ⅔ litre barley or less a day—common amounts at Nuzi (Pfeiffer and Lacheman 1942, no. 113) —would have a low energy intake. The most obvious nutritional deficiencies in the barley rations were those of Vitamin C and Vitamin A, which are almost non-existent in barley.

According to her estimates, $geme_2$ families and maybe some UN-il_2 families would have been on the borderline for having enough calories a day. Their diets would have been supported, however, by oil allotments and other foods and drinks, including meat, with which they were provided from time to time. Though the allotments at Urusagrig are unique as Owen indicates, it is possible that $geme_2$ families and UN-il_2 families in southern Babylonia were allotted a wider variety than barley and oil, though less frequently. As for citizen families, they would have had enough barley in general to suffice, in addition to other foods and drinks they could have received or bartered for. At least some, if not many, of them would have had other means of improving their diets, such as privately owned livestock or orchards. Overall, citizen families

were generally the only ones with barley incomes large enough to accumulate wealth over time, though some UN-il$_2$ families had higher incomes than those presented in Table 5.22 if their šuku-land sizes were larger.

CHAPTER 6. THE UR III PERIOD IN HISTORICAL PERSPECTIVE

6.1. Introduction

Situating the Ur III period in the third and early second millennia of Babylonia, including the Early Dynastic, Sargonic, and Old Babylonian periods, is a substantial undertaking. The discussion here is brief and should not be treated as comprehensive. It nevertheless demonstrates that there was significant continuity as well as transformative developments across these periods. The Ur III period was thus not an aberrant development in Mesopotamian history but rather a period with substantial documentation of socioeconomic phenomena that were entrenched during the third and early second millennia. As this discussion demonstrates, this was mainly due to the land-tenure conditions under the management of temple households. One important element of the Ur III period that is somewhat unique, however, is the social stratum of UN-il$_2$, which appears to have solidified from possible Early Dynastic and Sargonic predecessors. The fact that many of them received šuku land also distinguished them from their likely predecessors. Following the collapse of the Ur III state, there are a few attestations of UN-il$_2$, but it is not clear what happened to them overall.

6.2. The Early Dynastic Period

During the Early Dynastic period, northern and southern Babylonia were distinguished by significant environmental and political features, and these regions were not yet united (see p. 5). In northern Babylonia, arable land was privately owned by mainly extended families and royal households. In southern Babylonia, arable land was managed by temple households, and the land was partitioned the same way that it was during the Ur III period, though gan$_2$ gu$_4$ land was referred to as gan$_2$ en in the earlier phases and as (gan$_2$) nig$_2$-en-na toward the end of the Early Dynastic period (see Cripps 2007, 20).

With regard to Girsu/Lagaš during the Early Dynastic IIIb phase, the population was generally dependent on temple households (See Maekawa 1973–1974; 1987a; Prentice 2010). In terms of barley, individuals either received monthly allotments year round or received monthly allotments for four or five months a year in addition to šuku land. Individuals of both of these options are summarized by Prentice (2010, 19) as follows:

1. lu$_2$-šuku-dab$_5$-ba (‘those who hold šuku allotments’)
2. igi-nu-du$_8$, il$_2$, ša$_3$-dub-didli (‘‘blinded’ persons, carriers, and (persons) registered individually’)
3. geme$_2$-dumu (‘women and children’)
4. lu$_2$ di$_4$(TUR)-di$_4$(TUR)-la-ne (‘those of (subordinate to) the small ones’ i.e. ‘the households of the ruler’s children’), or ‘nam-DUMU’ (‘of the (ruler’s) child) when referring to the household of only one child.

In addition to these groups, ša$_3$ dub e$_2$-gal, whose precise meaning is uncertain (see Prentice 2020, 38), were also given monthly barley allotments all year round. As suggested on pp. 102–4, the il$_2$ may have been the precursors to the UN-il$_2$, though they did not receive šuku land like many UN-il$_2$ did during the Ur III period. The geme$_2$ dumu here were fairly similar to the geme$_2$ working in institutional households with their children during the Ur III period (see, for

example, Maekawa 1980).[358] The lu$_2$ šuku dab$_5$-ba were further subdivided into RU-lugal, ("'dependents of the lord'" according to Cripps 2007, 22),[359] aga$_3$-us$_2$, and various occupations. In addition to the work associated with their occupations, they also performed canal maintenance and harvested the (gan$_2$) nig$_2$-en-na land, for which they were allotted barley (see Maekawa 1987a, 61; Prentice 2010, 74–76). In agreement with Deimel, Maekawa observes that these individuals were similar to the citizens, specifically eren$_2$, of Girsu/Lagaš during the Ur III period (see pp. 66–67).

6.3. The Sargonic Period

The unification of Babylonia under the Sargonic dynasty had several impacts on the region, especially on land tenure in southern Babylonia. Arable land there was no longer managed by temple households but was rather under the control of mainly royal households. The appointment of royal family members, such as Enheduana, to priestly roles in cities of southern Babylonia as well as the deification of Narām-Suen and Šar-kali-šarrī played significant roles in this process (see Steinkeller 1999c, 124–26; 2017b, 107–64). The process of this land transfer also involved coercive payments, which Steinkeller (1999a, 556) describes accordingly:

> What is truly astounding about this transaction is that the land transferred in it undoubtedly came from the temple estates with which the "sellers" were institutionally connected. The price paid by Šar-kališarri in exchange for this land is 75 minas of silver (= 4500 shekels), with a resulting price of ca. 2.083 shekels of silver per one iku of land. This is roughly ⅓ less than the price of 3.3 shekels per 1 iku of land found in the Maništušu Obelisk, where Maništušu purchases a total of 9723 iku of land from several north Babylonian extended families. That price is already quite low, thus indicating strongly that the sale in question was transacted under duress. This must have been even more so the case in our transaction, where the price of land is still lower. However, the situation here is significantly different,

358. A recent discussion on slaves and related individuals during the Early Dynastic period is given in Bartash 2020.

359. For a helpful summary of the possible meanings of RU-lugal, see Prentice 2010, 71 n. 308.

> since, in contrast to their counterparts in the Maništušu Obelisk, the individuals acting as "sellers" in this transaction could hardly have claimed any real proprietary rights to the sold land! In more realistic terms, therefore, the "price" our text talks about constituted a bribe that Šar-kališarri paid to the heads of various Lagaš temple-estates in exchange for their acquiescence and cooperation in his take-over of the holdings remaining in their stewardship.

In accordance with this transfer in management (gan$_2$) nig$_2$-en-na land eventually became gan$_2$ gu$_4$ land (see Cripps 2007, 20), which was retained during the Ur III period, of course. šuku and apin-la$_2$ lands were also partitioned in similar ways. šuku land was allotted to male citizens in various sizes typically according to their occupations or relationships to royal households in exchange for conscription by those various royal households (see Foster 1993, 29–31; Visicato 2010, 321; Westenholz 1999, 63–64). Interestingly, there are few examples of the transfer of šuku land, which may have been a new phenomenon by this time (see Cripps 2007, 24), perhaps as a result of the dramatic shift in land-tenure conditions.

In terms of social stratification, the data are not as abundant or straightforward as they were during the Early Dynastic and Ur III periods, which may be due to the kind of evidence available as well as the more fragmentary management of arable land. With regard to terms for citizens, eren$_2$ is more prevalent than during the Early Dynastic period, whereas lu$_2$ šuku dab$_5$-ba fell out of use (see Cripps 2007, 32–46). dumu uru is also attested a few times (see Westenholz 1999, 63). As indicated on p. 100, there were a few attestations of UN-il$_2$, though its meaning and usage are uncertain. There were also fully dependent individuals and slaves in royal and institutional households as well as privately owned slaves (see, for example, Bartash 2018b, Maiocchi 2016; Westenholz 1999, 68–69).

6.4. The Old Babylonian Period

The Old Babylonian period is rather complicated, due largely to the rise and fall of several dynasties as well as the predominance of Amorites. This discussion focuses on the conditions during the reign of Ḫammu-rabi. In contrast to much of the third millennium, temples did not manage most or all the arable land of southern Babylonia, which was more divided between them and royal households, whereas families could own marginal amounts of land (see Goddeeris 2007; Renger 1995, 295–302). In his discussion of land managed by the palace, Renger (1995, 298–99) provides the following elaboration:

> As for arable land controlled by the palace, the contemporary legal and administrative documents originating within the palace administration—legal and administrative documents as well as letters—distinguish three types of arable land: sustenance fields, fields leased to agricultural entrepreneurs or to tenant farmers, and fields that were held at the disposal of the palace and cultivated by its own agricultural staff and that served as reserve land to be used for the two former types of entitlements.

This threefold division of arable land matches the threefold division existing throughout the third millennium—sustenance land is even called *šukūsum* (or *šukussum*), indicating the continuity of these land-tenure conditions.

Social stratification during this period has some complications. The Code of Ḫammu-rabi utilizes social-stratum terms like *awīlum*, *muškēnum*, and *wardum*, among others. The term *awīlum* clearly applies to citizens, whereas *muškēnum* individuals had some qualities like citizens, though they also seem to have been more dependent (see 3.2.4 MAŠ.EN.GAG). Regardless of these differences, *awīlum* and *muškēnum* individuals were both conscripted part-time (see Ishikida 1999). *wardum* and *amtum* refer to slaves, depending on context like $arad_2$ and $geme_2$, and there were slaves in royal and institutional households as well as in private households (see, for example, Seri 2011). The presence of UN-il_2 is less certain, though there are few references to them (see Stol 1995, 306). Given the lack of prominence of temples in

managing arable land, many of them probably were regarded as dependent *muškēnum* individuals.

CHAPTER 7. CONCLUSIONS

7.1. Overview of Social Stratification during the Ur III Period

Social stratification during the Ur III period, which consisted of citizens, serflike UN-il$_2$, and slaves, is evident with regard to a variety of features examined in this dissertation. These features, including native terminology, origins, family life, housing, legal rights, and economic conditions, cover a wide range of an individual's experiences and opportunities in life. Rather than review these features one by one according to each social stratum, this overview focuses on each stratum independently. The terminology is not reviewed here due to its highly specific details.

Citizens comprised at least 70 percent of Ur III society based on their proportions in southern Babylonia. They were mainly native Babylonians, though some former prisoners of war were resettled as citizens. They lived and worked together in extended and mainly nuclear families. They resided in privately owned houses, which were typically 2 to 3 sar, though their houses could be a little smaller and much larger. Citizens had the fullest extent of legal rights, especially adult male citizens. Due to their part-time conscription, male citizens and their female family members were not fully mobile, but they had some mobility throughout the year. Families could sell themselves or some of their members into debt slavery from which they could be later manumitted. While enslaved, they could not be sold abroad in most, if not all, circumstances. Citizens engaged in probably any possible occupation, which was partly determined by their gender and parentage. Male citizens were conscripted part-time, sometimes half-time, from year

to year, and the amount of time could change depending on their work that year. Female citizens were not regularly conscripted, though some could be subjected to penal work when their male relatives were delinquent. Some may have also been conscripted in order to increase their household's barley income. Since male citizens were conscripted part-time, they could also hire themselves out and be self-employed. Some were self-employed due to their occupations, if they were able to barter their raw or finished products or if they worked as merchants or in other managerial occupations. Many male citizens could rent apin-la$_2$ land as a form of self-employment. Most female citizens were self-employed, either in their typical household work, such as food preparation and textile production, or less commonly, in certain occupations, such as brewers, midwives, or sex workers. Families had annual barley incomes large enough to sustain their diets, which were supplemented with other allotments, bartered food and drinks, as well as their privately owned livestock and orchards. Most families also had enough annual income to accumulate wealth, though the families toward the lower end of the income range probably accumulated wealth slowly and only in favorable circumstances.

Probably at most 20 percent of Ur III society were serflike UN-il$_2$, and they were most numerous in southern Babylonia. Their origins are uncertain, though they were probably impoverished and descended from individuals engaged in work often related to carrying. Like citizens, they lived and worked together in extended and mainly nuclear families, though it is difficult to prove that male UN-il$_2$ were married to explicitly female UN-il$_2$ or geme$_2$, which ambiguously referred to female UN-il$_2$ in various circumstances. Their housing is also not known, though they were probably housed in various fashions by those upon whom they were economically dependent. Their legal rights are not well documented, if at all, but they probably had limited legal rights. They were not mobile because of their full-time conscription, and they

may not have been salable. Male UN-il$_2$ could work in some variety of occupations, especially in resource extraction as well as construction and manufacturing, though they rarely engaged in management. They are not known to have ever been priests and their managerial roles were typically as ugula's and not higher-ranking positions. Female UN-il$_2$ mostly worked in cereal grinding or textile production, among other occupations held by women in royal and institutional households. They were conscripted all year round and given days off usually at fix rates of ⅒ for male UN-il$_2$ and ⅙ or ⅕ for female UN-il$_2$. They may not have been able to hire themselves out, though they could perhaps be hired out by their royal and institutional households. They probably could not be self-employed, since they were conscripted full-time and are not known to have rented apin-la$_2$ land. UN-il$_2$ families typically had annual barley incomes that were just large enough to sustain their diets, which were supplemented with other allotments and potentially bartered food and drinks. Only rare families with higher incomes may have been able to accumulate wealth, but it is not certain how that wealth could have been used.

Slaves constituted perhaps about 10 percent of Ur III society. Chattel slaves were often former prisoners of war or purchased from interregional slave markets, whereas debt slaves were citizens who were often temporarily enslaved. Chattel slaves were probably separated from some of their family members, though they may have been able to live and work with their children. Debt slaves could have been enslaved with part of or all of their nuclear families, and they could be reunited with their families after manumission. Slaves were housed by their owners, so the quality and space of their housing varied accordingly. Slaves had few legal rights, though they could advocate for themselves in court, conduct some business transactions, and maybe accumulate their own property. The occupations of slaves in royal and institutional households were similar to those of mainly female UN-il$_2$ whereas privately owned slaves mostly performed

domsestic services. Slaves in royal and institutional households worked full time and were given days off at the same rates as female UN-il$_2$. The forced work of privately owned slaves is not well documented, but they could be substitutes for their owners for conscription. Like UN-il$_2$, they could probably not hire themselves out, though they could be hired out. Slaves could not be self-employed usually, though there are rare examples of some that rented apin-la$_2$ land. In these rare cases, they were privately owned by wealthy individuals. Probably almost all slaves were minimally sustained by their various allotments, though the few that could rent apin-la$_2$ land could presumably sustain themselves better.

Although these strata have many distinctions from one another, some of their similarities can be highlighted as well. In terms of family life, citizens and UN-il$_2$ appear to have had similarly structured families in comparison to the fragmentary families of slaves. With regard to housing and employment arrangments, however, UN-il$_2$ and slaves had more in common. While UN-il$_2$ lacked economic independence like slaves, they had the potential to work in a variety of occupations similar to but less than the full extent available to citizens. These experiences and opportunities associated with these strata would have played substantial factors in the livelihoods of individuals across them, but occupations also significantly impacted a household's income, thus creating additional means of distinguishing people within and across the strata. For slaves, the wealth of their owners could have improved their access to higher incomes, which would have also led to differentiation.

7.2. Topics for Further Study

This dissertation covers a wide range of features relating to social stratification during the Ur III period, but there is much that would benefit from further study. The following discussion lays

out several topics for further study in order of the chapters of this dissertation, starting with Chapter 2. This chapter on the history of scholarship surveys over a century of study of the ancient Near East and the Ur III period in particular, but it admittedly does not address the impact of Polanyi in detail. It also omits reviews of broad treatments on ancient history. Thus, the history of scholarship of the Ur III period can be expanded to include these works, among others, to demonstrate its relevance to broader reconstructions of socioeconomic history.

In Chapter 3, the type of stratification during the Ur III period can be further elucidated perhaps. The ability to transition from one stratum to another, especially between the citizen and UN-il$_2$ strata, is a topic that certainly requires further attention. The distinct meanings of dumu dab$_5$-ba and MAŠ.EN.GAG may also benefit from additional attention. While this chapter deals extensively with the meaning and origins of the UN-il$_2$, there may yet be further evidence to consider and insights from contexts outside of the Ur III period. It must be noted that Amorites during the Ur III period are not addressed. The messengers in messenger texts are also not covered, but many, if not all, of these individuals were probably citizens.

Chapter 4 depends significantly on prosopographical work, which is certainly ongoing. Though familial connections between male UN-il$_2$ and geme$_2$ cannot be clearly proven, further review of the evidence may be insightful. While many of the data regarding the housing of citizens are presented here, a comprehensive study of the documented number of residents per house is needed. Details concerning the housing and legal rights of UN-il$_2$ may also develop after further prosopographical analysis. The estimation of the population of the city of Ur, among other cities of southern Babylonia and beyond, would likewise benefit from further investigation of the amount of intramural space committed to housing as well as the inhabitation of extramural space, and the evidence from recent excavations at Umma needs further consideration.

As lengthy as Chapter 5 is, there is much left to further examine. In terms of occupations, differences between occupations dependent on royal versus institutional households or between various industries may be meaningful. As for the role that parentage plays in determining an individual's occupation, an exhaustive study of the occupations of parents and their children would provide clear details about occupational mobility or the lack thereof. With regard to the discussion on employment, there are several topics to consider. The discussions on Girsu/Lagaš and Urusagrig can be expanded, and evidence from other proveniences can be included as well. Extensive study, including prosopography, of various geme$_2$ is needed. In terms of šuku and apin-la$_2$ lands, their barley yields can be comprehensively documented, and further prosopographical analysis of the possessors of these lands is ongoing. Given the data on these various forms of income inequality, perhaps the Gini coefficient can be estimated. The roles of loaned barley (še ur$_5$-ra) and silver as well as wage variations require extensive study. In terms of sustenance, the private ownership of orchards needs to be thoroughly recorded with regard to their amounts, when documented.

Although much remains to be examined, this dissertation presents a thorough analysis of social stratification during the Ur III period. This stratification is tripartite, consisting of citizens, serflike UN-il$_2$, and slaves, who were distinguished from one another mostly with regard to their their legal rights and economic autonomy. While these social strata played significant roles in determining an individual's experiences and opportunities, their occupations, regardless of social stratum, were also integral. Although this tripartite social stratification is well delineated during the Ur III period, these strata existed well beyond this period, as is demonstrated by their various forms throughout the third and early second millennia.

APPENDIXES

Appendix 1. Selected Multiply Attested Male Citizens in Umma

Table A1.2 compiles 260 multiply attested male citizens in 73 Umma texts that demonstrate three observations.[360] Observation No. 1 is that an individual with no social-stratum designation juxtaposed to an explicit UN-il$_2$ in one text could be an explicit citizen in another text. Thus, in the first text, their citizenship is inferred from their juxtaposition. Observation No. 2 is that an individual could have various combinations of the notations ½, 1, ½$_c$, and AŠ$_c$ across multiple texts. Observation No. 3 is that an individual receiving an unspecified amount of šuku land (gan$_2$ PN) in one text could have a specified amount in another text. The texts are given in an approximately chronological order, and they are identified by their numbers (T#), as indicated below:

T1: *SAT* 2 77 (Š 33/vi/-)
T2: *NATN* 25 (Š 43*/-/-)
T3: *Nebraska* 37 (Š 43/-/-)
T4: *Nisaba* 23 2 (Š 47/-/-)
T5: *MVN* 21 199 (Š 47*/xiii*/-)
T6: *Nisaba* 23 46 (Š 48/-/-)
T7: *Nik.* 2 236 (AS 1/-/-)
T8: *OrSP* 47-49 324 (AS 2/-/-)
T9: *SNAT* 332 (AS 2/vii/-)
T10: *Santag* 6 384 ([-]/[-]/[-])[361]

360. A few dozen of the individuals compiled here have been previously tabulated with regard to similar details in Koslova 2008.

361. *Santag* 6 384 dates to around AS 3 based on Lugalmagure, Lugalezem, Šarabazige, and Irduga (see *CUSAS* 39 134 rev. i 3, 5, 7, 9; *Santag* 6 384 rev. iii 4'–5', 8'–9').

T11: *Santag* 7 32 ([-]/[-]/[-])[362]
T12: *CUSAS* 39 128 (AS 3/-/-)
T13: *CUSAS* 39 131 (AS 3/v/-)
T14: *CUSAS* 39 132 (AS 3/v/-)
T15: *Organisation administrative, Diss.*, 217 7 Talon-Vanderroost 2 (AS 3/v/-)
T16: *BPOA* 6 1385 (AS 3/vii*/-)
T17: *MVN* 18 545 (AS 3/viii/-)
T18: *Princeton* 1 367 (AS 3/viii*/-)
T19: *BIN* 5 272 (AS 3/xii*/-)
T20: *TCL* 5 5674 (AS 3/xii*/-)
T21: *MVN* 21 52 (AS 4/-/-)
T22: *UCP* 9/2-1 100 (AS 4/-/-)
T23: *MVN* 5 27 (AS 4*/i*/-)
T24: *Princeton* 1 388 (AS 4/iv*/28*)
T25: Peat, *JCS* 28, 219 37 (AS 4/viii*/-)
T26: *AnOr* 1 85 (AS 4*/xiii*/-)
T27: *TCL* 5 5675 (AS 4/xiii*/-)
T28: BDTNS 196758 ([-]/[-]/[-])[363]
T29: *CUSAS* 39 129 (AS 5/-/-)
T30: *SAT* 2 883 (AS 5/vi*/20*)
T31: *CUSAS* 39 127 (AS 5/vii/15)
T32: *CUSAS* 39 133 (AS 5/vii/15)
T33: *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 ([-]/[-]/[-])[364]
T34: *AnOr* 7 301 ([-]/[-]/[-])[365]
T35: *Nisaba* 23 9 (-/-/-)[366]
T36: *Torino* 2 706 ([-]/[-]/[-])[367]
T37: *MVN* 8 231 (AS 6/i/-)
T38: *CUSAS* 39 135 (AS 6/v*/-)
T39: *CUSAS* 39 130 (AS 6/xi/-)

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362. *Santag* 7 32 dates to around AS 3 based on Šaraizu, Abbagena, and Ur-Suen (see *CUSAS* 39 128 obv. ii 37 [coll.], iii 5–6; *Santag* 7 32 obv. ii' 2' [coll.], 10', 11' [coll.]).

363. While the reverse is not available, BDTNS 196758 predates *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 based on Nabalu and Lugalšunire (see BDTNS 196758 obv. ii 1, 4; *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 rev. ii 3, 6).

364. See n. 185 for the possible date.

365. *AnOr* 7 301 predates *CUSAS* 39 135 based on two Lu-Šaras and Tirgu (see *AnOr* 7 301 obv. ii' 3, 18, iii' 23; *CUSAS* 39 135 obv. i 40, ii 11, 37).

366. *Nisaba* 23 9 predates *CUSAS* 39 135 based on Tirgu (see *Nisaba* 23 9 obv. i 9; *CUSAS* 39 135 obv. ii 11). *Nisaba* 23 9 also postdates *AnOr* 7 301 based on Durgarni (see *AnOr* 7 301 obv. ii' 18; *Nisaba* 23 9 obv. i 8 [coll.]). Note that the DIŠ signs in *Nisaba* 23 9 simply count individuals rather than notate them as full-time (see also n. 371).

367. *Torino* 2 706 dates to around AS 6 based on Ayagena and Lugalamarku (see *CUSAS* 39 135 obv. iv 29, rev. v 14; *Torino* 2 706 A obv. ii' 4', B rev. iii' 5' [coll.]) and predates AS 7 based on Lugalamarku (see *TCL* 5 6038 obv. iv 10; *Torino* 2 706 B rev. iii' 5' [coll.]).

T40: *BCT* 2 288 (AS 6/xii/-)
T41: *Nisaba* 6 10 (AS 6/xii/-)
T42: *Nisaba* 26 17 (AS 6/xii/-)
T43: *YOS* 4 232 (AS 6/xii/-)
T44: *AAICAB* I/1 Ashm. 1924-665 (AS 6/xiii*/-)
T45: *BPOA* 7 2058 (AS 6/xiii*/-)
T46: *OrSP* 47-49 483 (-/-/-)[368]
T47: *MVN* 15 238 (AS 7*/-/-)
T48: *OrSP* 47-49 382 (AS 8/vi?|xii?/-)[369]
T49: *SNAT* 405 (AS 8/ix*/15*)
T50: CDLI P429776 (AS 8/xii/-)
T51: *BPOA* 1 757 (ŠS 1/-/-)
T52: *Organisation administrative, Diss.* 1, 226 10 Talon-Vanderroost 3 (ŠS 1/-/-)
T53: *BPOA* 1 810 (ŠS 1/iv*/-)
T54: *UTI* 3 1971 (ŠS 1*/xii*/-)
T55: *MVN* 21 342 (ŠS 2/-/-)
T56: Englund, *CDLJ* 2003, 1 2 Hand 1 (ŠS 2/i*/-)
T57: *BPOA* 2 2474 (ŠS 2/xii*/-)
T58: Englund, *CDLJ* 2003, 1 1 Erlenmeyer 152 (ŠS 2/xii/-)
T59: *MVN* 18 423 (ŠS 3/-/-)
T60: *BPOA* 2 2002 (ŠS 4/xi*/-)
T61: *Princeton* 1 556 (-/-/-)[370]
T62: *AAICAB* I/1 Ashm. 1911-228 (ŠS 5/vii/-)
T63: *CST* 880 (ŠS 5/vii/[-])
T64: *YOS* 4 160 (ŠS 6/ix*/10*)
T65: *Nisaba* 33 521 (ŠS 8/-/-)
T66: Pomponio, *AION* 64, 41 (ŠS 8/-/-)
T67: Englund, *ASJ* 14, 101 3 (IS 2/vi/20)
T68: *CUSAS* 39 138 ([-]/[-]/[-])
T69: *CUSAS* 39 139 ([-]/[-]/[-])
T70: *BPOA* 2 2557 (-/-/-)[371]
T71: *MVN* 3 370 (-/-/-)
T72: *Nisaba* 23 47 (-/-/-)
T73: *Nisaba* 23 79 (-/-/-)

368. *OrSP* 47-49 483 dates to around AS 7 based on Ur-Geštinanka, Šešani, Ludingira, and Ur-Guedena (see *OrSP* 47-49 483 obv. i 14, ii 9, 12, rev. i 14; *Torino* 2 704 obv. i 2, 5 [coll.], ii 3, 9; *YOS* 4 232 rev. ii 22).

369. The colophon includes the month iti ezem-^{d}Dumu-zi, which is the sixth month at Girsu, whereas iti ^{d}Dumu-zi is the twelfth month at Umma (see Sallaberger 1999, 235).

370. *Princeton* 1 556 predates *CST* 880 based on Dadamu (*CST* 880 rev. i 3; *Princeton* 1 556 obv. i 12).

371. *CUSAS* 40/2 736 is nearly identical to *BPOA* 2 2557 (see p. 210), but it clarifies that the various conscripted individuals were fishermen. It does not clearly distinguish between dumu-gir$_{15}$ and UN-il$_2$, however, so it is not included. Compared to *BPOA* 2 2557, *CUSAS* 40/2 736 is a good example of how citizens and UN-il$_2$ can be counted with DIŠ signs rather than notated as full-time (see also n. 366).

Each individual is assigned a personal identification number (PIN), and they are sequenced according to their attestations, such that Lugalitida (PIN 1) is the first individual included here in T1. In order to find individuals demonstrating specific Observation Nos., Table A1.2 groups all PINs according to their Observation Nos.

Table A1.1. Grouping of PINs according to Observation Nos.

Observation No. 1	Observation No. 2	Observation No. 3
17, 20, 31, 38–44, 46–56, 63, 100, 102–105, 111–121, 123–127, 148–150, 191–192, 194–201, 210–245	1–16, 21–42, 44–48, 51–63, 65–87, 89–123, 128, 130, 135, 139, 141–162, 173–176, 180, 182–196, 202–204, 210–212, 214, 216–219, 223–225, 228, 230–231, 235–236, 242–243, 246–254, 256–260	1, 18–19, 31, 64, 87–88, 114–115, 117, 121, 123, 125–140, 163–172, 177–179, 181, 188, 199, 205–209, 255

There are a few considerations that need to be mentioned. Every individual included here demonstrates at least one Observation No., and all their attestations in every text listed here are included, unless they lack many details or are too fragmentary. Whenever a name or term is cited multiple times for a given text, if their transliterations are the same, they are not repeated. In terms of inferring an individual's social stratum, only juxtaposition to UN-il$_2$ is included, as opposed to inferences based on familial relationships or occupations. If a text is too fragmentary, then it cannot be certain whether an individual's social stratum is inferable from juxtaposition. If individuals are included from such fragmentary texts, then their social stratum is described as "dumu-gir$_{15}$ | eren$_2$ | inferred (?)" Individuals included in less fragmentary texts in which this inference is possible but not certain are described as "inferred (?)" Although it is possible in some texts to infer an indented individual's social stratum, this is not consistently possible, so such individuals are not included here. Details regarding employment notations and terms or occupations repeated in a text's totals section are not cited here. Occupations include specific terms as well as phrases on some occasions. While phrases involving giri$_3$-se$_3$-ga are helpful and relate to occupations, they are not included here.

Table A1.2. Selected Multiply Attested Male Citizens in Umma

PIN. Name (Citation)	Social Stratum (Line) [Observation No. 1 in Gray]	Employment Notation|Term (Line) [Observation No. 2 in Gray]	Conscription Duration (Period) (Line)	Occupation (Line)	Barley Allotment | šuku land (Line) [Observation No. 3 in Gray]
1. Lugal-iti-da (T1 obv. i 12)	**inferred**	**AŠc** (obv. i 12)	—	**engar** (obv. i 12)	**<gan2>** (obv. i 12)
1. Lugal-iti-da, ˈLugalˈ-iti-da (T39 obv. i 15, 24)	**inferred**	**AŠc** (obv. i 15)	—	**ˈengarˈ** (obv. i 15)	**gan2** (obv. i 15)
1. Lugal-iti-da (T65 rev. i 6')	—	—	—	**engar** (rev. i 6')	**0.1.0 gan2 … a-ša3 igi-E2-mah-še3** (rev. i 6', 9')
2. Lu5-lu5-mu (T1 obv. i 21)	**inferred**	**AŠc** (obv. i 21)	—	**engar** (obv. i 21)	**<gan2>** (obv. i 21)
2. Lu5-lu5-ˈmuˈ, ˈLu5ˈ-lu5-mu (T39 obv. ii 14, rev. i 1 [coll.])	**inferred**	**AŠc** (obv. ii 14)	—	**ˈengarˈ** (obv. ii 14 [coll.])	**gan2** (obv. ii 14)
3. Ur-E11-e (T2 obv. ii' 1')	**ˈdumuˈ-gir15** (obv. iii' 17' [coll.])	**½** (obv. ii' 1')	—	—	—
3. Ur-E11-e (T8 obv. ii 22)	**eren2** (rev. iii 15)	**½c** (obv. ii 22)	—	**azlag7** (rev. ii 1)	**<gan2>** (obv. ii 22)
4. Na-mu (T2 obv. ii' 2')	**ˈdumuˈ-gir15** (obv. iii' 17' [coll.])	**½** (obv. ii' 2')	—	—	—
4. Na-mu (T8 obv. ii 23)	**eren2** (rev. iii 15)	**AŠc** (obv. ii 23)	—	**azlag7** (rev. ii 1)	**<gan2>** (obv. ii 23)
5. A-kal-la (T2 obv. ii' 3')	**ˈdumuˈ-gir15** (obv. iii' 17' [coll.])	**½** (obv. ii' 3')	—	—	—
5. A-kal-la (T8 obv. ii 26)	**eren2** (rev. iii 15)	**½c** (obv. ii 26)	—	**azlag7** (rev. ii 1)	**<gan2>** (obv. ii 26)
6. Lu2-sa6-i3-zu (T2 obv. ii' 4', iii' 3')	**ˈdumuˈ-gir15** (obv. iii' 17' [coll.])	**½** (obv. ii' 4', iii' 3')	—	—	—
6. Lu2-sa6-i3-zu (T8 obv. ii 33)	**eren2** (rev. iii 15)	**AŠc** (obv. ii 33)	—	**azlag7** (rev. ii 1)	**<gan2>** (obv. ii 33)
7. Lugal-iti-da (T2 obv. ii' 6', iii' 5')	**ˈdumuˈ-gir15** (obv. iii' 17' [coll.])	**½** (obv. ii' 6', iii' 5')	—	—	—
7. Lugal-iti-da (T8 obv. iii 8)	**eren2** (rev. iii 15)	**½c** (obv. iii 8)	—	**azlag7** (rev. ii 1)	**<gan2>** (obv. iii 8)
8. NI-da-ga (T2 obv. ii' 9', iii' 7')	**ˈdumuˈ-gir15** (obv. iii' 17' [coll.])	**½** (obv. ii' 9', iii' 7')	—	—	—
8. NI-da-ga (T8 obv. iii 17)	**eren2** (rev. iii 15)	**AŠc** (obv. iii 17)	—	**azlag7** (rev. ii 1)	**<gan2>** (obv. iii 17)
9. I7-pa-e3 (T2 obv. ii' 11', iii' 8')	**ˈdumuˈ-gir15** (obv. iii' 17' [coll.])	**½** (obv. ii' 11', iii' 8')	—	—	—
9. I7-pa-e3 (T8 obv. iii 19)	**eren2** (rev. iii 15)	**½c** (obv. iii 19)	—	**azlag7** (rev. ii 1)	**<gan2>** (obv. iii 19)

PIN. Name (Citation)	Social Stratum (Line) [Observation No. 1 in Gray]	Employment Notation|Term (Line) [Observation No. 2 in Gray]	Conscription Duration (Period) (Line)	Occupation (Line)	Barley Allotment | šuku land (Line) [Observation No. 3 in Gray]
10. Da-da (T2 obv. ii' 12', iii' 10')	**ˈdumuˈ-gir$_{15}$** (obv. iii' 17' [coll.])	**½** (obv. ii' 12', iii' 10')	—	—	—
10. Da-da (T8 obv. iii 23)	**eren$_2$** (rev. iii 15)	**AŠ$_c$** (obv. iii 23)	—	**azlag$_7$** (rev. ii 1)	**<gan$_2$>** (obv. iii 23)
11. Nig$_2$-gur$_{11}$ (T2 obv. ii' 14')	**ˈdumuˈ-gir$_{15}$** (obv. iii' 17' [coll.])	**½** (obv. ii' 14')	—	—	—
11. Nig$_2$-gur$_{11}$ˈ(BI) (T8 obv. iii 29)	**eren$_2$** (rev. iii 15)	**AŠ$_c$** (obv. iii 29)	—	**azlag$_7$** (rev. ii 1)	**<gan$_2$>** (obv. iii 29)
12. Da-gi (T2 obv. ii' 16')	**ˈdumuˈ-gir$_{15}$** (obv. iii' 17' [coll.])	**½** (obv. ii' 16')	—	—	—
12. Da-gi$_4$ (T8 obv. iii 35)	**eren$_2$** (rev. iii 15)	**½$_c$** (obv. iii 35)	—	**azlag$_7$** (rev. ii 1)	**<gan$_2$>** (obv. iii 35)
13. Šeš-kal-la (T2 obv. ii' 17', iii' 9')	**ˈdumuˈ-gir$_{15}$** (obv. iii' 17' [coll.])	**½** (obv. ii' 17', iii' 9')	—	—	—
13. Šeš-kal-la (T8 obv. iii 37)	**eren$_2$** (rev. iii 15)	**½$_c$** (obv. iii 37)	—	**azlag$_7$** (rev. ii 1)	**<gan$_2$>** (obv. iii 37)
14. Ur-^{d}Suen (T2 obv. iii' 14')	**ˈdumuˈ-gir$_{15}$** (obv. iii' 17')	**½** (obv. iii' 14')	—	—	—
14. Ur-^{d}Suen (T8 rev. i 29)	**eren$_2$** (rev. iii 15)	**½$_c$** (rev. i 29)	—	**azlag$_7$** (rev. ii 1)	**<gan$_2$>** (rev. i 29)
15. In-zu (T2 obv. iii' 15')	**ˈdumuˈ-gir$_{15}$** (obv. iii' 17' [coll.])	**½** (obv. iii' 15')	—	—	—
15. I$_3$-zu (T8 rev. i 32)	**eren$_2$** (rev. iii 15)	**½$_c$** (rev. i 32)	—	**azlag$_7$** (rev. ii 1)	**<gan$_2$>** (rev. i 32)
16. Ur-^{d}A-šar$_2$ (T2 obv. iii' 16')	**ˈdumuˈ-gir$_{15}$** (obv. iii' 17' [coll.])	**½** (obv. iii' 16')	—	—	—
16. Ur-^{d}A-šar$_2$ (T8 rev. i 33)	**eren$_2$** (rev. iii 15)	**½$_c$** (rev. i 33)	—	**azlag$_7$** (rev. ii 1)	**<gan$_2$>** (rev. i 33)
17. Ur-ab-ba (T3 rev. ii 26)	—	—	—	**lu$_2$-tir-ra** (rev. iii 11')	**0.1.0 gan$_2$ 10 la$_2$ 1.0.0 gur … a-ša$_3$ anše** (rev. ii 25, 27)
17. Ur-ab-ba (T40 obv. i 10)	**inferred (?)**	**šu** (obv. i 10)	—	—	—
17. Ur-ab-ba (T48 obv. i 14)	**eren$_2$ (?)**[372]	**šu** (obv. i 14)	—	**lu$_2$-tir-ra** (rev. iii 24)	—

372. eren$_2$-me may be written between rev. iii 13: šu-nigin$_2$ 2 dumu nita$_2$ nu-dib and 14: šu-nigin$_2$ 4(AŠ$_c$) gan$_2$ UN guruš. This part of the text is written on dry clay and several of the signs are difficult to read.

PIN. Name (Citation)	Social Stratum (Line) [Observation No. 1 in Gray]	Employment Notation|Term (Line) [Observation No. 2 in Gray]	Conscription Duration (Period) (Line)	Occupation (Line)	Barley Allotment | šuku land (Line) [Observation No. 3 in Gray]
18. La-lum (T3 rev. ii 31 [translit. mine])	—	—	—	**lu$_2$-tir-ra** (rev. iii 11')	**0.0.3 gan$_2$ 3.0.0 gur … […] ˹x˺-nigin** (rev. ii 30, iii 1' [translit. mine])
18. La-lum (T6 rev. ii 15 [translit. mine])	—	—	—	**lu$_2$-tir-ra** (rev. ii 20)	**0.0.3 gan$_2$ 3.0.0 gur … a-ša$_3$ A-du$_{10}$-ga-NIGIN$^{!?}$(LAGAB)** (rev. ii 30)[373]
18. La-lum (T7 rev. i 31)	—	—	—	—	**0.0.3 gan$_2$ 1.2.3 gur** (rev. i 31)
18. Lal$_3$-um (T48 rev. ii 13 [translit. mine])	**eren$_2$ (?)**	**AŠ$_c$** (rev. ii 13)	—	**lu$_2$-tir-ra** (rev. iii 24)	**gan$_2$** (rev. ii 13)
18. Lal$_3$-um (T55 rev. i 2)	—	—	—	**tir** (rev. i 2)	**0.0.4 gan$_2$ 6.0.0 gur … a-ša$_3$ A-du$_{10}$-nigin** (rev. i 1, 4)
19. Lugal-[ez]em (T3 rev. iii 4')	—	—	—	**lu$_2$-tir-ra** (rev. iii 11')	**[x.x.x gan$_2$ x].3.0 … [a-ša$_3$ Du$_6$]-kar-sag** (rev. iii 4', 6')
19. Lugal-ezem (T39 obv. ii 2)	**inferred**	**AŠ$_c$** (obv. ii 2)	—	—	**gan$_2$** (obv. ii 2)
19. Lugal-[ez]em (T68 obv. i 15')	—	—	—	**lu$_2$-tir** (obv. i 15')	**0.0.3 gan$_2$ 3.0.0 gur … {field}** (obv. i 14')
20. Ab-ba-sig$_5$ (T3 rev. iii 7')	—	—	—	**lu$_2$-tir-ra** (rev. iii 11')	**[x.x.x] gan$_2$ 0.3.0 … [a]-ša$_3$ A-ba-a-gi$_6$-i$_3$-gi$_4$-gi$_4$** (rev. iii 7', 9')
20. Ab-ba-sig$_5$ (T40 obv. ii 26)	**inferred (?)**	**šu** (obv. ii 26)	—	—	—
20. Ab-ba-sig$_5$ (T48 obv. iii 20)	**eren$_2$ (?)**	**šu** (obv. iii 20)	—	**lu$_2$-tir-ra** (rev. iii 24)	—
21. Lugal-^{giš}gigir-re (T4 obv. iii 3, 6)	**dumu-gir$_{15}$ | eren$_2$ (?)**[374]	**AŠ$_c$** (obv. iii 3)	—	**engar** (obv. iii 3)	**gan$_2$** (obv. iii 3)
21. Lugal-^{giš}gigir-re (T33 rev. iii 28')	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (rev. iii 28')	—	—	**gan$_2$** (rev. iii 28')
22. Arad$_2$-hul$_3$-la (T4 obv. iii 4)	**dumu-gir$_{15}$ | eren$_2$ (?)**	**AŠ$_c$** (obv. iii 4)	—	—	**gan$_2$** (obv. iii 4)
22. Arad$_2$-hul$_3$-la (T33 rev. iii 29')	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (rev. iii 29')	—	—	**gan$_2$** (rev. iii 29')

373. The name of this field as well as that in T3 and T55 for Lalûm is the same as the forest at which he worked in T48.

374. *Nisaba* 23 2 rev. ii 8' is transliterated as 4 šu-gi$_4$-/me, but it can probably be understood as 4 šu-gi$_4$ / dumu-gir$_{15}$-me or 4 šu-gi$_4$ / eren$_2$-me.

PIN. Name (Citation)	Social Stratum (Line) [Observation No. 1 in Gray]	Employment Notation|Term (Line) [Observation No. 2 in Gray]	Conscription Duration (Period) (Line)	Occupation (Line)	Barley Allotment | šuku land (Line) [Observation No. 3 in Gray]
23. Lugal$^{!?}$(LU$_2$)-nesag$^{!?}$(AB)-e$^{!?}$(BA), Lugal-nesag-e (T4 obv. iii 20, 24)	**dumu-gir$_{15}$ | eren$_2$ (?)**	**AŠ$_c$** (obv. iii 20)	—	**engar** (obv. iii 20)	**gan$_2$** (obv. iii 20)
23. Lugal-nesag-e (T33 rev. iv 8')	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (rev. iv 8')	—	**engar** (rev. iv 8')	**gan$_2$** (rev. iv 8')
24. Lu$_2$-^{d}Inanna (T4 obv. iii 22)	**dumu-gir$_{15}$ | eren$_2$ (?)**	**AŠ$_c$** (obv. iii 22)	—	—	**gan$_2$** (obv. iii 22)
24. Lu$_2$-^{d}Inanna (T33 rev. iv 11')	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (rev. iv 11')	—	—	**gan$_2$** (rev. iv 11')
25. Ur$_4$-ša$_3$-ki-du$_{10}$ (T4 obv. iii 26, 31)	**dumu-gir$_{15}$ | eren$_2$ (?)**	**AŠ$_c$** (obv. iii 26)	—	**engar** (obv. iii 26)	**gan$_2$** (obv. iii 26)
25. Ur$_4$-ša$_3$-ki-du$_{10}$ (T33 obv. v 13, 21)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. v 13)	—	**engar** (obv. v 13)	**gan$_2$** (obv. v 13)
26. Ur-^{d}Nin-a-zu (T4 obv. iii 28)	**dumu-gir$_{15}$ | eren$_2$ (?)**	**AŠ$_c$** (obv. iii 28)	—	—	**gan$_2$** (obv. iii 28)
26. Ur-^{d}Nin-a-zu (T33 obv. v 16)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. v 16)	—	—	**gan$_2$** (obv. v 16)
27. Ur-^{giš}gigir (T4 obv. iii 30)	**dumu-gir$_{15}$ | eren$_2$ (?)**	**AŠ$_c$** (obv. iii 30)	—	—	**gan$_2$** (obv. iii 30)
27. Ur-^{giš}gigir (T47 obv. 1)	—	**½** (obv. 1 [coll.])	**20 months (?) (AS 5/vii/- to AS 7/-/-)** (obv. 2–3)[375]	—	—
28. U$_2$-da-[ur$_4$-ra] (T4 rev. iii 20')[376]	**dumu-gir$_{15}$ | eren$_2$ (?)**	**AŠ$_c$** (rev. iii 20')	—	**[engar$^?$]** (rev. iii 20' [translit. mine])	**gan$_2$** (rev. iii 20')
28. U$_2$-da-ur$_4$-ra (T33 rev. vii 4, 11)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (rev. vii 4)	—	**engar, sag-apin** (rev. vii 4, 15)	**gan$_2$** (rev. vii 4)

375. AS 5 and AS 6 both had intercalary months (see, for example, *BPOA* 7 1733; 2287). It is not certain if the conscription period lasted to the beginning of AS 7 or continued further into that year.

376. Rev. i 5–12, iii 10–27 in the BDTNS are numbered as rev. i 5'–12', iii 10'–27' here. Udaura's occupation here was possibly engar since he was the first conscripted individual in his work group, and these individuals typically engar in this text. Based on this formatting, he may have conscripted his work group in rev. iii 26', but the transliteration cannot be easily confirmed.

PIN. Name (Citation)	Social Stratum (Line) [Observation No. 1 in Gray]	Employment Notation|Term (Line) [Observation No. 2 in Gray]	Conscription Duration (Period) (Line)	Occupation (Line)	Barley Allotment | šuku land (Line) [Observation No. 3 in Gray]
29. Lu$_2$-^{d}Nin-ur$_4$-ra (T5 obv. i 27')	**dumu-gir$_{15}$** (obv. ii 7, 9)	**½** (obv. i 27')	**13 months** (obv. ii 7)	—	—
29. Lu$_2$-^{d}Nin-ur$_4$-ra (T19 rev. iv 6)	**dumu-gir$_{15}$** (rev. iv 12)	**½** (rev. iv 6)	**3 months (x–xii)** (rev. iv 15–17)	—	—
29. Lu$_2$-^{d}Nin-ur$_4$-ra (T27 rev. v 15)	**dumu-gir$_{15}$** (rev. v 21)	**½** (rev. v 15)	**4 months (x–xiii)** (rev. v 20, 25)	—	—
30. Ur-nigar$_x^{gar}$ (T5 obv. i 31')	**dumu-gir$_{15}$** (obv. ii 7, 9)	**[½]** (obv. i 31')	**13 months** (obv. ii 7)	—	—
30. Ur-nigar$_x^{gar}$ (T31 rev. i 13)	**inferred**	**AŠ$_c$** (rev. i 13)	—	**šu-ku$_6$ sa$_2$-du$_{11}$** (rev. iii 1 [CDLI translit.])	**<gan$_2$>** (rev. i 13)
31. A-kal-la (T5 rev. v 12)	**dumu-gir$_{15}$** (obv. ii 7, 9)	**½** (rev. v 12)	**13 months** (obv. ii 7)	—	—
31. A-a-kal-la (T40 obv. ii 15)	**inferred (?)**	**AŠ$_c$** (obv. ii 15)	—	—	**gan$_2$** (obv. ii 15)
31. A-kal-la (T48 obv. iii 3)	**eren$_2$ (?)**	**AŠ$_c$** (obv. iii 3)	—	**lu$_2$-tir-ra** (rev. iii 24)	**gan$_2$** (obv. iii 3)
31. A-a-kal-la (T52 obv. 11)	—	—	—	—	**0.1.0 gan$_2$** (obv. 11)
32. Nu-ur$_2$-^{d}Suen (T8 obv. i 8)	**eren$_2$** (rev. ii 10)	**½$_c$** (obv. i 8)	—	**nagar** (obv. i 12)	**<gan$_2$>** (obv. i 8)
32. Nu-$^{'}$ur$_2$$^{'}$-^{d}Suen (T46 rev. i 29)	**dumu-gir$_{15}$, eren$_2$** (rev. ii 4, 7)	**½$_c$** (rev. i 29)	—	—	**<gan$_2$>** (rev. i 29)
33. Lugal-inim-ge-na (T9 obv. 4, 9)	**inferred**	**AŠ$_c$** (obv. 4)	—	**um-mi-a** (obv. 4)	**<gan$_2$>** (obv. 4)
33. Lugal-inim-ge-na (T50 obv. i 10, 15)	**inferred**	**AŠ$_c$** (obv. i 10)	—	**um-mi-a** (obv. i 10)	**<gan$_2$>** (obv. i 10)
34. Ur-^{d}Šara$_2$ (T9 obv. 6)	**inferred**	**AŠ$_c$, si$_{12}$-a** (obv. 6)	—	**nu-^{giš}kiri$_6$** (rev. 7)	**0.1.0** (obv. 6)
34. Ur-^{d}Šara$_2$ (T50 obv. i 12)	**inferred**	**AŠ$_c$, si$_{12}$-a** (obv. i 12)	—	—	**0.1.0** (obv. i 12)
35. Gu-da-da (T9 obv. 7)	**inferred**	**AŠ$_c$, si$_{12}$-a** (obv. 7)	—	**nu-^{giš}kiri$_6$** (rev. 7)	**0.1.0** (obv. 7)
35. Gu-da-$^{'}$da$^{'}$ (T50 obv. i 13 [coll.])	**inferred**	**AŠ$_c$, si$_{12}$-<a>** (obv. i 13)	—	—	**0.1.0** (obv. i 13)
36. Ar-ši-ah (T9 rev. 1)	**inferred**	**AŠ$_c$, si$_{12}$-a** (rev. 1)	—	**nu-^{giš}kiri$_6$** (rev. 7)	**0.1.0** (rev. 1)
36. Ar-ši-ah (T50 obv. i 28')	**inferred**	**AŠ$_c$, si$_{12}$-a** (obv. i 28')	—	—	**0.1.0** (obv. i 28')
37. Lu$_2$-^{d}Inanna (T9 obv. 11, rev. 5)	**inferred**	**AŠ$_c$** (obv. 11)	—	**um-mi-a** (obv. 11)	**<gan$_2$>** (obv. 11)
37. Lu$_2$-^{d}Inanna (T50 obv. ii 27)	**inferred**	**AŠ$_c$** (obv. ii 27)	—	**um-mi-a** (obv. ii 27)	**<gan$_2$>** (obv. ii 27)

PIN. Name (Citation)	Social Stratum (Line) [Observation No. 1 in Gray]	Employment Notation|Term (Line) [Observation No. 2 in Gray]	Conscription Duration (Period) (Line)	Occupation (Line)	Barley Allotment | šuku land (Line) [Observation No. 3 in Gray]
38. Be-li$_2$ (T10 obv. iii 31')[377]	**inferred (?)**	**½$_c$** (obv. iii 31')	—	—	**[ga]n$_2$** (obv. iii 31')
38. Be-'li$_2$', Be-li$_2$ (T26 obv. ii 14, rev. i 10)	**dumu-gir$_{15}$** (obv. ii 29, 34, rev. i 25)	**½** (obv. ii 14, rev. i 10)	**25 months** (obv. ii 30–32, rev. i 26)[378]	—	—
38. Be-li$_2$ (T70 obv. 3)[379]	**dumu-gir$_{15}$** (rev. 11)	**½** (obv. 3)	—	—	—
39. ^{d}Šara$_2$-i$_3$-zu (T10 obv. iii 23')	**inferred (?)**	**½$_c$** (obv. iii 23')	—	—	**gan$_2$** (obv. iii 23')
39. ^{d}Šara$_2$-i$_3$-zu (T26 obv. ii 1)	**dumu-gir$_{15}$** (obv. ii 29, 34)	**½** (obv. ii 1)	**13 months** (obv. ii 30–32)	**agar$_4$-nigin$_2$** (obv. ii 1)	—
40. Ba-sig$_5$ (T10 obv. iii 25')	**inferred (?)**	**½$_c$** (obv. iii 25')	—	—	**gan$_2$** (obv. iii 25')
40. Ba-sig$_5$ (T26 obv. ii 10, rev. i 6)	**dumu-gir$_{15}$** (obv. ii 29, 34, rev. i 25)	**½** (obv. ii 10, rev. i 6)	**25 months** (obv. ii 30–32, rev. i 26)	—	—
40. Ba-sig$_5$ (T70 obv. 5)	**dumu-gir$_{15}$** (rev. 11)	**½** (obv. 5)	—	—	—
41. Ur-e$_2$-nun-na (T10 obv. iii 27')	**inferred (?)**	**½$_c$** (obv. iii 27')	—	—	**gan$_2$** (obv. iii 27')
41. Ur-e$_2$-nun-na (T26 obv. ii 11, rev. i 7)	**dumu-gir$_{15}$** (obv. ii 29, 34, rev. i 25)	**½** (obv. ii 11, rev. i 7)	**25 months** (obv. ii 30–32, rev. i 26)	—	—
42. Ur-e$_2$-nun-na (T10 obv. iii 29')	**inferred (?)**	**½$_c$** (obv. iii 29')	—	—	**gan$_2$** (obv. iii 29')
42. Ur-e$_2$-nun-na (T26 obv. ii 12, rev. i 8)	**dumu-gir$_{15}$** (obv. ii 29, 34, rev. i 25)	**½** (obv. ii 12, rev. i 8)	**25 months** (obv. ii 30–32, rev. i 26)	—	—
43. Ur-nigar$_x^{gar}$ (T10 obv. iii 33')	**inferred (?)**	**šu** (obv. iii 33')	—	—	—
43. Ur-nigar$_x^{gar}$ (T26 obv. ii 15, rev. i 11)	**dumu-gir$_{15}$** (obv. ii 29, 34, rev. i 25)	**½** (obv. ii 15, rev. i 11)	**25 months** (obv. ii 30–32, rev. i 26)	—	—

377. See Koslova 2004, 55.

378. See p. 205 for a discussion on this unusual conscription period.

379. The connection between individuals in *AnOr* 1 85 (T26); *BPOA* 2 2557 (T70) is noted in Ozaki and Sigrist 2006, 209.

PIN. Name (Citation)	Social Stratum (Line) [Observation No. 1 in Gray]	Employment Notation|Term (Line) [Observation No. 2 in Gray]	Conscription Duration (Period) (Line)	Occupation (Line)	Barley Allotment | šuku land (Line) [Observation No. 3 in Gray]
44. Ur-^{d}Ma-m[i] (T10 obv. iii 37')	**inferred (?)**	**½$_{c}$** (obv. iii 37')	—	—	**gan$_{2}$** (obv. iii 37')
44. Ur-^{d}Ma-mi, Ur-^{d}Ma-mi (T20 obv. i 21', rev. ii 22)	**dumu-gir$_{15}$** (obv. ii 29)	**½** (obv. i 21', rev. ii 22)	**8 months (v–xii)** (obv. ii 30–31)	—	—
44. Ur-^{d}Ma-mi (T26 obv. ii 16, rev. i 12)	**dumu-gir$_{15}$** (obv. ii 29, 34, rev. i 25)	**½** (obv. ii 16, rev. i 12)	**25 months** (obv. ii 30–32, rev. i 26)	—	—
44. Ur-^{d}Ma-mi (T35 rev. i 6)	**dumu-gir$_{15}$** (rev. ii 3, 17 [both coll.])	—	—	—	—
44. Ur-^{d}Ma-mi (T54 obv. 1)	—	**½** (obv. 1)	—	—	—
44. Ur-^{d}Ma-mi (T58 obv. i 14)	**dumu-gir$_{15}$** (obv. ii 22)	**½** (obv. i 14)	**12 months** (obv. ii 16–18)	—	—
44. Ur-^{d}Ma-mi (T70 obv. 2)	**dumu-gir$_{15}$** (rev. 11)	**½** (obv. 2)	—	—	—
44. Ur-^{d}Ma-mi (T71 obv. 3)	**dumu-gir$_{15}$** (rev. 6)	—	—	—	—
45. Inim-ma-[n]i-zi (T10 obv. iv 3')	**inferred (?)**	**½$_{c}$** (obv. iv 3')	—	—	**gan$_{2}$** (obv. iv 3')
45. Inim-ma-ni-$^{\lceil}$zi$^{\rceil}$ (T49 rev. 2)	—	**½** (rev. 2)	—[380]	—	—
46. $^{\lceil}$E$^{\rceil}$-mul (T10 rev. iv 18')	**inferred (?)**	**½$_{c}$** (rev. iv 18')	—	**u$_{2}$-il$_{2}$ ^{d}Šara$_{2}$ Ki-an^{ki}-ta** (rev. iv 19')	**gan$_{2}$** (rev. iv 18')
46. E-mul (T41 obv. ii 10)	**eren$_{2}$** (rev. i 12)	**½$_{c}$** (obv. ii 10 [translit. mine])	—	**u$_{2}$-il$_{2}$ ^{d}Šara$_{2}$ Ki-an^{ki}-ta** (obv. ii 11 [translit. mine])	**gan$_{2}$** (obv. ii 10)
47. Lugal-^{giš}gigir-re (T10 rev. iv 20')	**inferred (?)**	**½$_{c}$** (rev. iv 20')	—	**lu$_{2}$-nisig-ga-ta** (rev. iv 21')	**gan$_{2}$** (rev. iv 20')
47. Lugal-^{giš}gigir-re (T33 rev. viii 25)	**dumu-gir$_{15}$ | eren$_{2}$ | inferred (?)**	**AŠ … šeš-tab-ba** (rev. viii 25)	—	**lu$_{2}$-nisig** (rev. viii 28)	**gan$_{2}$** (rev. viii 25)
47. Lugal-^{giš}gigir-re (T41 obv. ii 12)	**eren$_{2}$** (rev. i 12)	**½$_{c}$** (obv. ii 12 [coll.])	—	**lu$_{2}$-nisig-ga-ta** (obv. ii 13)	**gan$_{2}$** (obv. ii 12)
47. Lugal-^{giš}gigir-re (T60 obv. 1)	—	**½** (obv. 1)	—	—	—

380. Inimanizi was imprisoned according to this text.

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48. Inim-^{d}Šara$_2$ (T10 rev. iv 22')	**inferred (?)**	**½$_c$** (rev. iv 22')	—	—	**<gan$_2$>$^{?}$** (rev. iv 22')[381]
48. Inim-^{d}Šara$_2$ (T41 obv. ii 14)	**eren$_2$** (rev. i 12)	**½$_c$** (obv. ii 14 [coll.])	—	—	**<gan$_2$>$^{?}$** (obv. ii 14)
49. Ša$_3$-ku$_3$-ge (T10 rev. iv 23')	**inferred (?)**	**DIŠ** (rev. iv 23')	—	—	—
49. Ša$_3$-ku$_3$-ge (T41 obv. ii 15)	**eren$_2$** (rev. i 12)	**DIŠ** (obv. ii 15)	—	—	—
50. Ur-LI (T10 rev. iv 24')	**inferred (?)**	**DIŠ** (rev. iv 24')	—	—	—
50. Ur-LI (T41 obv. ii 16)	**eren$_2$** (rev. i 12)	**DIŠ** (obv. ii 16)	—	—	—
51. Lu$_2$-dingir-ra (T10 rev. iv 33')	**inferred (?)**	**½$_c$** (rev. iv 33')	—	**aga$_3$-us$_2$ GA$_2$-dub-ba-ta** (rev. iv 34')	**gan$_2$** (rev. iv 33')
51. Lu$_2$-dingir-ra (T41 obv. ii 25)	**eren$_2$** (rev. i 12)	**½$_c$** (obv. ii 25 [coll.])	—	**aga$_3$-us$_2$ GA$_2$-dub-ba-ta** (obv. ii 26)	**gan$_2$** (obv. ii 25)
52. Lu$_2$-ga (T10 rev. iv 35')	**inferred (?)**	**AŠ$_c$** (rev. iv 35')	—	—	**[g]an$_2$** (rev. iv 35')
52. Lu$_2$-ga (T41 obv. ii 27)	**eren$_2$** (rev. i 12)	**½$_c$** (obv. ii 27 [translit. mine])	—	—	**gan$_2$** (obv. ii 27)
53. Lugal-kar-re (T10 rev. iv 36')	**inferred (?)**	**AŠ$_c$** (rev. iv 36')	—	—	**gan$_2$** (rev. iv 36')
53. Lugal-kar-re (T41 obv. ii 28)	**eren$_2$** (rev. i 12)	**½$_c$** (obv. ii 28 [translit. mine])	—	—	**gan$_2$** (obv. ii 28)
54. Lugal-nig$_2$-lagar-e (T10 rev. iv 37')	**inferred (?)**	**½$_c$** (rev. iv 37')	—	—	**gan$_2$** (rev. iv 37')
54. Lugal-nig$_2$-lagar-e (T41 rev. i 1)	**eren$_2$** (rev. i 12)	**½$_c$** (rev. i 1 [translit. mine])	—	—	**gan$_2$** (rev. i 1)
55. Ur-ama-na (T10 rev. iv 38')	**inferred (?)**	**½$_c$** (rev. iv 38')	—	—	**gan$_2$** (rev. iv 38')
55. Ur-ama-na (T41 rev. i 2)	**eren$_2$** (rev. i 12)	**'½$_c$'** (rev. i 2 [coll.])	—	—	**gan$_2$** (rev. i 2)
56. Ur-e$_2$-nun-na (T10 rev. iv 40')	**inferred (?)**	**½$_c$** (rev. iv 40')	—	**gudu$_4$ ^{d}Nin-ur$_4$-ra-ta** (rev. iv 41')	**gan$_2$** (rev. iv 40')
56. Ur-e$_2$-nun-na (T41 rev. i 4)	**eren$_2$** (rev. i 12)	**'½$_c$'** (rev. i 4 [coll.])	—	—	**gan$_2$** (rev. i 4)

381. The absence of gan$_2$ is unusual here as well as in T41 for Inim-Šara.

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57. Ur-dingir-ra (T11 obv. ii' 6')	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. ii' 6' [CDLI])	—	—	**<gan$_2$>** (obv. ii' 6')
57. Ur-dingir-ra (T12 obv. iii 2)	**inferred**	**AŠ$_c$** (obv. iii 2)	—	**gab$_2$-ra** (rev. iii 1)	**gan$_2$** (obv. iii 2)
57. Ur-dingir-ra (T29 obv. iii 8, iv 28)	**inferred**	**AŠ$_c$** (obv. iv 28)	—	**gab$_2$-ra** (obv. v 31)	**gan$_2$** (obv. iv 28)
58. Ad-da-[da$^{!}$] (T11 obv. ii' 7')	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. ii' 7' [CDLI])	—	—	**<gan$_2$>** (obv. ii' 7')
58. $^{!}$Ad$^{!}$-da-da, $^{!}$Ad$^{!}$-da-da (T12 rev. i 36, 41)	**inferred**	**AŠ$_c$** (rev. i 36)	—	**gab$_2$-ra** (rev. iii 1)	**gan$_2$** (rev. i 36)
58. Ad-da-da (T36 B rev. iii' 7')	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**$^{!}$½$_c$$^{!}$** (B rev. iii' 7' [coll.])	—	—	**gan$_2$** (B rev. iii' 7')
59. ^{d}Šara$_2$-a-mu (T11 obv. ii' 9', 13')	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. ii' 9' [CDLI])	—	**unu$_3$** (obv. ii' 9')	**<gan$_2$>** (obv. ii' 9')
59. ^{d}Šara$_2$-<a>-mu, ^{d}Šara$_2$-a-mu (T12 obv. iii 4 [translit. mine], 8)	**inferred**	**AŠ$_c$** (obv. iii 4)	—	**unu$_3$** (obv. iii 4)	**gan$_2$** (obv. iii 4)
59. ^{d}Šara$_2$-a-mu (T29 obv. iii 17, 26)	**inferred**	**AŠ$_c$** (obv. iii 17)	—	**unu$_3$** (obv. iii 17)	**gan$_2$** (obv. iii 17)
60. Lu$_2$-$^{!d}$Utu$^{!}$, Lu$_2$-^{d}Utu (T12 obv. i 13, ii 3)	**inferred**	**AŠ$_c$** (obv. i 13)	—	**$^{!}$unu$_3$$^{!}$** (obv. i 13)	**gan$_2$** (obv. i 13)
60. Lu$_2$-^{d}Utu (T29 obv. i 11')	**inferred**	**AŠ$_c$** (obv. i 11')	—	**[…] (?)** (obv. i 11')	**[gan$_2$]** (obv. i 11' [translit. mine])
61. Al-ba-ni-du$_{11}$ (T12 obv. i 23)	**inferred**	**AŠ$_c$** (obv. i 23)	—	**gab$_2$-ra** (rev. iii 1)	**gan$_2$** (obv. i 23)
61. Al-ba-ni-du$_{11}$ (T29 rev. i 29')	**inferred**	**AŠ$_c$** (rev. i 29' [CDLI])	—	—	**gan$_2$** (rev. i 29')
62. Lu$_2$-^{d}Šara$_2$ (T12 obv. i 29)	**inferred**	**AŠ$_c$** (obv. i 29)	—	**gab$_2$-ra** (rev. iii 1)	**gan$_2$** (obv. i 29)
62. Lu$_2$-$^{!d}$Šara$_2$$^{!}$ (T29 obv. iv 21)	**inferred**	**AŠ$_c$** (obv. iv 21)	—	**gab$_2$-ra** (obv. v 31)	**gan$_2$** (obv. iv 21)
63. Ab-ba-$^{!}$ge-na$^{!}$ (T12 obv. ii 7)	**inferred**	**AŠ$_c$** (obv. ii 7)	—	**unu$_3$** (obv. ii 7)	**gan$_2$** (obv. ii 7)
63. Ab-ba-ge-na, Ab-ba-ge-na (T29 obv. ii 14, iii 2)	**inferred**	**AŠ$_c$** (obv. ii 14)	—	**unu$_3$** (obv. ii 14)	**gan$_2$** (obv. ii 14)
63. Ab-ba-ge-na (T48 rev. ii 10)	**eren$_2$ (?)**	**AŠ$_c$** (rev. ii 10)	—	**lu$_2$-tir-ra** (rev. iii 24)	**gan$_2$** (rev. ii 10)
64. Gu-du-du (T12 obv. ii 17)	**inferred**	**AŠ$_c$** (obv. ii 17)	—	**gab$_2$-ra** (rev. iii 1)	**gan$_2$** (obv. ii 17)
64. [Gu]-$^{!}$du$^{!}$-du (T68 obv. xiii 5')	—	—	—	—	**0.0.3 gan$_2$ $^{!}$2$^{!}$.0.0 [gur] \ a-ša$_3$ Na-r[a-am-^{d}Suen]** (obv. xiii 3'–4')

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65. Lugal-šu-nir-re (T12 obv. ii 24)	**inferred**	**AŠc** (obv. ii 24)	—	**gab$_2$-ra** (rev. iii 1)	**gan$_2$** (obv. ii 24)
65. [Lu]gal-šu-ˈnir-reˈ (T29 obv. ii 35)	**inferred**	**[AŠc]** (obv. ii 35 [coll.])	—	**gab$_2$-ra** (obv. v 31)	**[gan$_2$]** (obv. ii 35 [coll.])
66. Lugal-ezem (T12 obv. ii 36, iii 3)	**inferred**	**AŠc** (obv. ii 36)	—	**unu$_3$** (obv. ii 36)	**gan$_2$** (obv. ii 36)
66. Lugal-ezem (T29 obv. iii 3, 16; iv 29; v 3)	**inferred**	**AŠc** (obv. iii 3)	—	**unu$_3$** (obv. iii 3)	**gan$_2$** (obv. iii 3)
67. Ab-ba-ge-na (T12 obv. iii 5)	**inferred**	**AŠc** (obv. iii 5)	—	**gab$_2$-ra** (rev. iii 1)	**gan$_2$** (obv. iii 5)
67. Ab-ba-ge-na (T29 obv. iii 18)	**inferred**	**AŠc** (obv. iii 18)	—	**gab$_2$-ra** (obv. v 31)	**(?)** (obv. iii 18)[382]
68. Ur-^{d}Si$_4$-da, Ur-^{d}Si$_4$-ˈdaˈ (T12 obv. iii 9, 14)	**inferred**	**AŠc** (obv. iii 9)	—	**unu$_3$** (obv. iii 9)	**gan$_2$** (obv. iii 9)
68. Ur-^{d}Si$_4$-da, [Ur-^{d}Si$_4$]-da (T29 obv. iii 27, 34)	**inferred**	**AŠc** (obv. iii 27)	—	**ˈunu$_3$ˈ** (obv. iii 27)	**gan$_2$** (obv. iii 27)
69. ^{d}Šara$_2$-kam (T12 obv. iii 16, 22, rev. i 8)	**inferred**	**AŠc** (obv. iii 16)	—	**unu$_3$** (obv. iii 16)	**gan$_2$** (obv. iii 16)
69. ˈ^{d}ˈŠara$_2$-kam, ^{d}Šara$_2$-kam (T29 obv. iii 36, iv 5)	**inferred**	**[AŠc]** (obv. iii 36)	—	**ˈunu$_3$ˈ** (obv. iii 36)	**[gan$_2$]** (obv. iii 36)
70. ^{giš}Dur$_2$-gar-ˈniˈ (T12 obv. iii 20)	**inferred**	**AŠc** (obv. iii 20)	—	**gab$_2$-ra** (rev. iii 1)	**gan$_2$** (obv. iii 20)
70. [^{giš}Dur$_2$]-gar-ni (T29 obv. iii 39)	**inferred**	**[AŠc]** (obv. iii 39)	—	**gab$_2$-ra** (obv. v 31)	**[gan$_2$]** (obv. iii 39)
71. Lugal-ku$_3$-zu, ˈLugalˈ-ku$_3$-zu (T12 obv. iii 23, 35)	**inferred**	**AŠc** (obv. iii 23)	—	**unu$_3$** (obv. iii 23)	**gan$_2$** (obv. iii 23)
71. Lugal-ku$_3$-zu (T29 obv. iv 6, 31, 35)	**inferred**	**AŠc** (obv. iv 6)	—	**unu$_3$** (obv. iv 6)	**gan$_2$** (obv. iv 6)
72. Giri$_3$-ni-i$_3$-sa$_6$ (T12 obv. iii 29)	**inferred**	**AŠc** (obv. iii 29)	—	**gab$_2$-ra** (rev. iii 1)	**gan$_2$** (obv. iii 29)
72. Giri$_3$-ni-ˈi$_3$ˈ-sa$_6$ (T29 obv. iv 14)	**inferred**	**AŠc** (obv. iv 14)	—	**gab$_2$-ra** (obv. v 31)	**gan$_2$** (obv. iv 14)
73. Uš (T12 rev. i 2, 9)	**inferred**	**AŠc** (rev. i 2)	—	**unu$_3$** (rev. i 2)	**gan$_2$** (rev. i 2)
73. Uš (T29 obv. iv 38, v 5, vii 12)	**inferred**	**AŠc** (obv. iv 38)	—	**unu$_3$** (obv. iv 38)	**gan$_2$** (obv. iv 38)
74. Ur-e$_2$-mah (T12 rev. i 3)	**inferred**	**AŠc** (rev. i 3)	—	**gab$_2$-ra** (rev. iii 1)	**gan$_2$** (rev. i 3)
74. Ur-e$_2$-mah (T29 obv. iv 39)	**inferred**	**ˈAŠcˈ** (obv. iv 39 [translit. mine])	—	**gab$_2$-ra** (obv. v 31)	—

382. gan$_2$ appears to be erased here. Perhaps Abbagena was sustained by his elder brother's šuku land.

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75. Lugal-ma$_2$-gur$_8$-re (T13 obv. i 12)	**inferred**	**AŠ$_c$** (obv. i 12)	—	—	**gan$_2$** (obv. i 12)
75. Lugal-ma$_2$-gur$_8$-re (T33 obv. vii 7)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. vii 7)	—	**engar** (obv. vii 7)	**gan$_2$** (obv. vii 7)
76. Ur-nigar$_x^{gar}$ (T13 obv. i 16)	**inferred**	**AŠ$_c$** (obv. i 16)	—	—	**gan$_2$** (obv. i 16)
76. Ur-nigar$_x^{gar}$ (T33 obv. vii 11)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. vii 11)	—	—	**gan$_2$** (obv. vii 11)
77. A-ˈkalˈ-[la] (T13 obv. ii 1)	**inferred**	**ˈAŠ$_c$ˈ** (obv. ii 1)	—	—	**ˈgan$_2$ˈ** (obv. ii 1)
77. A-a-kal-la (T33 obv. vii 12)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. vii 12)	—	—	**gan$_2$** (obv. vii 12)
78. A-kal-la (T13 obv. ii 5, 12)	**inferred**	**AŠ$_c$** (obv. ii 5)	—	**ˈengarˈ** (obv. ii 5)	**gan$_2$** (obv. ii 5)
78. A-a-kal-la (T33 obv. vii 16, 24)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. vii 16)	—	**engar** (obv. vii 16)	**gan$_2$** (obv. vii 16)
79. Lugal-ˈa$_2$ˈ-zi-ˈdaˈ (T13 obv. ii 6)	**inferred**	**AŠ$_c$** (obv. ii 6)	—	—	**gan$_2$** (obv. ii 6)
79. Lugal-a$_2$-zi-da (T33 obv. vii 17)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. vii 17)	—	—	**gan$_2$** (obv. vii 17)
80. Lugal-šu-nir-re (T13 obv. ii 11)	**inferred**	**AŠ$_c$** (obv. ii 11)	—	—	**gan$_2$** (obv. ii 11)
80. Lugal-šu-nir-re (T33 obv. vii 22)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. vii 22)	—	—	**gan$_2$** (obv. vii 22)
81. ˈLugalˈ-amar-ku$_3$, Lugal-amar-ku$_3$ (T13 obv. ii 13, rev. i 8)	**inferred**	**AŠ$_c$** (obv. ii 13)	—	**engar** (obv. ii 13)	**gan$_2$** (obv. ii 13)
81. Lugal-amar-ku$_3$ (T33 obv. vii 25, 36)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. vii 25)	—	**engar** (obv. vii 25)	**gan$_2$** (obv. vii 25)
82. A-tu (T13 rev. i 2)	**inferred**	**AŠ$_c$** (rev. i 2)	—	—	**gan$_2$** (rev. i 2)
82. A-tu (T33 obv. vii 30)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. vii 30)	—	—	**gan$_2$** (obv. vii 30)
83. Ab-ba-ge-na (T13 rev. ii 7)	**inferred**	**AŠ$_c$** (rev. ii 7)	—	—	**gan$_2$** (rev. ii 7)
83. Ab-ba-ge-na (T33 obv. viii 7)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. viii 7)	—	—	**gan$_2$** (obv. viii 7)
84. A-kal-la (T13 rev. ii 8)	**inferred**	**AŠ$_c$** (rev. ii 8)	—	—	**gan$_2$** (rev. ii 8)
84. ˈAˈ-a-kal-la (T33 obv. viii 9)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. viii 9)	—	—	**gan$_2$** (obv. viii 9)

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85. Ur-Gu$_2$-eden-na, [Ur-Gu$_2$]-eden-ˈnaˈ (T13 rev. ii 11)	**inferred**	**AŠ$_c$** (rev. ii 11)	—	**engar** (rev. ii 11)	**gan$_2$** (rev. ii 11)
85. Ur-Gu$_2$-eden-na, [Ur-Gu$_2$]-eden-ˈnaˈ (T33 obv. viii 12)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. viii 12)	—	**engar** (obv. viii 12)	**gan$_2$** (obv. viii 12)
85. Ur-Gu$_2$-de$_3$-na, Ur-Gu$_2$-ˈde$_3$-naˈ (T63 obv. ii 11', 18' [coll.])	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. ii 11')	—	**engar** (obv. ii 11')	**gan$_2$** (obv. ii 11')
86. Da$^{!?}$(A$_2$)-du (T13 rev. ii 12 [translit. mine])[383]	**inferred**	**AŠ$_c$** (rev. ii 12)	—	—	**gan$_2$** (rev. ii 12)
86. Da$^{!?}$(A$_2$)-du (T33 obv. viii 13 [translit. mine])	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. viii 13)	—	—	**gan$_2$** (obv. viii 13)
87. Engar-zi (T13 rev. ii 14)	**inferred**	**ˈAŠ$_c$ˈ** (rev. ii 14)	—	—	**ˈgan$_2$ˈ** (rev. ii 14)
87. Engar-zi (T22 obv. i 11')	—	—	—	—	**0.0.4 gan$_2$ a-ša$_3$ muru$_{13}$ \ 0.0.2 gan$_2$ Sag-du$_3$** (obv. i 9'–10')
87. Engar-zi (T33 obv. viii 18)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. viii 18)	—	—	**gan$_2$** (obv. viii 18)
88. A-kal-la (T14 obv. i 14)[384]	**eren$_2$** (rev. ii 17)	**AŠ$_c$** (obv. i 14)	—	**ma$_2$-gin$_2$-ta (?)** (obv. ii 2 [may not apply])	**gan$_2$** (obv. i 14)
88. A-kal-la (T55 obv. i 4)	—	—	—	**ma$_2$-gin$_2$** (obv. i 4)	**0.0.3 gan$_2$ 3.0.0 gur … a-ša$_3$ Nin-^{u2}*KWU* 127.LAGAB** (obv. i 3, 7)
89. Ab-ba-sig$_5$ (T15 obv. i 2, rev. ii 5)	**inferred**	**AŠ$_c$** (obv. i 2)	—	**nu-banda$_3$ gu$_4$** (obv. i 2, 12)	**gan$_2$** (obv. i 2)
89. Ab-ba-sa$_6$-ga (T33 obv. viii 25, rev. i 4)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. viii 25)	—	**nu-banda$_3$ gu$_4$** (obv. viii 25)	**gan$_2$** (obv. viii 25)
90. Ur-dub-la$_2$ (T15 obv. i 14, 22)	**inferred**	**AŠ$_c$** (obv. i 14)	—	**engar** (obv. i 14)	**gan$_2$** (obv. i 14)
90. Ur-dub-la$_2$, Ur-dub-ˈla$_2$ˈ (T33 obv. viii 39, ix 1)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. viii 39)	—	**engar** (obv. viii 39)	**gan$_2$** (obv. viii 39)

383. A$_2$-du is visible in *CUSAS* 39 131 (T13) rev. ii 12, but *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 (T33) obv. viii 13 cannot be visually confirmed. A$_2$-du is a limitedly attested name, however, so Da-du is preferred.

384. One of the two Urmeses in *CUSAS* 39 132 (T14) obv. i 12–13, who just preceded this A(ya)kala, was probably the Urmes in *MVN* 21 342 (T55) obv. i 2, who likewise just preceded this A(ya)kala.

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91. Lugal-ku$_3$-ga-ni (T15 obv. i 15)	**inferred**	**AŠ$_c$** (obv. i 15)	—	—	**gan$_2$** (obv. i 15)
91. Lugal-ku$_3$-ga-ni (T33 obv. viii 40)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. viii 40)	—	—	**gan$_2$** (obv. viii 40)
92. Inim-ma-ni-zi (T15 obv. ii 1, 7)	**inferred**	**AŠ$_c$** (obv. ii 1)	—	**engar** (obv. ii 1)	**gan$_2$** (obv. ii 1)
92. Inim-ma-ni-zi (T33 obv. ix 2, 9)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. ix 2)	—	**engar** (obv. ix 2)	**gan$_2$** (obv. ix 2)
93. Lugal-ša$_3$-la$_2$ (T15 obv. ii 3)	**inferred**	**AŠ$_c$** (obv. ii 3)	—	—	**gan$_2$** (obv. ii 3)
93. Lugal-ša$_3$-la$_2$ (T33 obv. ix 5)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. ix 5)	—	—	**gan$_2$** (obv. ix 5)
94. [Ur-sukkal], Ur-sukkal (T15 obv. ii 8, 22)	**inferred**	**[AŠ$_c$]** (obv. ii 8)	—	**[engar ša$_3$-gu$_4$-ta]** (obv. ii 8)	**[gan$_2$]** (obv. ii 8)
94. Ur-sukkal, [Ur]-sukkal (T33 obv. ix 10, 24)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. ix 10)	—	**engar ša$_3$-gu$_4$-ta** (obv. ix 10)	**gan$_2$** (obv. ix 10)
95. Ku-li (T15 obv. ii 18)	**inferred**	**AŠ$_c$** (obv. ii 18)	—	**engar-ta** (obv. ii 18)	**gan$_2$** (obv. ii 18)
95. ˹Ku˺-li (T33 obv. ix 20)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**[AŠ$_c$]** (obv. ix 20)	—	**engar-ta** (obv. ix 20)	**[gan$_2$]** (obv. ix 20)
96. ^{d}Utu-sig$_5$ (T15 rev. i 2)	**inferred**	**AŠ$_c$** (rev. i 2)	—	—	**gan$_2$** (rev. i 2)
96. ^{d}Utu-sa$_6$-ga (T33 obv. ix 27)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**˹AŠ$_c$˺** (obv. ix 27)	—	—	**[gan$_2$]** (obv. ix 27)
97. Ur-E$_{11}$-e (T15 rev. i 3)	**inferred**	**AŠ$_c$** (rev. i 3)	—	**agar$_4$-nigin$_2$-ta** (rev. i 3)	**gan$_2$** (rev. i 3)
97. Ur-˹E$_{11}$˺-e (T33 obv. ix 28)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**˹AŠ$_c$˺** (obv. ix 28)	—	**[agar$_4$-nigin$_2$-ta]** (obv. ix 28)	**˹gan$_2$˺** (obv. ix 28)
98. Lugal-TAR (T15 rev. i 18)	**inferred**	**AŠ$_c$** (rev. i 18)	—	—	**gan$_2$** (rev. i 18)
98. [Luga]l-TAR (T33 rev. i 1 [translit. mine])	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (rev. i 1)	—	—	**˹gan$_2$˺** (rev. i 1)
99. A-kal-la (T15 rev. i 22)	**inferred**	**AŠ$_c$** (rev. i 22)	—	—	**gan$_2$** (rev. i 22)
99. A-a-kal-la (T33 rev. i 6)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (rev. i 6)	—	—	**gan$_2$** (rev. i 6)

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100. Ur-^{d}Lugal-banda$_{3}^{da}$ (T16 obv. 1)	—	**½** (obv. 1)	**7 months (i–vii)** (obv. 3–4)	**gab$_{2}$-us$_{2}$-še$_{3}$** (obv. 2)	—
100. Ur-^{d}Lugal-ba[nda$_{3}^{da}$] (T17 obv. 7)	—	**½** (obv. 7)	**(?)**[385]	**gab$_{2}$-us$_{2}$ […] … lu$_{2}$ didli $^{\lceil}$x$^{\rceil}$[…]** (rev. 1, 4)	—
100. Ur-^{d}Lugal-banda$_{3}^{\lceil da\rceil}$, Ur-^{d}Lugal-banda$_{3}^{da}$ (T20 obv. ii 4, iv 15, rev. ii 25)	**dumu-gir$_{15}$** (obv. ii 29)	**½** (obv. ii 4, iv 15, rev. ii 25)	**8 months (v–xii)** (obv. ii 30–31)	**gab$_{2}$-us$_{2}$ u$_{3}$ lu$_{2}$ didli-ta gur-ra** (obv. iv 14)	—
100. Ur-^{d}Lugal-banda$_{3}^{da}$ (T35 rev. i 8)	**dumu-gir$_{15}$** (rev. ii 3, 17 [both coll.])	—	—	—	—
100. Ur-^{d}Lugal-banda$_{3}^{da}$ (T38 obv. viii 10')	**inferred**	**uš$_{2}$** (obv. viii 10')	—	**ša$_{3}$-sahar-ra** (rev. viii 1)	—
101. Ba-an-s[a$_{6}$] (T17 obv. 5)	—	**½** (obv. 5)	**(?)**	**gab$_{2}$-us$_{2}$ […] … lu$_{2}$ didli $^{\lceil}$x$^{\rceil}$[…]** (rev. 1, 4)	—
101. Ba-an-sa$_{6}$ (T20 obv. i 22', iv 6, rev. v 36)	**dumu-gir$_{15}$** (obv. ii 29)	**½** (obv. i 22', iv 6,[386] rev. v 36)	**8 months (v–xii)** (obv. ii 30–31)	**gab$_{2}$-us$_{2}$-še$_{3}$** (obv. iv 7, rev. v 36)	—
102. ^{d}Šara$_{2}$-k[am] (T17 obv. 6)	—	**½** (obv. 6)	**(?)**	**gab$_{2}$-us$_{2}$ […] … lu$_{2}$ didli $^{\lceil}$x$^{\rceil}$[…]** (rev. 1, 4)	—
102. ^{d}Šara$_{2}$-[kam], ^{d}Šara$_{2}$-kam (T20 obv. ii 18, iv 14, rev. iv 27)	**dumu-gir$_{15}$** (obv. ii 29)	**½** (obv. ii 18, iv 14, rev. iv 27)	**8 months (v–xii)** (obv. ii 30–31)	**gab$_{2}$-us$_{2}$ u$_{3}$ lu$_{2}$ didli-ta gur-ra, agar$_{4}$-nigin$_{2}$-še$_{3}$** (obv. iv 14, rev. iv 27)	—
102. ^{d}Šara$_{2}$-kam (T38 obv. viii 37')	**inferred**	**½$_{c}$** (obv. viii 37')	—	**ša$_{3}$-sahar-ra** (rev. viii 1)	**gan$_{2}$** (obv. viii 37')

385. See rev. 2–3: iti x-AN$^{?}$[…-ta] \ iti e$_{2}$-i[ti-6-še$_{3}$].

386. See Studevent-Hickman 2006, 2:424.

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103. Ur-^{d}Suen (T17 obv. 8)	—	**½** (obv. 8)	**(?)**	**gab$_2$-us$_2$ […] … lu$_2$ didli ˹x˺[…]** (rev. 1, 4)	—
103. Ur-^{d}Suen (T20 obv. ii 20, iv 16)	**dumu-gir$_{15}$** (obv. ii 29)	**½** (obv. ii 20, iv 16)	**8 months (v–xii)** (obv. ii 30–31)	**gab$_2$-us$_2$ u$_3$ lu$_2$ didli-ta gur-ra** (obv. iv 14)	—
103. Ur-^{d}Suen (T35 rev. i 13)	**dumu-gir$_{15}$** (rev. ii 3, 17 [both coll.])	—	—	—	—
103. ˹Ur˺-^{d}Suen (T38 obv. viii 39')	**inferred**	**½$_c$** (obv. viii 39')	—	**ša$_3$-sahar-ra** (rev. viii 1)	**˹gan$_2$˺** (obv. viii 39')
104. Lu$_2$-du$_{10}$-ga (T17 obv. 9)	—	**½** (obv. 9)	**(?)**	**gab$_2$-us$_2$ […] … lu$_2$ didli ˹x˺[…]** (rev. 1, 4)	—
104. Lu$_2$-du$_{10}$-ga (T20 obv. i 19', iv 18)	**dumu-gir$_{15}$** (obv. ii 29)	**½** (obv. i 19', iv 18)	**8 months (v–xii)** (obv. ii 30–31)	**gab$_2$-us$_2$ u$_3$ lu$_2$ didli-ta gur-ra** (obv. iv 14)	—
104. Lu$_2$-du$_{10}$-ga (T38 obv. vii 24)	**inferred**	**½$_c$** (obv. vii 24)	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$** (obv. vii 24)
105. Ur-Gu$_2$-de$_3$-na (T18 obv. 4)	—	**½** (obv. 4)	—	**ša$_3$-sahar-ra-še$_3$** (obv. 6)	—
105. Ur-Gu$_2$-de$_3$-na (T35 obv. ii 5)	**dumu-gir$_{15}$** (obv. ii 14, lo. ed. 2 [both coll.])	—	—	—	—
105. Ur-Gu$_2$-de$_3$-na (T38 obv. iv 11)	**inferred**	**½$_c$** (obv. iv 11 [CDLI translit.])	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$** (obv. iv 11)
106. Arad$_2$-hu-la (T19 rev. iv 5)	**dumu-gir$_{15}$** (rev. iv 12)	**½** (rev. iv 5)	**3 months (x–xii)** (rev. iv 15–17)	—	—
106. Arad$_2$-hu-la (T27 rev. v 14)	**dumu-gir$_{15}$** (rev. v 21)	**½** (rev. v 14)	**4 months (x–xiii)** (rev. v 20, 25)	—	—

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107. Lu$_2$-^{d}Šara$_2$ (T19 rev. iv 7)	**dumu-gir$_{15}$** (rev. iv 12)	**½** (rev. iv 7)	**3 months (x–xii)** (rev. iv 15–17)	—	—
107. Lu$_2$-^{d}Šara$_2$ (T27 rev. v 16)	**dumu-gir$_{15}$** (rev. v 21)	**½** (rev. v 16)	**4 months (x–xiii)** (rev. v 20, 25)	—	—
108. Lu$_2$-^{d}Inanna (T19 rev. iv 8)	**dumu-gir$_{15}$** (rev. iv 12)	**½** (rev. iv 8)	**3 months (x–xii)** (rev. iv 15–17)	—	—
108. Lu$_2$-^{d}Inanna (T27 rev. v 17)	**dumu-gir$_{15}$** (rev. v 21)	**½** (rev. v 17)	**4 months (x–xiii)** (rev. v 20, 25)	—	—
109. Lu$_2$-ge-na (T19 rev. iv 9)	**dumu-gir$_{15}$** (rev. iv 12)	**½** (rev. iv 9)	**3 months (x–xii)** (rev. iv 15–17)	**šu-i** (rev. iv 9)	—
109. Lu$_2$-ge-na (T27 rev. v 18)	**dumu-gir$_{15}$** (rev. v 21)	**½** (rev. v 18)	**4 months (x–xiii)** (rev. v 20, 25)	**šu-i** (rev. v 18)	—
110. Lugal-nesag-e (T19 rev. iv 10)	**dumu-gir$_{15}$** (rev. iv 12)	**½** (rev. iv 10)	**3 months (x–xii)** (rev. iv 15–17)	—	—
110. Lugal-nesag-e (T27 rev. v 19)	**dumu-gir$_{15}$** (rev. v 21)	**½** (rev. v 19)	**4 months (x–xiii)** (rev. v 20, 25)	—	—
111. Ur-^{d}Utu (T20 obv. i 15', rev. ii 9)	**dumu-gir$_{15}$** (obv. ii 29)	**½** (obv. i 15', rev. ii 9)	**8 months (v–xii)** (obv. ii 30–31)	—	—
111. Ur-^{d}Utu (T35 rev. i 3)	**dumu-gir$_{15}$** (rev. ii 3, 17 [both coll.])	—	—	—	—
111. $^{\text{'}}$Ur$^{\text{'}}$-^{d}[Utu] (T38 obv. vi 40 [coll.])	**inferred**	**½$_{c}$** (obv. vi 40)	—	**ša$_3$-sahar-ra** (rev. viii 1)	**$^{\text{'}}$gan$_2$$^{\text{'}}$** (obv. vi 40)
112. Ur-sukkal (T20 obv. i 17', rev. ii 16)	**dumu-gir$_{15}$** (obv. ii 29)	**½** (obv. i 17', rev. ii 16)	**8 months (v–xii)** (obv. ii 30–31)	—	—
112. Ur-sukkal (T35 rev. i 4)	**dumu-gir$_{15}$** (rev. ii 3, 17 [both coll.])	—	—	—	—
112. Ur-sukkal (T38 obv. vii 21)	**inferred**	**½$_{c}$** (obv. vii 21)	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$** (obv. vii 21)

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113. Lu$_2$-dingir-ra-šum$_2$ (T20 obv. i 18' [coll.])[387]	**dumu-gir$_{15}$** (obv. ii 29)	**½** (obv. i 18')	**8 months (v–xii)** (obv. ii 30–31)	**gu$_4$ diri** (obv. i 18' [coll.])[388]	—
113. Lu$_2$-dingir-ra-šum$_2$-ma (T35 rev. i 5)	**dumu-gir$_{15}$** (rev. ii 3, 17 [both coll.])	—	—	—	—
113. Lu$_2$-dingir-ra-šum$_2$-ma (T38 obv. vii 22 [coll.])	**inferred**	**½$_c$** (obv. vii 22)	—	**gu$_4$ diri** (obv. vii 23)	**gan$_2$** (obv. vii 22)
113. Lu$_2$-dingir-ra-šum$_2$-ma (T45 obv. 5)	**inferred**	**½** (obv. 5)	**10 months (iv–xiii)** (obv. 8–rev. 1)	**tir anše gu-tum$_2$-\ma-da tuš-<a>** (obv. 6–7)	—
114. Nam-ha-ni (T20 obv. ii 9, rev. ii 29)	**dumu-gir$_{15}$** (obv. ii 29)	**½** (obv. ii 9, rev. ii 29)	**8 months (v–xii)** (obv. ii 30–31)	—	—
114. Nam-ha-ni (T35 rev. i 10)	**dumu-gir$_{15}$** (rev. ii 3, 17 [both coll.])	**šu?** (rev. i 10)[389]	—	—	—
114. Nam-ha-ni (T36 C obv. ii' 2')	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**½$_c$** (C obv. ii' 2' [coll.])	—	—	**gan$_2$** (C obv. ii' 2')
114. ˹Nam-ha˺-[ni] (T38 obv. viii 19' [coll.])	**inferred**	**½$_c$** (obv. viii 19')	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$** (obv. viii 19')
114. Nam-ha-ni (T68 obv. ix 19')	—	—	—	—	**0.1.0 gan$_2$ 6.0.0 gur … a-ša$_3$ ^{d}Šara$_2$-gu$_2$-gal** (obv. ix 18', 22')

387. The BDTNS and CDLI transliterate this name with šum$_2$(-ma) as part of the name rather than as an occupation related to onions (see BPOA 1 587 obv. 6; 7 2058 obv. 5; Nisaba 23 9 rev. i 5), but this is uncertain. The fact that this name is then followed by the occupation gu$_4$ diri (see n. 388) may indicate that šum$_2$(-ma) is not an occupation in this context, though that may not be sufficient evidence.

388. gu$_4$ diri appears to be an occupation based on its usage. The phrase ša$_3$-gu$_4$ gu$_4$-diri(-ga)-še$_3$ is particularly indicative of the usage of gu$_4$ diri as an occupation (see *AAICAB* I/1 Ashm. 1924-665 obv. iii 13; *AOS* 32 G7 obv. 9; *BPOA* 7 2006 obv. 4; *MVN* 21 199 rev. i 3).

389. Rev. i 10 is transliterated as azlag$_7$$^{!?}$(AZLAG$_2$) Nam-ha-ni, but the first sign could be šu. Namhani is notated with ½$_c$ in potentially later texts, however, so this suggestion is not certain.

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115. Ab-ba-mu (T20 obv. ii 10, rev. ii 30)	**dumu-gir$_{15}$** (obv. ii 29)	**½** (obv. ii 10, rev. ii 30)	**8 months (v–xii)** (obv. ii 30–31)	—	—
115. Ab-ba-mu (T32 rev. i 40)	**inferred**	**AŠ$_c$** (rev. i 40)	—	**engar giš-i$_3$** (rev. ii 10)	**<gan$_2$>** (rev. i 40)
115. Ab-ba-[mu] (T38 obv. viii 21' [coll.])	**inferred**	**½$_c$** (obv. viii 21')	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$** (obv. viii 21')
115. Ab-ba-mu (T68 obv. ix 21')	—	—	—	—	**0.1.0 gan$_2$ 6.0.0 gur … a-ša$_3$ ^{d}Šara$_2$-gu$_2$-gal** (obv. ix 20', 22')
116. Ur-^{giš}gigir (T20 obv. ii 11, rev. ii 31)	**dumu-gir$_{15}$** (obv. ii 29)	**½** (obv. ii 11, rev. ii 31)	**8 months (v–xii)** (obv. ii 30–31)	—	—
116. $^{\lceil}$Ur$^{\rceil}$-^{giš}gigir (T32 rev. i 41)	**inferred**	**AŠ … šeš-tab-ba** (rev. i 41)	—	**engar giš-i$_3$** (rev. ii 10)	**<gan$_2$>** (rev. i 41)
116. Ur-^{giš}[gigir] (T38 obv. viii 22' [coll.])	**inferred**	**½$_c$** (obv. viii 22')	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$?** (obv. viii 22' [coll.])
117. Ur-^{d}Suen (T20 obv. ii 13, rev. ii 23)	**dumu-gir$_{15}$** (obv. ii 29)	**½** (obv. ii 13, rev. ii 23)	**8 months (v–xii)** (obv. ii 30–31)	—	—
117. Ur-^{d}[Suen] (T38 obv. viii 27' [coll.])	**inferred**	**½$_c$** (obv. viii 27')	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$** (obv. viii 27')
117. Ur-^{d}Suen (T68 obv. ix 27')	—	—	—	—	**0.1.0 gan$_2$ 6.0.0 gur … {field}** (obv. ix 26')
118. Lu$_2$-da-ga (T20 obv. ii 14, rev. ii 33)	**dumu-gir$_{15}$** (obv. ii 29)	**½** (obv. ii 14, rev. ii 33)	**8 months (v–xii)** (obv. ii 30–31)	—	—
118. Lu$_2$-da-ga (T35 rev. i 11)	**dumu-gir$_{15}$** (rev. ii 3, 17 [both coll.])	—	—	—	—
118. Lu$_2$-[da-ga] (T38 obv. viii 29' [coll.])	**inferred**	**½$_c$** (obv. viii 29')	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$** (obv. viii 29')
119. Ma-an-šum$_2$ (T20 obv. ii 16, rev. ii 35)	**dumu-gir$_{15}$** (obv. ii 29)	**½** (obv. ii 16, rev. ii 35)	**8 months (v–xii)** (obv. ii 30–31)	—	—
119. Ma-an-[šum$_2$] (T35 rev. i 12)	**dumu-gir$_{15}$** (rev. ii 3, 17 [both coll.])	—	—	—	—
119. $^{\lceil}$Ma$^{\rceil}$-an-$^{\lceil}$šum$_2$$^{\rceil}$ (T38 obv. viii 34' [coll.])	**inferred**	**½$_c$** (obv. viii 34')	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$** (obv. viii 34')

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120. Ur-e$_2$-sag-ˈil$_2$$^{?}$ˈ-la, Ur-e$_2$-s[ag-il$_2$$^{?}$-la] (T20 obv. ii 21, rev. v 13 [both translit. mine])	**dumu-gir$_{15}$** (obv. ii 29)	**½** (obv. ii 21, rev. v 13)	**8 months (v–xii)** (obv. ii 30–31)	—	—
120. Ur-e$_2$-sag-[il$_2$$^{?}$]-la (T35 rev. i 14 [translit. mine])	**dumu-gir$_{15}$** (rev. ii 3, 17 [both coll.])	—	—	—	—
120. ˈUrˈ-e$_2$-sag-il$_2$$^{?}$-la (T38 obv. viii 40' [translit. mine])	**inferred**	**½$_c$** (obv. viii 40')	—	**ša$_3$-sahar-ra** (rev. viii 1)	**ˈgan$_2$ˈ** (obv. viii 40' [translit. mine])
121. Lu$_2$-^{d}Utu, Lu$_2$-^{d}[Ut]u (T20 obv. ii 22, rev. v 14 [coll.])	**dumu-gir$_{15}$** (obv. ii 29)	**½** (obv. ii 22, rev. v 14)	**8 months (v–xii)** (obv. ii 30–31)	—	—
121. Lu$_2$-^{d}Utu (T22 obv. iii 3)	—	—	—	—	**0.0.4 gan$_2$ a-ša$_3$ muru$_{13}$ \ 0.0.2 gan$_2$ a-ša$_3$ Sag-du$_3$** (obv. iii 1–2)
121. Lu$_2$-^{d}Utu (T24 obv. 1)	—	**½** (obv. 1 [coll.])	—	**agar$_4$-nigin$_2$-ˈtaˈ gur-ˈraˈ** (rev. 3 [coll.])	—
121. Lu$_2$-^{d}Utu (T35 rev. i 15)	**dumu-gir$_{15}$** (rev. ii 3, 17 [both coll.])	—	—	—	—
121. ˈLu$_2$ˈ-[^{d}Utu] (T38 obv. viii 44' [coll.])	**inferred**	**½$_c$** (obv. viii 44')	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$** (obv. viii 44')
122. ^{giš}Dur$_2$-gar-ni (T21 obv. 1)	—	**½** (obv. 1)	—	**ŠIM×GAR ^{d}Šul-gi-ra-še$_3$** (obv. 1)	—
122. ^{giš}Dur$_2$-gar-ni (T26 obv. ii 2)	**dumu-gir$_{15}$** (obv. ii 29, 34)	**½** (obv. ii 2)	**13 months** (obv. ii 30–32)	**lu$_2$-ŠIM** (obv. ii 2)	—
122. ^{giš}Dur$_2$-gar-ni (T67 obv. 4)	**ˈdumuˈ-gir$_{15}$** (obv. 9)	**½** (obv. 4)	—	**gi zi zi$_x$(SIG$_7$)-e-da gub-ba** (rev. 12)	—
122. ^{giš}Dur$_2$-gar-ni (T70 obv. 13)	**dumu-gir$_{15}$** (rev. 11)	**½** (obv. 13)	—	—	—

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123. UN-**da-ga** (T22 obv. ii 4)	—	—	—	—	**0.0.** ˹**4**ˀ˺**([2**ˀ**]+2) gan₂ a-ša₃ muru₁₃ \ 0.0.2 gan₂ Sag-du₃** [translit. mine] (obv. ii 2–3)[390]
123. [UN**]-da-ga** (T34 obv. ii' 11 [translit. mine])	**inferred**	**[½c]** (obv. ii' 11 [translit. mine])	—	—	**<gan₂>** (obv. ii' 11)
123. U**[**N**-da-ga]** (T35 obv. i 7 [coll.])	**dumu-gir₁₅** (obv. ii 14, lo. ed. 2 [both coll.])	—	—	—	—
123. UN**-[da]-ga** (T38 obv. ii 3 [coll.])	**inferred**	**½c** (obv. ii 3)	—	**ša₃-sahar-ra** (rev. viii 1)	**gan₂** (obv. ii 3)
124. ^{giš}**Dur₂-gar-ni** (T22 obv. ii 7)	—	—	—	—	**0.0.4 gan₂ a-ša₃ muru₁₃ \ 0.0.2 gan₂ Sag-du₃** (obv. ii 5–6)
124. [^{giš}**]Dur₂-gar-**˹**ni**˺ (T34 obv. ii' 12)	**inferred**	**[…]** (obv. ii' 12)[391]	—	—	**[…] (?)** (obv. ii' 12)
124. ^{giš}**[Dur₂-gar-ni]** (T35 obv. i 8 [coll.])	**dumu-gir₁₅** (obv. ii 14, lo. ed. 2 [both coll.])	**uš₂** (obv. i 8)	—	—	—
124. ^{giš}**Dur₂-**˹**gar**˺**-ni** (T38 obv. ii 6)	**inferred**	**uš₂** (obv. ii 6)	—	**ša₃-sahar-ra** (rev. viii 1)	—
125. Tir-gu (T22 obv. ii 10)	—	—	—	—	**0.0.4 gan₂ a-ša₃ muru₁₃ \ 0.0.2 gan₂ Sag-du₃** (obv. ii 8–9)
125. Tir-gu (T34 obv. ii' 18)	**inferred**	**½c** (obv. ii' 18)	—	—	**<gan₂>** (obv. ii' 18)
125. Ti[r-gu] (T35 obv. i 9)	**dumu-gir₁₅** (obv. ii 14, lo. ed. 2 [both coll.])	—	—	—	—
125. Tir-gu (T38 obv. ii 11)	**inferred**	**uš₂** (obv. ii 11)	—	**ša₃-sahar-ra** (rev. viii 1)	—

390. UNdaga probably received 6 iku like many individuals in this text. Obv. ii 2 is somewhat damaged, so there may be 2 iku in that damaged area.

391. Durgarni was probably either notated with ½c, receiving <gan₂>, or was deceased.

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126. Lu$_2$-du$_{10}$-ga (T22 obv. ii 13)	—	—	—	—	**0.0.4 gan$_2$ a-ša$_3$ muru$_{13}$ \ 0.0.2 gan$_2$ Sag-du$_3$** (obv. ii 11–12)
126. Lu$_2$-du$_{10}$-ga (T34 obv. iii' 22)	**inferred**	**AŠ** (obv. iii' 22)	—	—	—
126. Lu$_2$-du$_{10}$-ga (T35 obv. i 16)	**dumu-gir$_{15}$** (obv. ii 14, lo. ed. 2 [both coll.])	—	—	—	—
126. Lu$_2$-du$_{10}$-ga (T38 obv. ii 36)	**inferred**	**AŠ$_c$** (obv. ii 36 [coll.])	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$** (obv. ii 36)
127. Šeš-kal-la (T22 obv. ii 16)	—	—	—	—	**0.0.4 gan$_2$ a-ša$_3$ muru$_{13}$ \ 0.0.2 gan$_2$ Sag-du$_3$** (obv. ii 14–15)
127. Šeš-kal-la (T35 obv. i 18)	**dumu-gir$_{15}$** (obv. ii 14, lo. ed. 2 [both coll.])	—	—	—	—
127. Šeš-ka[l-la] (T38 obv. ii 46)	**inferred**	**½$_c$** (obv. ii 46)	—	**ša$_3$-sahar-ra** (rev. viii 1)	**'gan$_2$'** (obv. ii 46)
128. Ur-^{d}A-šar$_2$ (T22 obv. ii 22)	—	—	—	—	**0.0.4 gan$_2$ a-ša$_3$ muru$_{13}$ \ 0.0.2 gan$_2$ Sag-du$_3$** (obv. ii 20–21)
128. Ur-^{d}A-šar$_2$ (T24 rev. 1)	—	**½** (rev. 1 [coll.])	—	**agar$_4$-nigin$_2$-'ta' gur-'ra'** (rev. 3 [coll.])	—
128. Ur-^{d}A-šar$_2$ (T34 rev. i 3)	**inferred**	**½$_c$** (rev. i 3)	—	—	**<gan$_2$>** (rev. i 3)
128. Ur-^{d}A-šar$_2$ (T38 obv. iii 2)	**inferred**	**½$_c$** (obv. iii 2)	—	**agar$_4$-nigin$_2$-ta, ša$_3$-sahar-ra** (obv. iii 4 [coll.], rev. viii 1)	**gan$_2$** (obv. iii 2)
129. Lugal-nig$_2$-lagar-e (T22 obv. iii 14)	—	—	—	—	**0.1.0 gan$_2$ ... a-ša$_3$ Du$_6$-^{d}Šara$_2$** (obv. iii 14, 24)
129. Lugal-nig$_2$-lagar-e (T38 obv. iv 22)	**inferred**	**½$_c$** (obv. iv 22)	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$** (obv. iv 22)

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130. A-kal-la (T22 obv. iii 15)	—	—	—	—	**0.1.0 gan$_2$ … a-ša$_3$ Du$_6$-^{d}Šara$_2$** (obv. iii 15, 24)
130. A-kal-la (T36 A obv. ii' 8')	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**½$_c$** (A obv. ii' 8' [coll.])	—	—	**gan$_2$** (A obv. ii' 8')
130. A-kal-la (T38 obv. iv 34)	**inferred**	**½$_c$** (obv. iv 34)	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$** (obv. iv 34)
131. Lu$_2$-kiri$_3$-zal (T22 obv. iii 16)	—	—	—	—	**0.1.0 gan$_2$ … a-ša$_3$ Du$_6$-^{d}Šara$_2$** (obv. iii 16, 24)
131. Lu$_2$-kiri$_3$-zal (T38 obv. v 8)	**inferred**	**½$_c$** (obv. v 8)	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$** (obv. v 8)
132. Gu$_3$-de$_2$-a (T22 obv. iii 17)	—	—	—	—	**0.1.0 gan$_2$ … a-ša$_3$ Du$_6$-^{d}Šara$_2$** (obv. iii 17, 24)
132. Gu$_3$-de$_2$-a (T38 obv. v 11)	**inferred**	**½$_c$** (obv. v 11)	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$** (obv. v 11)
133. Lugal-ku$_3$-ga-ni (T22 obv. iii 18)	—	—	—	—	**0.1.0 gan$_2$ … a-ša$_3$ Du$_6$-^{d}Šara$_2$** (obv. iii 18, 24)
133. Lugal-ku$_3$-ga-ni (T38 obv. v 21)	**inferred**	**½$_c$** (obv. v 21)	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$** (obv. v 21)
134. Ur-^{d}Lugal-banda$_3$^{da} (T22 obv. iii 19)	—	—	—	—	**0.1.0 gan$_2$ … a-ša$_3$ Du$_6$-^{d}Šara$_2$** (obv. iii 19, 24)
134. Ur-^{d}Lugal-banda$_3$^{da} (T36 A obv. iii' 12')	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**½$_c$** (A obv. iii' 12' [coll.])	—	—	**gan$_2$** (A obv. iii' 12')
134. Ur-^{d}Lugal-'banda$_3$'^{da} (T38 obv. v 33)	**inferred**	**[…]** (obv. v 33)[392]	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$** (obv. v 33)
135. Lu$_2$-^{d}Šara$_2$ (T22 obv. iii 20)	—	—	—	—	**0.1.0 gan$_2$ … a-ša$_3$ Du$_6$-^{d}Šara$_2$** (obv. iii 20, 24)
135. Lu$_2$-^{d}[Šara$_2$] (T36 A obv. iii' 13' [coll.])	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**'½$_c$'** (A obv. iii' 13' [coll.])	—	—	**gan$_2$** (A obv. iii' 13')
135. Lu$_2$-^{d}Šara$_2$ (T38 obv. v 34)	**inferred**	**'½$_c$'** (obv. v 34)	—	**ša$_3$-sahar-ra** (rev. viii 1)	**'gan$_2$'** (obv. v 34)

392. Ur-Lugalbanda was probably notated with ½$_c$ based on context.

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136. A$_2$-zi-da (T22 obv. iii 21)	—	—	—	—	**0.1.0 gan$_2$ … a-ša$_3$ Du$_6$-^{d}Šara$_2$** (obv. iii 21, 24)
136. A$_2$-zi-$^{\lceil}$da$^{\rceil}$ (T38 obv. vi 4)	**inferred**	**$^{\lceil}$½$_c^{\rceil}$** (obv. vi 4 [coll.])	—	**ša$_3$-sahar-ra** (rev. viii 1)	**$^{\lceil}$gan$_2^{\rceil}$** (obv. vi 4 [coll.])
137. Nig$_2$-ša$_3$-ge (T22 obv. iii 22)	—	—	—	—	**0.1.0 gan$_2$ … a-ša$_3$ Du$_6$-^{d}Šara$_2$** (obv. iii 22, 24)
137. Nig$_2$-ša$_3$-ge (T38 obv. vi 12)	**inferred**	**AŠ$_c$** (obv. vi 12)	—	**aga$_3$-us$_2$** (obv. vi 15)	**gan$_2$** (obv. vi 12)
138. Ur-am$_3$-ma (T22 obv. iii 23)	—	—	—	—	**0.1.0 gan$_2$ … a-ša$_3$ Du$_6$-^{d}Šara$_2$** (obv. iii 23–24)
138. Ur-am$_3$-$^{\lceil}$ma$^{\rceil}$ (T38 obv. vi 13)	**inferred**	**AŠ … šeš-tab-$^{\lceil}$ba$^{\rceil}$** (obv. vi 13)	—	**aga$_3$-us$_2$ (?)** (obv. vi 15 [may not apply])	**gan$_2$** (obv. vi 13)
139. Lu$_2$-^{d}Šara$_2$ (T22 obv. iii 27)	—	—	—	—	**0.0.4 gan$_2$ a-ša$_3$ muru$_{13}$ \ 0.0.2 gan$_2$ Sag-du$_3$** (obv. iii 25–26)
139. Lu$_2$-^{d}Šara$_2$ (T36 A obv. i' 2')	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**[½$_c$]** (A obv. i' 2' [translit. mine])	—	—	**[ga]n$_2$** (A obv. i' 2' [translit. mine])
139. Lu$_2$-^{d}Šara$_2$ (T38 obv. vi 19)	**inferred**	**½$_c$** (obv. vi 19)	—	**aga$_3$-us$_2$** (obv. vi 22)	**$^{\lceil}$gan$_2^{\rceil}$** (obv. vi 19)
140. Lugal-he$_2$-gal$_2$ (T22 rev. i 29')	—	—	—	**sipa šah$_2$** (rev. i 29')	**0.0.4 gan$_2$ a-ša$_3$ muru$_{13}$ \ 0.0.2 gan$_2$ Sag-du$_3$** (rev. i 27'–28')
140. $^{\lceil}$Lugal-he$_2$-gal$_2^{\rceil}$, Lugal-he$_2$-g[al$_2$] (T29 rev. vii 10', 18')	**inferred**	**AŠ$_c$** (rev. vii 10')	—	**sipa šah$_2$** (rev. vii 18')	**gan$_2$** (rev. vii 10')
141. Ur-^{d}Utu (T23 obv. 6)	—	**½** (obv. 6)	—	—	—
141. Ur-^{d}Utu (T42 obv. 7)	**inferred**	**½$_c$** (obv. 7)	—	—	**gan$_2$** (obv. 7)
142. Ur-an-zi-za (T23 obv. 7)[393]	—	**½** (obv. 7)	—	—	—
142. Ur-an-zi-za (T42 obv. 13)	**inferred**	**½$_c$** (obv. 13)	—	—	**gan$_2$** (obv. 13)
143. Nimgir-an-ne$_2$ (T25 obv. 1)	—	**½** (obv. 1)	—	—	—
143. Nimgir-an-ne$_2$ (T31 rev. ii 1)	**inferred**	**½$_c$** (rev. ii 1 [CDLI])	—	**bahar$_3$** (rev. ii 1)	**gan$_2$** (rev. ii 1)

393. This name is read as Ur-^{d}Si$_2$-sa$_3$ according to the BDTNS and CDLI, but Ur-an-zi-za is a more popular reading. There are also two attestatestions of Ma-an-zi-za in the BDTNS (see the Umma texts *Nisaba* 26 103 obv. ii 10; *SAT* 3 1810 obv. 3), but Ma-an-zi-za appears to be Ur-an-zi-za in *Nisaba* 26 103 obv. ii 10 (*SAT* 3 1810 obv. 3 can be confirmed after further consideration). Note that Ur-an-zi-za is similar to the name Ur-^{d}A-zi-a (see n. 415).

PIN. Name (Citation)	Social Stratum (Line) [Observation No. 1 in Gray]	Employment Notation|Term (Line) [Observation No. 2 in Gray]	Conscription Duration (Period) (Line)	Occupation (Line)	Barley Allotment | šuku land (Line) [Observation No. 3 in Gray]
144. Inim-ma-ni-zi (T26 obv. ii 8, rev. i 4)	**dumu-gir$_{15}$** (obv. ii 29, 34, rev. i 25)	**½** (obv. ii 8, rev. i 4)	**25 months** (obv. ii 30–32, rev. i 26)	—	—
144. Inim-ma-ni-ˈziˈ (T67 rev. 1)	**ˈdumuˈ-gir$_{15}$** (obv. 9)	**½** (rev. 1)	—	**gi zi zi$_x$(SIG$_7$)-e-da gub-ba** (rev. 12)	—
145. Ur-kun, Ur-kun (T26 obv. ii 17, rev. i 13)	**dumu-gir$_{15}$** (obv. ii 29, 34, rev. i 25)	**½** (obv. ii 17, rev. i 13)	**25 months** (obv. ii 30–32, rev. i 26)	—	—
145. Ur-kun (T70 obv. 1)	**dumu-gir$_{15}$** (rev. 11)	**½** (obv. 1)	—	—	—
146. Ur-e$_2$-mah (T26 obv. ii 20, rev. i 16)	**dumu-gir$_{15}$** (obv. ii 29, 34, rev. i 25)	**½** (obv. ii 20, rev. i 16)	**25 months** (obv. ii 30–32, rev. i 26)	—	—
146. Ur-e$_2$-mah (T58 obv. ii 2)	**dumu-gir$_{15}$** (obv. ii 22)	**½** (obv. ii 2)	**12 months** (obv. ii 16–18)	—	—
146. Ur-e$_2$-mah (T70 obv. 9)	**dumu-gir$_{15}$** (rev. 11)	**½** (obv. 9)	—	—	—
147. Al-la (T26 obv. ii 21, rev. i 17)	**dumu-gir$_{15}$** (obv. ii 29, 34, rev. i 25)	**½** (obv. ii 21, rev. i 17)	**25 months** (obv. ii 30–32, rev. i 26)	—	—
147. Al-la (T70 rev. 4)	**dumu-gir$_{15}$** (rev. 11)	**½** (rev. 4)	—	—	—
148. Ma-dar (T26 obv. ii 23, rev. i 19)	**dumu-gir$_{15}$** (obv. ii 29, 34, rev. i 25)	**½** (obv. ii 23, rev. i 19)	**25 months** (obv. ii 30–32, rev. i 26)	—	—
148. Ma-dar (T70 rev. 9)	**dumu-gir$_{15}$** (rev. 11)	**½** (rev. 9)	—	—	—
148. Ma-dar (T72 rev. i 22 [translit. mine])	**inferred**	**AŠ$_c$** (rev. i 22)	—	**šu-ku$_6$ ^{d}Amar-^{d}Suen-še$_3$** (rev. i 26)	—
149. Gi-gi-ga (T26 obv. ii 24, rev. i 20)	**dumu-gir$_{15}$** (obv. ii 29, 34, rev. i 25)	**½** (obv. ii 24, rev. i 20)	**25 months** (obv. ii 30–32, rev. i 26)	—	—
149. Gi-gi-ga (T72 rev. i 23)	**inferred**	**AŠ$_c$** (rev. i 23)	—	**šu-ku$_6$ ^{d}Amar-^{d}Suen-še$_3$** (rev. i 26)	—

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150. Lu$_2$-^{d}Šara$_2$ (T26 obv. ii 25, rev. i 21 [coll.])	**dumu-gir$_{15}$** (obv. ii 29, 34, rev. i 25)	**½** (obv. ii 25, rev. i 21)	**25 months** (obv. ii 30–32, rev. i 26)	—	—
150. Lu$_2$-^{d}Šara$_2$ (T31 rev. i 1)	**inferred**	**AŠ$_c$** (rev. i 1)	—	**šu-ku$_6$ sa$_2$-du$_{11}$** (rev. iii 1 [CDLI translit.])	**<gan$_2$>** (rev. i 1)
150. Lu$_2$-^{d}Šara$_2$ (T72 rev. i 24)	**inferred**	**AŠ$_c$** (rev. i 24)	—	**šu-ku$_6$ ^{d}Amar-^{d}Suen-še$_3$** (rev. i 26)	—
151. Ur-^{giš}gigir, Ur-^{giš}[gigir] (T28 obv. i 1, seal 1)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. i 1 [coll.])	—	**nu-banda$_3$ gu$_4$** (obv. i 1, 6)	**'gan$_2$'** (obv. i 1)
151. Ur-^{giš}gigir (T33 rev. i 23, ii 38)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (rev. i 23)	—	**nu-banda$_3$ gu$_4$** (rev. i 23, 29)	**[gan$_2$]** (rev. i 23)
152. Ge-na-mu, Ge-na-mu (T28 obv. i 7, 15)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. i 7)	—	**engar** (obv. i 7)	**gan$_2$** (obv. i 7)
152. Ge-'na-mu', Ge-na-mu (T33 rev. i 30, 38)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (rev. i 23)	—	**engar** (rev. i 30)	**[gan$_2$]** (rev. i 30)
153. Ur-DUN (T28 obv. i 8)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. i 8)	—	—	**gan$_2$** (obv. i 8)
153. Ur-DUN (T33 rev. i 31)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (rev. i 31)	—	—	**gan$_2$** (rev. i 31)
154. Ur-^{d}Šul-pa-e$_3$ (T28 obv. i 17)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. i 17)	—	**engar** (obv. i 17)	**gan$_2$** (obv. i 17)
154. Ur-^{d}Šul-pa-e$_3$ (T33 rev. i 40, ii 2)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (rev. i 40)	—	**'engar'** (rev. i 40)	**gan$_2$** (rev. i 40)
155. Ur-mes (T28 obv. i 22)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. i 22)	—	—	**gan$_2$** (obv. i 22)
155. Ur-'mes' (T33 rev. i 45)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (rev. i 45)	—	—	**gan$_2$** (rev. i 45)
156. Arad$_2$-mu (T28 obv. ii 6, 13)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. ii 6)	—	**engar** (obv. ii 6)	**gan$_2$** (obv. ii 6)
156. Arad$_2$-mu (T33 rev. ii 8, 15)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (rev. ii 8)	—	**engar** (rev. ii 8)	**gan$_2$** (rev. ii 8)

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157. Ur-^{d}Ma-mi (T28 obv. ii 8)	**dumu-gir$_{15}$ | eren$_{2}$ | inferred (?)**	**AŠ$_{c}$** (obv. ii 8)	—	—	**gan$_{2}$** (obv. ii 8)
157. Ur-^{d}Ma-mi (T33 rev. ii 10)	**dumu-gir$_{15}$ | eren$_{2}$ | inferred (?)**	**AŠ$_{c}$** (rev. ii 10)	—	—	**gan$_{2}$** (rev. ii 10)
158. Lugal-nir-gal$_{2}$ (T28 obv. ii 9)	**dumu-gir$_{15}$ | eren$_{2}$ | inferred (?)**	**AŠ$_{c}$** (obv. ii 9)	—	—	**gan$_{2}$** (obv. ii 9)
158. Lugal-nir-gal$_{2}$ (T33 rev. ii 11)	**dumu-gir$_{15}$ | eren$_{2}$ | inferred (?)**	**AŠ$_{c}$** (rev. ii 11 [translit. mine])	—	—	**$^{\lceil}$gan$_{2}$$^{\rceil}$** (rev. ii 11 [translit. mine])
159. Ur-^{d}Dumu-$^{\lceil}$zi$^{\rceil}$-(da), Ur-^{d}Dumu-zi-da (T28 obv. ii 15, 23)	**dumu-gir$_{15}$ | eren$_{2}$ | inferred (?)**	**AŠ$_{c}$** (obv. ii 15)	—	**(engar)** (obv. ii 15 [translit. mine])	**gan$_{2}$** (obv. ii 15)
159. Ur-^{d}Dumu-zi-da, Ur-^{d}Dumu-zi-d[a] (T33 rev. ii 17, 26)	**dumu-gir$_{15}$ | eren$_{2}$ | inferred (?)**	**AŠ$_{c}$** (rev. ii 17)	—	**engar** (rev. ii 17)	**gan$_{2}$** (rev. ii 17)
160. ^{d}Šara$_{2}$-a$_{2}$-mah (T28 obv. ii 16)	**dumu-gir$_{15}$ | eren$_{2}$ | inferred (?)**	**AŠ$_{c}$** (obv. ii 16)	—	—	**gan$_{2}$** (obv. ii 16)
160. ^{d}Šara$_{2}$-a$_{2}$-mah (T33 rev. ii 19)	**dumu-gir$_{15}$ | eren$_{2}$ | inferred (?)**	**AŠ$_{c}$** (rev. ii 19)	—	—	**gan$_{2}$** (rev. ii 19)
161. Inim-ma-ni-zi (T28 obv. ii 19)	**dumu-gir$_{15}$ | eren$_{2}$ | inferred (?)**	**AŠ$_{c}$** (obv. ii 19)	—	—	**gan$_{2}$** (obv. ii 19)
161. Inim-ma-ni-zi (T33 rev. ii 22)	**dumu-gir$_{15}$ | eren$_{2}$ | inferred (?)**	**AŠ$_{c}$** (rev. ii 22)	—	—	**gan$_{2}$** (rev. ii 22)
162. E$_{2}$-lu$_{2}$-bi-zu (T28 obv. ii 21)	**dumu-gir$_{15}$ | eren$_{2}$ | inferred (?)**	**AŠ$_{c}$** (obv. ii 21)	—	—	**gan$_{2}$** (obv. ii 21)
162. E$_{2}$-lu$_{2}$-bi-zu (T30 obv. 1)	—	**1** (obv. 1)	**6 months, 20 days (i–vi/20)** (obv. 3–4)	**dam-gar$_{3}$-še$_{3}$** (rev. 1)	—
162. E$_{2}$-lu$_{2}$-$^{\lceil}$bi$^{\rceil}$-zu (T33 rev. ii 24)	**dumu-gir$_{15}$ | eren$_{2}$ | inferred (?)**	**AŠ$_{c}$, nu** (rev. ii 24)	—	—	**gan$_{2}$ (**rev. vii 24**)**
162. E$_{2}$-lu$_{2}$-bi-zu (T42 obv. 16 [coll.])	**inferred**	**½$_{c}$** (obv. 16)	—	—	**gan$_{2}$** (obv. 16)

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163. Ba-zi-ge (T29 obv. vi 14)	**inferred**	**AŠc** (obv. vi 14)	—	**na-gada** (obv. vi 14)	**gan$_2$** (obv. vi 14)
163. Ba-ˈziˈ-[ge] (T68 rev. i 20' [coll.])[394]	—	—	—	**[na-gada]** (rev. i 20' [coll.])	**1.0.3 gan$_2$ 4+[4.x.x gur] \ a-ša$_3$ ^{d}Šara$_2$-gu$_2$-[gal]** (rev. iii 18'–19')
164. Ša$_3$-ku$_3$-ge, ˈŠa$_3$-ku$_3$ˈ-ge, Ša$_3$-ku$_3$-ge (T29 rev. ii 13', vi 3, 8)	**inferred**	**AŠc** (rev. vi 3)[395]	—	**sipa udu DU.DU-še$_3$, na-gada** (rev. ii 17', vi 3)	**ˈgan$_2$ˈ** (rev. vi 3)
164. ˈŠa$_3$ˈ-[ku$_3$-ge] (T68 rev. iii 7' [coll.])	—	—	—	—	**0.0.ˈ3ˈ [gan$_2$ x.x.x gur] … ˈa-ša$_3$ xˈ-[…]** (rev. iii 6', 8')
165. U$_3$-ma-ni (T29 rev. ii 18')	**inferred**	**AŠc** (rev. ii 18')	—	—	**gan$_2$** (rev. ii 18')
165. U$_3$-ma-[ni] (T68 rev. iii 11' [coll.])	—	—	—	—	**0.0.3 ˈgan$_2$ˈ [x.x.x gur] \ a-ša$_3$ ˈANˈ.[…]** (rev. iii 9'–10')
166. Ur-sukkal (T29 rev. ii 31')	**inferred**	**AŠc** (rev. ii 31')	—	—	**gan$_2$** (rev. ii 31')
166. Ur-sukkal (T68 rev. iii 26')	—	—	—	—	**0.0.3 gan$_2$ 3.0.0 gur … gaba a-ˈša$_3$ˈ A-ˈu$_2$ˈ-da** (rev. iii 25', 27')
167. [Ur-^{d}Šul-pa-e$_3$], Ur-^{d}Šul-pa-e$_3$ (T29 rev. iii 1, 8)	**inferred**	**[AŠc]** (rev. iii 1)	—	**[na-gada]** (rev. iii 1)	**[gan$_2$]** (rev. iii 1)
167. Ur-^{d}Šul-pa-e$_3$ (T68 rev. iii 30')	—	—	—	**na-gada** (rev. iii 30')	**0.2.0 gan$_2$ 20.0.0 gur … {field}** (rev. iii 29')
168. Igi-tur-tur (T29 rev. iv 8)	**inferred**	**AŠc** (rev. iv 8)	—	**sipa ud$_5$ n[am-en-na] (?)** (rev. iv 21' [may not apply])[396]	**gan$_2$** (rev. iv 8)
168. Igi-tur-tur (T68 rev. iv 6')	—	—	—	**sipa udu eme-gi-ra** (rev. iv 9')	**0.0.3 gan$_2$ 3.0.0 gur \ a-ša$_3$ A-u$_2$-da** (rev. iv 4'–5')

394. The line numbering for *CUSAS* 39 138 rev. i follows the CDLI rather than the BDTNS, since the latter is missing lines 12'–13'.

395. Šakuge is indented in rev. ii 13' (coll.).

396. Obv. vi 15–29, vii 14–31, viii 19–43, rev. iii 23–44, iv 21–39 in the BDTNS are numbered as obv. vi' 15–29', vii 14'–31', viii 19'–43', rev. iii 23'–44', iv 21'–39' here.

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169. Ur-sila-luh (T29 rev. iv 18)	**inferred**	**AŠc** (rev. iv 18)	—	**na-gada** (rev. iv 18)	**gan$_2$** (rev. iv 18)
160. Ur-sila-luh (T68 rev. iv 21', 25')	—	—	—	**na-ˈgadaˈ, ˈnaˈ-[gada]** (rev. iv 21', 25')	**0.0.4 ½ gan$_2$ 8.0.0 gur \ gaba a-ša$_3$ Apin-ba-zi \ 0.1.0 gan$_2$ 1.2.3 gur \ a-ša$_3$ Na-ra-am-^{d}Suen** (rev. iii 17'–20')
170. Ma-ma, ˈMa-maˈ (T29 rev. v 18, 25)	**inferred**	**AŠc** (rev. v 18)	—	**na-gada** (rev. v 18)	**gan$_2$** (rev. v 18)
170. Ma-maˈ, Ma-ma (T68 rev. v 13', 19')	—	—	—	**na-gada** (rev. v 13')	**0.0.3 gan$_2$ 4.0.0 gur \ gaba a-ša$_3$ ^{d}Nin-hur-sag \ 0.1.0 gan$_2$ 4.0.0 gur \ a-ša$_3$ ^{d}Nin-hur-sag** (rev. v 9'–12')
171. Ur-^{d}Šara$_2$ (T29 rev. vi 17)	**inferred**	**AŠc** (rev. vi 17)	—	**šar$_2$-ra-ab-du udu** (rev. v 18)	**gan$_2$** (rev. vi 17)
171. Ur-^{d}Šara$_2$ (T68 rev. v 30')	—	—	—	—	**0.1.0 gan$_2$ 10.0.0 gur \ a-ša$_3$ muru$_{13}$** (rev. v 28'–29')
172. Nig$_2$-bi (T29 rev. vi 20)	**inferred**	**½c** (rev. vi 20 [coll.])	—	—	**gan$_2$** (rev. vi 20)
172. ˈNig$_2$ˈ-bi (T68 rev. v 27' [coll.])	—	—	—	—	**0.1.0 gan$_2$ 12.0.0 gur \ gaba a-ša$_3$ Apin-ba-zi** (rev. v 25'–26')
173. Im-ta-e$_3$-a (T30 obv. 2)	—	**1** (obv. 2)	**6 months, 20 days (i–vi/20)** (obv. 3–4)	**dam-gar$_3$-še$_3$** (rev. 1)	—
173. Im-ta-e$_3$-a (T42 obv. 17)	**inferred**	**½c** (obv. 17)	—	—	**gan$_2$** (obv. 17)
174. Šeš-e-ma-an-g[ig] (T32 obv. ii 1)	**inferred**	**AŠc** (obv. ii 1)	—	**šu-ku$_6$ gu$_2$-na (?)** (obv. iii 28 [may not apply])	**<gan$_2$>** (obv. ii 1)
174. Šeš-e-ma-an-gig (T66 obv. i 6')	—	**½** (obv. i 6')	—	**šu-ku$_6$** (rev. ii 8)	—
175. [Ur-dingir-ra], Ur-dingir-ra (T33 obv. ii 1' [coll.], 16')	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**[AŠc]** (obv. ii 1' [coll.])	—	**engar** (obv. ii 1')	**[gan$_2$]** (obv. ii 1' [coll.])
175. Ur-dingir-ra, [U]r-dingir-ra (T63 obv. i 18', ii 3')	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠc** (obv. i 18')	—	**engar** (obv. i 18')	**gan$_2$** (obv. i 18')

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176. Nig$_2$-lagar-[e] (T33 obv. iv 14')	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. iv 14')	—	—	**gan$_2$** (obv. iv 14')
176. ˹Nig$_2$-lagar-e˺ (T63 obv. ii 6' [CDLI])	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. ii 6')	—	—	**gan$_2$** (obv. ii 6')
177. Nigar$_x^{gar}$-ki-du$_{10}$ (T33 obv. v 25)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. v 25)	—	—	**gan$_2$** (obv. v 25)
177. Nigar$_x^{gar}$-ki-du$_{10}$ (T52 rev. 7)	—	—	—	—	**0.0.3 gan$_2$** (rev. 7)
178. Unken-ne$_2$ (T33 obv. vi 10, 18)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. vi 10)	—	—	**gan$_2$** (obv. vi 10)
178. Unken-ne$_2$ (T52 obv. 4)	—	—	—	—	**0.0.3 gan$_2$** (obv. 4)
179. Unken-ne$_2$ (T33 obv. vi 13)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. vi 13)	—	—	**gan$_2$** (obv. vi 13)
179. Unken-ne$_2$ (T52 obv. 3)	—	—	—	—	**0.0.3$^?$ gan$_2$** (obv. 3)
180. ˹Bar˺-ku$_3$-ge (T33 obv. vi 23)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. vi 23)	—	—	**˹gan$_2$˺** (obv. vi 23)
180. Bar-ku$_3$-ge (T63 obv. ii 16')	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (obv. ii 16')	—	—	**gan$_2$** (obv. ii 16')
181. Hu-ba-li$_2$-iš (T33 rev. iii 4', 18')	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (rev. iii 4')	—	—	**gan$_2$** (rev. iii 4')
181. Hu-ba-li$_2$-iš (T52 obv. 6)	—	—	—	—	**0.0.3 gan$_2$** (obv. 6)
182. Lu$_2$-kiri$_3$-zal (T33 rev. vii 28)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (rev. vii 28)	—	**lu$_2$ i$_3$-dub** (rev. vii 28)	**gan$_2$** (rev. vii 28)
182. Lu$_2$-kiri$_3$-zal (T41 obv. i 1, rev. ii 1, seal 1)	**eren$_2$** (rev. i 12)	**AŠ$_c$** (obv. i 1 [CDLI])	—	**ugula, dub-sar** (obv. i 1, seal 1)	**gan$_2$** (obv. i 1)
183. Lu$_2$-sa$_6$-ga (T33 rev. viii 40)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (rev. viii 40)	—	**simug** (rev. viii 40)	**gan$_2$** (rev. viii 40)
183. L[u$_2$]-sig$_5$ (T40 rev. iii 1 [coll.])	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (rev. iii 1)	—	—	**gan$_2$** (rev. iii 1)

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184. Ur-^{d}Nin-zu (T33 rev. ix 5)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (rev. ix 5)	—	**ašgab** (rev. ix 19)	**gan$_2$** (rev. ix 5)
184. Ur-^{d}Nin-zu (T40 rev. iii 11 [coll.])	**inferred (?)**	**AŠ$_c$** (rev. iii 11)	—	—	**gan$_2$** (rev. iii 11)
184. Ur-^{d}Nin-zu (T53 obv. 2)	—	**½** (obv. 2)	—	**lu$_2$ ^{kuš}ha-ti-ti-\um-ma-še$_3$** (obv. 6–7)	—
185. Ur-^{d}Lu$_2$-lal$_3$ (T33 rev. ix 10)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (rev. ix 10)	—	**ašgab** (rev. ix 19)	**gan$_2$** (rev. ix 10)
185. Ur-^{d}Lu$_2$-lal$_3$ (T40 rev. iii 16)	**inferred (?)**	**½$_c$** (rev. iii 16)	—	—	**gan$_2$** (rev. iii 16)
186. Lugal-ma$_2$-gur$_8$-re (T33 rev. ix 13)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (rev. ix 13)	—	**ašgab** (rev. ix 19)	**gan$_2$** (rev. ix 13)
186. Lugal-ma$_2$-gur$_8$-re (T40 rev. iii 18)	**inferred (?)**	**½$_c$** (rev. iii 18 [coll.])	—	—	**gan$_2$** (rev. iii 18)
187. ˹Ur-e$_2$˺-diri (T33 rev. ix 41 [coll.])	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**˹AŠ$_c$˺** (rev. ix 41)	—	—	**˹gan$_2$˺** (rev. ix 41)
187. Ur-e$_2$-diri (T40 rev. iv 4)	**inferred (?)**	**AŠ$_c$** (rev. iv 4)	—	—	**gan$_2$** (rev. iv 4)
188. Lugal-˹kur˺-dub$_2$ (T34 obv. ii' 1 [translit. mine])	**inferred**	**½$_c$** (obv. ii' 1)	—	—	**<gan$_2$>** (obv. ii' 1)
188. Lugal-kur-dub$_2$ (T38 obv. i 38 [translit. mine])	**inferred**	**½$_c$** (obv. i 38)	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$** (obv. i 38)
188. Lugal-kur-dub$_2$-e (T69 obv. iii' 11')[397]	—	—	—	—	**0.1.0 gan$_2$ 6.0.0 gur … {field (?)}** (obv. iii' 10')[398]
189. Al-la (T34 obv. ii' 2)	**inferred**	**½$_c$** (obv. ii' 2)	—	—	**<gan$_2$>** (obv. ii' 2)
189. Al-la (T38 obv. i 39)	**inferred**	**½$_c$** (obv. i 39)	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$** (obv. i 39)
189. Al-la (T69 obv. iii' 13')	—	—	—	—	**0.1.0 gan$_2$ 4+[1].0.0 gur … {field (?)}** (obv. iii' 12')

397. Obv. i–iv in the BDTNS are numbered as i'–iv' here.

398. Lugalkurdub is attested in *UCP* 9/2-1 100 (T22) obv. ii 1 ([x]-kur-geštin can probably be restored as [Lugal]-kur-dub$_2$). The šuku land he received, which was probably 6 iku, is entirely lost though.

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190. ˈNimgirˈ-an-ne$_2$ (T34 obv. ii' 5 [translit. mine])	**inferred**	**½$_c$** (obv. ii' 5)	—	**muš-lah$_5$-ˈše$_3$ˈ** (obv. ii' 5 [translit. mine])	**<gan$_2$>** (obv. ii' 5)
190. Nimgir-an-ne$_2$ (T38 obv. i 42)	**inferred**	**½$_c$** (obv. i 42 [coll.])	—	**muš-lah$_5$** (obv. i 42)	**gan$_2$** (obv. i 42)
191. Ur-^{d}Šul-pa-e$_3$ (T34 obv. ii' 24)	**inferred**	**½$_c$** (obv. ii' 17)	—	—	**<gan$_2$>** (obv. ii' 24)
191. Ur-^{d}Šu[l-pa-e$_3$] (T35 obv. i 10 [coll.])	**dumu-gir$_{15}$** (obv. ii 14, lo. ed. 2 [both coll.])	—	—	—	—
191. Ur-^{d}Šul-pa-e$_3$ (T38 obv. ii 17)	**inferred**	**½$_c$** (obv. ii 17)	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$** (obv. ii 17)
192. Ur-^{d}Suen (T34 obv. iii' 1)	**inferred**	**½$_c$** (obv. iii' 1)	—	—	**<gan$_2$>** (obv. iii' 1)
192. Ur-^{d}[Suen] (T35 obv. i 11 [coll.])	**dumu-gir$_{15}$** (obv. ii 14, lo. ed. 2 [both coll.])	—	—	—	—
192. Ur-^{d}Suen (T38 obv. ii 19)	**inferred**	**½$_c$** (obv. ii 19)	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$** (obv. ii 19)
193. Lu$_2$-gu-la (T34 obv. iii' 3)	**inferred**	**½$_c$** (obv. iii' 3)	—	—	**<gan$_2$>** (obv. iii' 3)
193. ˈLu$_2$ˈ-g[u]-ˈlaˈ (T36 A rev. ii' 1' [coll.])	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**½$_c$** (A rev. ii' 1' [coll.])	—	—	**gan$_2$** (A rev. ii' 1')
193. Lu$_2$-gu-la (T38 obv. ii 21)	**inferred**	**½$_c$** (obv. ii 21)	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$** (obv. ii 21)
194. Gu$_3$-ˈde$_2$ˈ-a (T34 obv. iii' 8)	**inferred**	**½$_c$** (obv. iii' 8)	—	—	**<gan$_2$>** (obv. iii' 8)
194. Gu$_3$-d[e$_2$-a] (T35 obv. i 12 [coll.])	**dumu-gir$_{15}$** (obv. ii 14, lo. ed. 2 [both coll.])	—	—	—	—
194. Gu$_3$-de$_2$-a (T38 obv. ii 25)	**inferred**	**½$_c$** (obv. ii 25)	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$** (obv. ii 25)
195. Ab-ba-sig$_5$ (T34 obv. iii' 10)	**inferred**	**½$_c$** (obv. iii' 10)	—	—	**<gan$_2$>** (obv. iii' 10)
195. Ab-ba-[sig$_5$] (T35 obv. i 13 [coll.])	**dumu-gir$_{15}$** (obv. ii 14, lo. ed. 2 [both coll.])	—	—	—	—
195. Ab-ba-sig$_5$ (T38 obv. ii 27)	**inferred**	**½$_c$** (obv. ii 27)	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$** (obv. ii 27)

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196. Ur-^{d}Šul-pa-e$_3$ (T34 obv. iii' 15)	**inferred**	**½$_c$** (obv. iii' 15)	—	—	**<gan$_2$>** (obv. iii' 15)
196. Ur-^{d}Šul-pa-e$_3$ (T35 obv. i 14)	**dumu-gir$_{15}$** (obv. ii 14, lo. ed. 2 [both coll.])	—	—	—	—
196. Ur-^{d}Šul-pa-e$_3$ (T38 obv. ii 30)	**inferred**	**½$_c$** (obv. ii 30)	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$** (obv. ii 30)
197. Lu$_2$-^{d}Šara$_2$ (T34 obv. iii' 23)	**inferred**	**DIŠ** (obv. iii' 23)	—	—	—
197. Lu$_2$-^{d}Ša[ra$_2$] (T35 obv. i 17)	**dumu-gir$_{15}$** (obv. ii 14, lo. ed. 2 [both coll.])	—	—	—	—
197. Lu$_2$-^{d}Šara$_2$ (T38 obv. ii 37)	**inferred**	**AŠ … šeš-tab-ba** (obv. ii 37)	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$** (obv. ii 37)
198. Šeš-a-ni (T35 obv. i 20)	**dumu-gir$_{15}$** (obv. ii 14, lo. ed. 2 [both coll.])	—	—	—	—
198. Šeš-a-ni (T38 obv. iii 21)	**inferred**	**½$_c$** (obv. iii 21)	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$** (obv. iii 21)
199. U[nken-ne$_2$] (T35 obv. ii 1 [coll.])	**dumu-gir$_{15}$** (obv. ii 14, lo. ed. 2 [both coll.])	—	—	—	—
199. Unken-ne$_2$ (T38 obv. iii 22)	**inferred**	**½$_c$** (obv. iii 22)	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$** (obv. iii 22)
199. Unken-ne$_2$ (T68 obv. x 22')	—	—	—	—	**0.1.0 gan$_2$ 1.0.0 gur … a-ša$_3$ ki-BAD** (obv. x 21', 23')
200. [L]u$_2$-^{d}N[in-šubur] (T35 obv. ii 2 [coll.])	**dumu-gir$_{15}$** (obv. ii 14, lo. ed. 2 [both coll.])	—	—	—	—
200. Lu$_2$-^{d}Nin-šubur (T38 obv. iii 24)	**inferred**	**½$_c$** (obv. iii 24)	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$** (obv. iii 24)
201. [Lu]gal-ni$_2$-zu (T35 obv. ii 3 [coll.])	**dumu-gir$_{15}$** (obv. ii 14, lo. ed. 2 [both coll.])	—	—	—	—
201. Lugal-ni$_2$-zu (T38 obv. iii 26)	**inferred**	**½$_c$** (obv. iii 26)	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$** (obv. iii 26)
202. Lu$_2$-^{d}Nin-šubur (T36 B rev. iii' 2')	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**½$_c$** (B rev. iii' 2' [coll.])	—	—	**gan$_2$** (B rev. iii' 2')
202. Lu$_2$-^{d}Nin-šubur (T51 obv. 1)	—	**½** (obv. 1)	—	**eren$_2$ diri A-pi$_4$-sal$_4^{ki}$-še$_3$** (obv. 5)	—

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203. A-al-ni (T37 obv. 1)	—	**½** (obv. 1)	—	**tir-da tuš-a** (obv. 4)	—
203. A-al-ni-mu (T41 obv. i 16 [translit. mine])[399]	**eren$_2$** (rev. i 12)	**½$_c$** (obv. i 16 [translit. mine])	—	—	**gan$_2$** (obv. i 16)
204. Lugal-he$_2$-gal$_2$ (T37 obv. 2)	—	**½** (obv. 2)	—	**tir-da tuš-a** (obv. 4)	—
204. Lugal-he$_2$-gal$_2$ (T41 obv. i 17)	**eren$_2$** (rev. i 12)	**½$_c$** (obv. i 17 [coll.])	—	—	**gan$_2$** (obv. i 17)
205. Lu$_2$-^{d}'Šara$_2$' (T38 obv. i 17)	**inferred**	**½$_c$** (obv. i 17)	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$** (obv. i 17)
205. Lu$_2$-'^{d}'[Šara$_2$] (T69 obv. iii' 2' [coll.])	—	—	—	—	**'1'.0.0 g[an$_2$ x.x.x. gur] ... a-ša$_3$ muru$_{13}$** (obv. iii' 1' [translit. mine], 9')
206. Lugal-ezem (T38 obv. i 21)	**inferred**	**'½$_c$'** (obv. i 21)	—	**ša$_3$-sahar-ra** (rev. viii 1)	**gan$_2$** (obv. i 21)
206. Lugal-[ezem] (T69 obv. iii' 4' [coll.])	—	—	—	—	**0.1.0 gan$_2$ 1+[x.x.x gur] ... a-ša$_3$ muru$_{13}$** (obv. iii' 3', 9')
207. Ur-nigar$_x$^{gar} (T38 obv. i 29)	**inferred**	**[...]** (obv. i 29)[400]	—	**ša$_3$-sahar-ra** (rev. viii 1)	**'gan$_2$'** (obv. i 29)
207. Ur-nigar$_x$'^{gar}' (T69 obv. iii' 8')	—	—	—	—	**0.1.0 gan$_2$ 6.0.0 g[ur] ... a-ša$_3$ muru$_{13}$** (obv. iii' 7', 9')
208. Ur-nigar$_x$^{gar} (T39 obv. i 17)	**inferred**	**AŠ$_c$** (obv. i 17)	—	—	**gan$_2$** (obv. i 17)
208. [Ur]-nigar$_x$^{gar} (T68 obv. i 4')	—	—	—	—	**[0.0.3$^{?}$] gan$_2$ 3.0.0 gur ... {field}** [translit. mine] (obv. i 3')[401]
209. 'Lu$_2$-^{d}Suen', Lu$_2$-^{d}Suen (T39 obv. ii 8, 13)	**inferred**	**AŠ$_c$** (obv. ii 8)	—	**engar** (obv. ii 8)	**gan$_2$** (obv. ii 8)
209. Lu$_2$-^{d}Suen (T68 obv. i 19')	—	—	—	**engar** (obv. i 19')	**0.1.0 gan$_2$ 7.0.0 gur ... {field}** (obv. i 18')

399. This name is transliterated here as A-al-li$_2$-mu, but A-al-ni is more common than A-al-li$_2$ in the BDTNS.

400. Urnigar was probably notated with ½$_c$ based on context.

401. Urnigar was probably allotted 3 iku based on context and the barley yield.

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210. E$_2$-ur$_2$-bi-du$_{10}$ (T40 obv. i 2, iii 17)	**inferred (?)**	**AŠ$_c$** (obv. i 2)	—	**ugula** (obv. i 2)	**gan$_2$** (obv. i 2)
210. E$_2$-ur$_2$-bi-du$_{10}$ (T48 obv. i 2, ii 15)	**eren$_2$ (?)**	**AŠ$_c$** (obv. i 2)	—	**ugula, lu$_2$-tir-ra** (obv. i 2, rev. iii 24)	**gan$_2$** (obv. i 2)
211. Giri$_3$-ni-i$_3$-sa$_6$ (T40 obv. i 3)	**inferred (?)**	**AŠ** (obv. i 3)	—	—	—
211. Giri$_3$-ni-i$_3$-sa$_6$ (T48 obv. i 3)	**eren$_2$ (?)**	**AŠ$_c$!** (obv. i 3)	—	**lu$_2$-tir-ra** (rev. iii 24)	**gan$_2$** (obv. i 3)
211. Giri$_3$-ni-i$_3$-sa$_6$ (T62 rev. i 2)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (rev. i 2, 16)	—	**tir-ta, ša$_3$-gu$_4$** (rev. i 2, 16)	**gan$_2$** (rev. i 2, 16)
212. Ur-^{d}Geštin-an-ka (T40 obv. i 5)	**inferred (?)**	**AŠ$_c$** (obv. i 5)	—	—	**gan$_2$** (obv. i 5)
212. Ur-^{d}Geštin-an-ka (T48 obv. i 5)	**eren$_2$ (?)**	**AŠ$_c$** (obv. i 5)	—	**lu$_2$-tir-ra** (rev. iii 24)	**gan$_2$** (obv. i 5)
212. $^{\lceil}$Ur-$^{d\rceil}$Geštin-$^{\lceil}$an$^{?\rceil}$-ka (T59 obv. 1)	—	**½** (obv. 1)	—	**tir-t[a$^?$]** (obv. 2)	—
213. Lu$_2$-^{d}Sukkal-an-ka (T40 obv. i 6)	**inferred (?)**	**DIŠ** (obv. i 6)	—	—	—
213. Lu$_2$-^{d}Sukkal-an-ka (T48 obv. i 6)	**eren$_2$ (?)**	**DIŠ** (obv. i 6)	—	**lu$_2$-tir-ra** (rev. iii 24)	—
214. Inim-^{d}Šara$_2$ (T40 obv. i 8)	**inferred (?)**	**AŠ$_c$** (obv. i 8)	—	—	**gan$_2$** (obv. i 8)
214. Inim-^{d}Šara$_2$ (T48 obv. i 11)	**eren$_2$ (?)**	**AŠ$_c$** (obv. i 11)	—	**lu$_2$-tir-ra** (rev. iii 24)	**gan$_2$** (obv. i 11)
215. Lugal-inim-ge-na (T40 obv. i 9)	**inferred (?)**	**DIŠ** (obv. i 9)	—	—	—
215. Lugal-inim-ge-na (T48 obv. i 12)	**eren$_2$ (?)**	**DIŠ** (obv. i 12)	—	**lu$_2$-tir-ra** (rev. iii 24)	—
216. Lu$_2$-^{d}Šara$_2$ (T40 obv. i 11)	**inferred (?)**	**AŠ$_c$** (obv. i 11)	—	—	**gan$_2$** (obv. i 11)
216. Lu$_2$-^{d}Šara$_2$ (T48 obv. i 15)	**eren$_2$ (?)**	**AŠ$_c$** (obv. i 15)	—	**lu$_2$-tir-ra** (rev. iii 24)	**gan$_2$** (obv. i 15)
217. Lu$_2$-ge-na (T40 obv. i 13)	**inferred (?)**	**AŠ$_c$** (obv. i 13)	—	—	**gan$_2$** (obv. i 13)
217. Lu$_2$-ge-na (T48 obv. i 18)	**eren$_2$ (?)**	**AŠ$_c$** (obv. i 18)	—	**lu$_2$-tir-ra** (rev. iii 24)	**gan$_2$** (obv. i 18)
218. Lu$_2$-^{d}Ab-u$_2$ (T40 obv. i 18)	**inferred (?)**	**AŠ$_c$** (obv. i 18)	—	—	**gan$_2$** (obv. i 18)
218. [Lu$_2$]-^{d}Ab-u$_2$ (T48 obv. i 24)	**eren$_2$ (?)**	**[AŠ$_c$]** (obv. i 24)	—	**lu$_2$-tir-ra** (rev. iii 24)	**[gan$_2$]** (obv. i 24)
219. Inim-ma-ni-zi (T40 obv. i 24)	**inferred (?)**	**AŠ$_c$** (obv. i 24)	—	—	**gan$_2$** (obv. i 24)
219. Inim-ma-ni-zi (T48 obv. ii 5)	**eren$_2$ (?)**	**AŠ$_c$, nu** (obv. ii 5)	—	**lu$_2$-tir-ra** (rev. iii 24)	**gan$_2$** (obv. ii 5)

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220. Ur-e$_2$-mah (T40 obv. i 25)	**inferred (?)**	**AŠ** (obv. i 25)	—	—	—
220. Ur-e$_2$-mah (T48 obv. ii 6)	**eren$_2$ (?)**	**AŠ, nu** (obv. ii 6)	—	**lu$_2$-tir-ra** (rev. iii 24)	—
221. ^{d}Utu-sig$_5$ (T40 obv. i 26)	**inferred (?)**	**DIŠ** (obv. i 26)	—	—	—
221. ^{d}Utu-sig$_5$ (T48 obv. ii 7)	**eren$_2$ (?)**	**DIŠ, nu** (obv. ii 7)	—	**lu$_2$-tir-ra** (rev. iii 24)	—
222. Ur-^{d}Ur$_3$-bar-tab (T40 obv. i 27)	**inferred (?)**	**DIŠ** (obv. i 27)	—	—	—
222. Ur-^{d}Ur$_3$-bar-tab (T48 obv. ii 8)	**eren$_2$ (?)**	**DIŠ, nu** (obv. ii 8)	—	**lu$_2$-tir-ra** (rev. iii 24)	—
223. Ša$_3$-gu$_2$-bi (T40 obv. i 29)	**inferred (?)**	**AŠ$_c$, nu** (obv. i 29)	—	—	**gan$_2$** (obv. i 29)
223. Ša$_3$-gu$_2$-bi (T48 obv. ii 11)	**eren$_2$ (?)**	**AŠ$_c$, zah$_3$** (obv. ii 11)	—	**lu$_2$-tir-ra** (rev. iii 24)	—
224. Ur-e$_2$-maš (T40 obv. ii 1)	**inferred (?)**	**AŠ$_c$** (obv. ii 1)	—	—	**gan$_2$** (obv. ii 1)
224. Ur-e$_2$-maš (T48 obv. ii 13)	**eren$_2$ (?)**	**AŠ$_c$** (obv. ii 13)	—	**lu$_2$-tir-ra** (rev. iii 24)	**gan$_2$** (obv. ii 13)
225. Lugal-hi-li (T40 obv. ii 11)	**inferred (?)**	**AŠ$_c$** (obv. ii 11)	—	—	**gan$_2$** (obv. ii 11)
225. Lugal-hi-li (T48 obv. ii 18)	**eren$_2$ (?)**	**AŠ$_c$** (obv. ii 18)	—	**lu$_2$-tir-ra** (rev. iii 24)	**gan$_2$** (obv. ii 18)
226. ^{d}Šara$_2$-zi-da (T40 obv. ii 12)	**inferred (?)**	**DIŠ** (obv. ii 12)	—	—	—
226. ^{d}Šara$_2$-zi-da (T48 obv. ii 19)	**eren$_2$ (?)**	**AŠ** (obv. ii 19)	—	**lu$_2$-tir-ra** (rev. iii 24)	—
227. Lu$_2$-^{d}Ab-u$_2$ (T40 obv. ii 13)	**inferred (?)**	**DIŠ** (obv. ii 13)	—	—	—
227. Lu$_2$-^{d}Ab-u$_2$ (T48 obv. ii 20)	**eren$_2$ (?)**	**DIŠ** (obv. ii 20)	—	**lu$_2$-tir-ra** (rev. iii 24)	—
228. Šeš-kal-la (T40 obv. ii 17)	**inferred (?)**	**AŠ$_c$** (obv. ii 17)	—	—	**gan$_2$** (obv. ii 17)
228. Šeš-kal-la (T48 obv. iii 6)	**eren$_2$ (?)**	**AŠ$_c$** (obv. iii 6)	—	**lu$_2$-tir-ra** (rev. iii 24)	**gan$_2$** (obv. iii 6)
229. Lu$_2$-he$_2$-'gal$_2$' (T40 obv. ii 18)	**inferred (?)**	**DIŠ** (obv. ii 18)	—	—	—
229. Lugal-he$_2$-gal$_2$ (T48 obv. iii 7)	**eren$_2$ (?)**	**AŠ** (obv. iii 7)	—	**lu$_2$-tir-ra** (rev. iii 24)	—
230. Lu$_2$-dingir-ra (T40 obv. ii 19)	**inferred (?)**	**AŠ$_c$** (obv. ii 19)	—	—	**gan$_2$** (obv. ii 19)
230. Lu$_2$-dingir-ra (T48 obv. iii 9)	**eren$_2$ (?)**	**AŠ$_c$** (obv. iii 9)	—	**lu$_2$-tir-ra** (rev. iii 24)	**gan$_2$** (obv. iii 9)
231. Lugal-za$_3$-ge (T40 obv. ii 22)	**inferred (?)**	**AŠ$_c$** (obv. ii 22)	—	—	**gan$_2$** (obv. ii 22)
231. Lugal-za$_3$-ge (T48 obv. iii 14)	**eren$_2$ (?)**	**AŠ$_c$** (obv. iii 14)	—	**lu$_2$-tir-ra** (rev. iii 24)	**gan$_2$** (obv. iii 14)

PIN. Name (Citation)	Social Stratum (Line) [Observation No. 1 in Gray]	Employment Notation|Term (Line) [Observation No. 2 in Gray]	Conscription Duration (Period) (Line)	Occupation (Line)	Barley Allotment | šuku land (Line) [Observation No. 3 in Gray]
232. Lu$_2$-^{d}Nanna (T40 obv. ii 23)	**inferred (?)**	**DIŠ** (obv. ii 23)	—	—	—
232. Lu$_2$-^{d}Nanna (T48 obv. iii 15)	**eren$_2$ (?)**	**DIŠ** (obv. iii 15)	—	**lu$_2$-tir-ra** (rev. iii 24)	—
233. Ur-nigar$_x^{gar}$ (T40 obv. ii 24)	**inferred (?)**	**AŠ$_c$** (obv. ii 24)	—	—	**gan$_2$** (obv. ii 24)
233. Ur-nigar$_x^{gar}$ (T48 obv. iii 17)	**eren$_2$ (?)**	**AŠ$_c$** (obv. iii 17)	—	**lu$_2$-tir-ra** (rev. iii 24)	**gan$_2$** (obv. iii 17)
234. A$_2$-ta (T40 obv. ii 25)	**inferred (?)**	**DIŠ** (obv. ii 25)	—	—	—
234. A$_2$-ta (T48 obv. iii 18)	**eren$_2$ (?)**	**DIŠ** (obv. iii 18)	—	**lu$_2$-tir-ra** (rev. iii 24)	—
235. ^{d}Šara$_2$-kam (T40 obv. ii 27)	**inferred (?)**	**AŠ$_c$** (obv. ii 27)	—	—	**gan$_2$** (obv. ii 27)
235. ^{d}Šara$_2$-kam (T48 obv. iii 22)	**eren$_2$ (?)**	**AŠ$_c$** (obv. iii 22)	—	**lu$_2$-tir-ra** (rev. iii 24)	**gan$_2$** (obv. iii 22)
236. [B]a-$^{\lceil}$an$^{\rceil}$-sa$_6$ (T40 obv. iii 1 [coll.])	**inferred (?)**	**AŠ$_c$** (obv. iii 1)	—	—	**[gan$_2$]** (obv. iii 1 [coll.])
236. Ba-an-sa$_6$ (T48 obv. iii 24)	**eren$_2$ (?)**	**AŠ$_c$** (obv. iii 24)	—	**lu$_2$-tir-ra** (rev. iii 24)	**gan$_2$** (obv. iii 24)
237. Ur-sukkal (T40 obv. iii 2)	**inferred (?)**	**DIŠ** (obv. iii 2)	—	—	—
237. Ur-sukkal (T48 rev. i 1)	**eren$_2$ (?)**	**DIŠ** (rev. i 1)	—	**lu$_2$-tir-ra** (rev. iii 24)	—
238. Ur-^{d}Šara$_2$ (T40 obv. iii 18)	**inferred (?)**	**AŠ$_c$** (obv. iii 18)	—	**ugula** (obv. iii 18)	**gan$_2$** (obv. iii 18)
238. Ur-^{d}Šara$_2$ (T48 rev. i 6, ii 21)	**eren$_2$ (?)**	**šu** (rev. i 6)	—	**lu$_2$-tir-ra** (rev. iii 24)	—
239. Lu$_2$-he$_2$-gal$_2$ (T40 obv. iii 20)	**inferred (?)**	**DIŠ** (obv. iii 20)	—	—	—
239. Lu$_2$-he$_2$-gal$_2$ (T48 rev. i 7)	**eren$_2$ (?)**	**AŠ$_c$** (rev. i 7)	—	**lu$_2$-tir-ra** (rev. iii 24)	**gan$_2$** (rev. i 7)
240. Ha-la-^{d}Ma-mi (T40 obv. iii 21)	**inferred (?)**	**DIŠ** (obv. iii 21)	—	—	—
240. Ha-la-^{d}Ma-mi (T48 rev. i 8)	**eren$_2$ (?)**	**AŠ** (rev. i 8)	—	**lu$_2$-tir-ra** (rev. iii 24)	—
241. Lugal-$^{\lceil}$nesage-e$^{\rceil}$ (T40 obv. iii 23)	**inferred (?)**	**DIŠ** (obv. iii 23)	—	—	—
241. Lugal-nesage-e (T48 rev. i 10)	**eren$_2$ (?)**	**DIŠ** (rev. i 10)	—	**lu$_2$-tir-ra** (rev. iii 24)	—
242. Ur-^{d}Šara$_2$ (T40 obv. iii 26)	**inferred (?)**	**AŠ$_c$** (obv. iii 26)	—	—	**gan$_2$** (obv. iii 26)
242. Ur-^{d}Šara$_2$ (T48 rev. i 13)	**eren$_2$ (?)**	**AŠ$_c$** (rev. i 13)	—	**lu$_2$-tir-ra** (rev. iii 24)	**gan$_2$** (rev. i 13)
243. Ša$_3$-ku$_3$-ge (T40 obv. iii 29)	**inferred (?)**	**AŠ$_c$** (obv. iii 29)	—	—	**$^{\lceil}$gan$_2$$^{\rceil}$** (obv. iii 29 [coll.])
243. Ša$_3$-ku$_3$-ge (T48 rev. i 18)	**eren$_2$ (?)**	**AŠ$_c$** (rev. i 18)	—	**lu$_2$-tir-ra** (rev. iii 24)	**gan$_2$** (rev. i 18)

PIN. Name (Citation)	Social Stratum (Line) [Observation No. 1 in Gray]	Employment Notation|Term (Line) [Observation No. 2 in Gray]	Conscription Duration (Period) (Line)	Occupation (Line)	Barley Allotment | šuku land (Line) [Observation No. 3 in Gray]
244. Ur-nigar$_{x}^{gar}$ (T40 obv. iii 30)	**inferred (?)**	**DIŠ** (obv. iii 30)	—	—	—
244. Ur-nigar$_{x}^{gar}$ (T48 rev. i 19)	**eren$_2$ (?)**	**AŠ** (rev. i 19)	—	**lu$_2$-tir-ra** (rev. iii 24)	—
245. L[u$_2$-I]b-g[al] (T40 obv. iii 31)	**inferred (?)**	**DIŠ** (obv. iii 31)	—	—	—
245. Lu$_2$-Ib-gal (T48 rev. ii 1)	**eren$_2$ (?)**	**DIŠ** (rev. ii 1)	—	**lu$_2$-tir-ra** (rev. iii 24)	—
246. Lu$_2$-^{d}Nin-šubur (T43 obv. i 14)	**eren$_2$** (rev. ii 34)[402]	**½$_c$** (obv. i 14)	—	—	**gan$_2$** (obv. i 14)
246. Lu$_2$-^{d}Nin-šubur (T44 obv. i 9)	**dumu-gir$_{15}$** (obv. i 15)	**½** (obv. i 9)	**13 months** (obv. ii 1, 4)	**nu-^{giš}kiri$_6$ 'x'-pa-e$_3$** (obv. i 13)	—
247. Ur-ab-zu (T43 obv. i 15)	**eren$_2$** (rev. ii 34)	**½$_c$** (obv. i 15)	—	—	**gan$_2$** (obv. i 15)
247. Ur-ab-zu (T44 obv. i 10)	**dumu-gir$_{15}$** (obv. i 15)	**½** (obv. i 10)	**13 months** (obv. ii 1, 4)	**nu-^{giš}kiri$_6$ 'x'-pa-e$_3$** (obv. i 13)	—
248. Inim-^{d}Šara$_2$ (T43 obv. i 25)	**eren$_2$** (rev. ii 34)	**½$_c$ (?)** (obv. i 25)[403]	—	—	**<gan$_2$> (?)** (obv. i 25)
248. Inim-^{d}Šara$_2$ (T44 obv. i 12)	**dumu-gir$_{15}$** (obv. i 15)	**½** (obv. i 12)	**13 months** (obv. ii 1, 4)	**nu-^{giš}kiri$_6$ 'x'-pa-e$_3$** (obv. i 13)	—
249. A-du-du (T43 rev. i 12)	**eren$_2$** (rev. ii 34)	**½$_c$** (rev. i 12)	—	—	**gan$_2$** (rev. i 12)
249. A-du-du (T44 obv. i 4)	**dumu-gir$_{15}$** (obv. i 15)	**½** (obv. i 4)	**13 months** (obv. ii 1, 4)	**nu-^{giš}kiri$_6$ 'x'-pa-e$_3$** (obv. i 13)	—
250. Lu$_2$-^{d}Šara$_2$ (T43 rev. i 28)	**eren$_2$** (rev. ii 34)	**½$_c$** (rev. i 28)	—	—	**gan$_2$** (rev. i 28)
250. Lu$_2$-^{d}Šara$_2$ (T44 obv. i 5)	**dumu-gir$_{15}$** (obv. i 15)	**½** (obv. i 5)	**13 months** (obv. ii 1, 4)	**nu-^{giš}kiri$_6$ 'x'-pa-e$_3$** (obv. i 13)	—
251. A-kal-la (T43 rev. ii 7)	**eren$_2$** (rev. ii 34)	**½$_c$** (rev. ii 7)	—	—	**gan$_2$** (rev. ii 7)
251. A-kal-la (T44 obv. i 8)	**dumu-gir$_{15}$** (obv. i 15)	**½** (obv. i 8)	**13 months** (obv. ii 1, 4)	**nu-^{giš}kiri$_6$ 'x'-pa-e$_3$** (obv. i 13)	—
252. Ur-sukkal (T43 rev. ii 10)	**eren$_2$** (rev. ii 34)	**½$_c$** (rev. ii 10)	—	—	**gan$_2$** (rev. ii 10)
252. Ur-sukkal (T44 obv. i 6)	**dumu-gir$_{15}$** (obv. i 15)	**½** (obv. i 6)	**13 months** (obv. ii 1, 4)	**nu-^{giš}kiri$_6$ 'x'-pa-e$_3$** (obv. i 13)	—

402. Studevent-Hickman (2016, 2: 440) transliterates this line as "šu+nigin2 3 šu-gi4<<eren2>>-me." eren$_2$-me refers to all the individuals totaled in rev. ii 27–34.

403. See p. 113 for a comment on this individual. The same also applies to Ursukkal (PIN 252).

PIN. Name (Citation)	Social Stratum (Line) [Observation No. 1 in Gray]	Employment Notation|Term (Line) [Observation No. 2 in Gray]	Conscription Duration (Period) (Line)	Occupation (Line)	Barley Allotment | šuku land (Line) [Observation No. 3 in Gray]
253. Ur-in-dub-ba (T43 rev. ii 14 [translit. mine])	**eren$_2$** (rev. ii 34)	**½$_c$** (rev. ii 14)	—	—	**gan$_2$** (rev. ii 14)
253. Ur-in-dub-ba (T44 obv. i 3)	**dumu-gir$_{15}$** (obv. i 15)	**½** (obv. i 3)	**13 months** (obv. ii 1, 4)	**nu-^{giš}kiri$_6$ 'x'-pa-e$_3$** (obv. i 13)	—
254. Ur-'e$_2$'-an-na (T43 rev. ii 16 [translit. mine])	**eren$_2$** (rev. ii 34)	**½$_c$** (rev. ii 16)	—	—	**g[an$_2$]** (rev. ii 16 [translit. mine])
254. Ur-e$_2$-an-na (T44 obv. i 7)	**dumu-gir$_{15}$** (obv. i 15)	**½** (obv. i 7)	**13 months** (obv. ii 1, 4)	**nu-^{giš}kiri$_6$ 'x'-pa-e$_3$** (obv. i 13)	—
255. A-bu-DU$_{10}$ (T48 rev. ii 15)	**eren$_2$ (?)**	**AŠ$_c$** (rev. ii 15)	—	**lu$_2$-tir-ra** (rev. iii 24)	**gan$_2$** (rev. ii 15)
255. A-hu-DU$_{10}$ (T55 rev. i 3)	—	—	—	**tir** (rev. i 3)	**0.0.4 gan$_2$ 6.0.0 gur … a-ša$_3$ a-du$_{10}$-nigin** (rev. i 3–4)
256. UN-da-ga (T56 obv. 1)[404]	—	**½** (obv. 1)	—	—	—
256. UN-da-ga (T58 obv. ii 10)	**dumu-gir$_{15}$** (obv. ii 22)	**½** (obv. ii 10)	**12 months** (obv. ii 16–18)	—	—
257. Lu$_2$-dingir-ra (T57 obv. 2)	—	**½** (obv. 2)	**12 months** (rev. 1–2)	—	—
257. Lu$_2$-dingir-ra (T70 rev. 5)	**dumu-gir$_{15}$** (rev. 11)	**[½]** (rev. 5)	—	—	—
258. Arad$_2$ (T61 obv. i 11)	—	**½$_c$** (obv. i 11)	—	—	**<gan$_2$>$^?$** (obv. i 11)[405]
258. 'Arad$_2$' (T63 rev. i 2)	**dumu-gir$_{15}$ | eren$_2$ | inferred (?)**	**AŠ$_c$** (rev. i 2)	—	—	**gan$_2$** (rev. i 2)
259. Lu$_2$-bala-sig$_5$ (T64 obv. 1)	—	**½** (obv. 1)	—	—	—
259. Lu$_2$-bala-sig$_5$ (T73 obv. 15)	—	**½** (obv. 15)	—	—	—
260. DU-u$_2$-'du' (T64 obv. 3 [translit. mine])	—	**½** (obv. 3)	—	—	—
260. DU-u$_2$-du (T73 obv. 14)	—	**½** (obv. 14)	—	—	—

404. This matching of UNdaga in these texts is noted in Englund 2003, 5–6.

405. While this text is fragmentary, it looks like only individuals notated with AŠ$_c$ explicitly received gan$_2$, but individuals notated with ½$_c$ were probably assumed to receive gan$_2$.

Appendix 2. Social Strata of Donated Male Individuals in Umma

An extensive list of donated male individuals in Umma texts is provided in Table A2.1. Their social strata are cited when known, and many are possibly UN-il$_2$ based on context. If one or more donated male individuals in a given text are known to be UN-il$_2$, then any other donated male individuals in the same text whose social strata are uncertain are possibly UN-il$_2$. Note that "etc. (# PNs)" is utilized for heavily damaged lines when a certain number of donated male individuals can be determined but not practically listed one by one. The names of multiply attested individuals are only listed for each occurrence if their transliterations differ.

Table A2.1. Social Strata of Donated Male Individuals in Umma

Name(s)	Donation Citation(s)	Social Stratum	Social-Stratum Citation(s)
Ba-zi-ge	*AAICAB* I/1 Ashm. 1911-229 obv. i 17–18	UN-il$_2$	*AAICAB* I/1 Ashm. 1911-229 rev. iv 3–6
Lu$_2$-^{d}Inanna	*AAICAB* I/1 Ashm. 1911-229 obv. ii 21, 23; *Nisaba* 6 12 rev. ii 29–30	UN-il$_2$	*AAICAB* I/1 Ashm. 1911-229 rev. i 27
Ur-^{d}Si$_4$-an-na	*AAICAB* I/1 Ashm. 1911-229 obv. iii 5, 8	UN-il$_2$	*AAICAB* I/1 Ashm. 1911-229 rev. iv 3–6
Nig$_2$-u$_2$-rum	*AAICAB* I/1 Ashm. 1912-1144 obv. 7; I/2 Ashm. 1971-252 obv. 3–4; *SAT* 2 1132 rev. 1	(?)	(?)
A$_2$-nin-ga$_2$-ta	*AAICAB* I/1 Ashm. 1912-1156 obv. 3–4; I/2 Ashm. 1975-301 obv. 3–4; *SAT* 2 642 obv. 2–rev. 2	(?)	(?)
Ur-^{d}Suen	*AAICAB* I/2 Ashm. 1935-566 obv. 3, 7	UN-il$_2$ (?)	(?)
Ur-sa$_6$	*AAICAB* I/2 Ashm. 1935-566 obv. 6–7	UN-il$_2$ (?)	(?)
^{d}Nu-muš-da-an-dul$_3$, ^{d}[Nu]-muš-da-an-dul$_3$	*AAICAB* I/2 Ashm. 1971-250 obv. 3–4; *MVN* 3 364 obv. 2–3	(?)	(?)
Ga-ga-mu	*AAICAB* I/2 Ashm. 1971-329 obv. 1, 3	(?)	(?)
E$_2$-ŠU.PEŠ$_5$-e	*AAICAB* I/2 Ashm. 1975-301 obv. 6, rev. 2	(?)	(?)
^{d}Šara$_2$-zi-mu	*AAICAB* I/4 Bod. S 565 rev. 10–11	(?)	(?)
An-ta-lu$_2$	Liu and Nielsen, *Akkadica* 140, 82 6 obv. 1–2	UN-il$_2$ (?)[406]	(?)
Lugal-i$_3$-sa$_6$	*AnOr* 1 280 rev. 9, 14	(?)	(?)
Lugal-iti-da	*AnOr* 1 280 rev. 10, 14	(?)	(?)
Du-du-ha-ma-ti, Du-du-ha-ma-^{r}ti^{1}	*AOS* 32 G7 obv. 1, 6; *YOS* 15 115 rev. ii 17'–18'	UN-il$_2$ (?)	*SA* 74 pl. 109 obv. 1 (?) (may not apply); *YOS* 15 115 rev. v 23' (?) (ditto)
A-kal-la	*AOS* 32 G7 obv. 4, 6	UN-il$_2$ (?)	(?)

406. Antalu may have been an UN-il$_2$ based on his notation as 1 PN in this sealed receipt (see, for example, p. 210). He would also have been an UN-il$_2$ if he is present in *CUSAS* 39 128 obv. ii 33, but this connection is uncertain.

Name(s)	Donation Citation(s)	Social Stratum	Social-Stratum Citation(s)
^{d}Šara$_2$-me-a-DU	*AOS* 32 G7 obv. 7, rev. 2	UN-il$_2$	*Organisation administrative, Diss.* 1, 230 12 Talon-Vanderroost 5 obv. i 6
Lu$_2$-^{d}Nin-ur$_4$-ra, Lu$_2$-^{d}Nin-ur$_4$-r[a]	*AOS* 32 G7 obv. 9, rev. 2; *BCT* 2 112 obv. 5; *Santag* 6 384 obv. v 15'–16'	UN-il$_2$	*Santag* 6 384 obv. v 15'
Giri$_3$-^{d}Šara$_2$-i$_3$-dab$_5$	*BPOA* 1 1434 obv. 1–2	UN-il$_2$ (?)[407]	(?)
Ku$_3$-ga-ni	*BPOA* 2 2168 obv. 4–5	UN-il$_2$ (?)[408]	(?)
A-a-uru-mu	*BPOA* 2 2228 obv. 1–2	(?)	(?)
Šu-na-mu-gi$_4$	CDLI P429776 obv. i 22'–23'	UN-il$_2$	CDLI P429776 obv. i 22'
Ur-^{d}Si$_4$-an-na	*CHEU* 55 obv. 6	UN-il$_2$ (?)[409]	(?)
Ur-zikum-ma	*CHEU* 55 obv. 8	UN-il$_2$ (?)	(?)
Lu$_2$-du$_{10}$-ga	*CHEU* 55 rev. 3[410]	UN-il$_2$ (?)	(?)
Lu$_2$-ga-mu	*CHEU* 55 rev. 5 (coll.)	UN-il$_2$ (?)	(?)
Du$_{11}$-ge	*CHEU* 55 rev. 6	UN-il$_2$ (?)	(?)
A-da-lal$_3$	*CUSAS* 39 103 obv. 1–2	(?)	(?)
^{d}Šara$_2$-i$_3$-sa$_6$	*CUSAS* 39 126 obv. iv 7–8; *MVN* 16 727 obv. 3	UN-il$_2$ (?)	(?)
Lugal-ezem, ^{r}Lugal^{1}-ezem	*CUSAS* 39 126 obv. v 36–37; 135 rev. v 31–32; 140 obv. ii 15'	UN-il$_2$	*CUSAS* 39 135 rev. vi 30; 140 rev. iii 1
Šeš-kal-la	*CUSAS* 39 126 obv. v 38–39; 135 rev. v 33–34; 140 obv. ii 16'	UN-il$_2$	*CUSAS* 39 135 rev. vi 30; 140 rev. iii 1
Lugal-giš-hur-e[411]	*CUSAS* 39 126 obv. v 40–41; 135 rev. v 35–36; 140 obv. ii 17'	UN-il$_2$	*CUSAS* 39 135 rev. vi 30; 140 rev. iii 1
Nam-tar-ib$_2$-gu-ul	*CUSAS* 39 126 obv. v 42–43; 135 rev. v 39, 41; 140 obv. ii 19', 21'	UN-il$_2$	*CUSAS* 39 135 rev. vi 30; 140 rev. iii 1
Lugal-nir-gal$_2$	*CUSAS* 39 126 obv. v 44–45; 135 rev. v 42–43; 140 obv. ii 22'–23'	UN-il$_2$	*CUSAS* 39 135 rev. vi 30; 140 rev. iii 1
Lugal-si-sa$_2$	*CUSAS* 39 126 obv. vi 21–22; 140 rev. i 17	UN-il$_2$	*CUSAS* 39 140 rev. iii 1
Ur-^{d}Hendur-sag-ka	*CUSAS* 39 126 rev. i 27, (coll.), 28	UN-il$_2$ (?)	(?)
^{r}Lugal^{1}-ma$_2$-gur$_8$-re, Lugal-ma$_2$-gur$_8$-re	*CUSAS* 39 126 rev. iv 19 (coll.), 20; 135 rev. vi 11–12	UN-il$_2$	*CUSAS* 39 135 rev. vi 30
Ki-tuš-lu$_2$	*CUSAS* 39 126 rev. v 29, 32	UN-il$_2$ (?)	(?)
E-ma-am$_3$	*CUSAS* 39 126 rev. v 30, 32	UN-il$_2$ (?)	(?)
Nu-ur$_2$-i$_3$-li$_2$	*CUSAS* 39 126 rev. v 31–32	UN-il$_2$ (?)	(?)
Lugal-e$_2$-na-na	*CUSAS* 39 129 obv. iii 23–24	UN-il$_2$	*CUSAS* 39 129 obv. iii 23
etc. (3 PNs)	*CUSAS* 39 129 obv. iv 2–3, v 28–29, vii 5–6	UN-il$_2$	*CUSAS* 39 129 obv. iv 2, v 28, vii 5
A$^{!}$-da-da	*CUSAS* 39 129 obv. vi 6	UN-il$_2$	*CUSAS* 39 129 obv. vi 6

407. Giri-Šaraidab may have been an UN-il$_2$ based on his notation as 1 PN in this sealed receipt.

408. Kugani may have been an UN-il$_2$ based on his proximity to Ur-Iškur, son of Bazige, who was an UN-il$_2$ in *Syracuse* 36 obv. 3.

409. Ur-Siana, Urzikuma, Luduga, Lugamu, and Duge may have been UN-il$_2$ based on their proximity to Lugalnesage, son of Amakala (lo. ed. 11), who was an UN-il$_2$ in *CUSAS* 39 135 rev. iii 24 (coll.). Note that besides Lugalnesage, Šaraisa is also identified by his mother (obv. 1–2), which may likewise indicate that this text concerns various UN-il$_2$.

410. This line is difficult to collate, but a-ru should be a-ru-a.

411. This name is also read as Lugal-^{giš}HAR-e in the BDTNS, but Lugal-giš-hur-e is preferred here.

Name(s)	Donation Citation(s)	Social Stratum	Social-Stratum Citation(s)
Ur-sila-luh	*CUSAS* 39 129 rev. ii 35'	UN-il$_2$	*CUSAS* 39 129 rev. ii 35'; *OrSP* 47-49 483 obv. ii 3, rev. i 3
Arad$_2$	*CUSAS* 39 133 obv. iii 4–5	(?)	(?)
Dingir-ga$_2$-i$_3$-sa$_6$	*CUSAS* 39 135 obv. vii 32–33; *Nisaba* 9 274 obv. 1–2; *OrSP* 47-49 393 obv. 1–2; *TCL* 5 5674 obv. i 10'	UN-il$_2$	*CUSAS* 39 135 obv. vii 32; *MVN* 18 545 obv. 1; *TCL* 5 5674 obv. i 14'
^{d}Šara$_2$-i$_3$-sa$_6$	*CUSAS* 39 135 rev. iv 35–36	UN-il$_2$	*CUSAS* 39 135 rev. vi 30
Šeš-kal-la	*CUSAS* 39 135 rev. v 27–28; 140 obv. ii 13'	UN-il$_2$	*CUSAS* 39 135 rev. vi 30; 140 rev. iii 1
^{d}Šara$_2$-^{r}a-mu^{1}	*CUSAS* 39 135 rev. v 29–30; 140 obv. ii 14'	UN-il$_2$	*CUSAS* 39 135 rev. vi 30; 140 rev. iii 1
Lugal-ezem	*CUSAS* 39 135 rev. v 37–38; 140 obv. ii 18'	UN-il$_2$	*CUSAS* 39 135 rev. vi 30; 140 rev. iii 1
Šu-im-bi$^{!}$, Šu-im-bi	*CUSAS* 39 135 rev. v 40–41; 140 obv. ii 20'–21'	UN-il$_2$	*CUSAS* 39 135 rev. vi 30; 140 rev. iii 1
[Giri$_3$]-$^{r d 1}$Šara$_2$-i$_3$-dab, Giri$_3$-^{d}Šara$_2$-i$_3$-dab$_5$	*CUSAS* 39 135 rev. vi 1 (coll.), 2; 140 obv. ii 24', 25' (coll.)	UN-il$_2$	*CUSAS* 39 135 rev. vi 30; 140 rev. iii 1
Ur-$^{r d 1}$Iškur^{1}, ^{r}Ur^{1}-^{d}Iškur	*CUSAS* 39 135 rev. vi 3–4; 140 obv. ii 26'[412]	UN-il$_2$	*CUSAS* 39 135 rev. vi 30; 140 rev. iii 1
^{d}Šara$_2$-za-me	*CUSAS* 39 135 rev. vi 7–8[413]	UN-il$_2$	*CUSAS* 39 135 rev. vi 30
Lu$_2$-^{d}Nin-šubur	*CUSAS* 39 135 rev. vi 9–10	UN-il$_2$	*CUSAS* 39 135 rev. vi 30
KA-eren-^{r}ma$^{?1}$	*CUSAS* 39 135 rev. vi 13–14	UN-il$_2$	*CUSAS* 39 135 rev. vi 30
^{d}Šubur-ba-^{r}ra^{1}	*CUSAS* 39 135 rev. vi 15–16	UN-il$_2$	*CUSAS* 39 135 rev. vi 30
Engar-^{r}du$_{10}$^{1}	*CUSAS* 39 135 rev. vi 17–18	UN-il$_2$	*CUSAS* 39 135 rev. vi 30
^{d}Utu-sig$_5$	*CUSAS* 39 135 rev. vi 19–20	UN-il$_2$	*CUSAS* 39 135 rev. vi 30
^{d}Šara$_2$-mu-tum$_2$	*CUSAS* 39 135 rev. vi 21–22	UN-il$_2$	*CUSAS* 39 135 rev. vi 30
An-ta-lu$_2$	*CUSAS* 39 135 rev. vi 23	UN-il$_2$	*CUSAS* 39 135 rev. vi 30
Šu-^{d}En-lil$_2$	*CUSAS* 39 135 rev. vi 31, 35	UN-il$_2$	*CUSAS* 39 135 rev. vi 31
A-ta$_2$-na-ah	*CUSAS* 39 135 rev. vi 32, 35	UN-il$_2$	*CUSAS* 39 135 rev. vi 31[414]
Šu-Kab-ta$_2$	*CUSAS* 39 135 rev. vi 33, 35	UN-il$_2$	*CUSAS* 39 135 rev. vi 31
Ur-^{d}A-zi-a[415]	Foxvog, *ASJ* 18, 77 10 obv. i 15, 18	UN-il$_2$	*CUSAS* 39 130 rev. i 13
Ur-E$_2$.MIR.ZA	Foxvog, *ASJ* 18, 77 10 obv. i 16, 18	UN-il$_2$	*CUSAS* 39 130 rev. i 15 (CDLI)
Lugal-ma$_2$-gur$_8$-re	Foxvog, *ASJ* 18, 77 10 obv. i 17–18	UN-il$_2$ (?)	(?)
Kinda$_2$	Foxvog, *ASJ* 18, 77 10 obv. ii 16–17	UN-il$_2$ (?)	(?)
Ur-Gu$_2$-de$_3$-na	Foxvog, *ASJ* 18, 77 10 rev. i 23–24	UN-il$_2$ (?)	(?)
Ur-^{d}Utu	*L'uomo* 62 rev. iv' 34'–35'	(?)	(?)
Da-da	de Maaijer, *JEOL* 33, 123 8 obv. 2–3	(?)	(?)
Lugal-bad$_3$	de Maaijer, *JEOL* 33, 123 8 obv. 4	(?)	(?)
E$_2$-u$_3$-e	de Maaijer, *JEOL* 33, 123 8 obv. 5	(?)	(?)

412. Ur-Iškur was presumably donated by Inimanizi in the following line, which is lost.

413. *CUSAS* 39 135 rev. vi 7–8 is transliterated as x ki ^{d}Šara$_2$-za-me-^{r}ta^{1} \ a-ru-a AN-gir$_2$-ra in the BDNTS and as x x x ^{d}Šara$_2$-za-me x \ a-ru-a AN-gir$_2$-ra in the original publication. While these lines are difficult to read from the current images, the first few signs in rev. vi 7 could be AŠ 0.0.2 or AŠ 0.0.3, which fits the context. The ki and -^{r}ta^{1} do not seem to fit this context, however. Given these challenges, a firm collation is not suggested.

414. Ātanah and Šū-Kabtā are considered to be UN-il$_2$ based on their father.

415. While this name is transliterated as Ur-^{d}A-zi-a in this text and several others according to the BDTNS, note that it is rather similar to the names Ur-an-zi-za and Ur-^{d}Si$_2$-sa$_3$ (see n. 393).

Name(s)	Donation Citation(s)	Social Stratum	Social-Stratum Citation(s)
Šeš-kal-la	*MVN* 3 127 obv. 3–4	(?)	(?)
Lugal-an-ne$_2$	*MVN* 3 128 obv. 3–4	(?)	(?)
ŠE.ŠA.NI	*MVN* 16 1104 obv. 1, 3	(?)	(?)
Igi-dingir-še$_3$	*MVN* 16 1227 obv. 1–2	(?)	(?)
Di-ni-li$_2$	*MVN* 16 1369 obv. 2	UN-il$_2$	*MVN* 16 1369 obv. 2
A-a-ha-ma-ti	*MVN* 21 222 obv. 4–5	(?)	(?)
Ur-giš-ša$_3$-ga	*MVN* 21 223 rev. 5	(?)	(?)
DINGIR-AN.DUL$_3$	*MVN* 21 223 rev. 7	(?)	(?)
^{d}Nanna-mu-dah	*MVN* 21 241 rev. 2–3	(?)	(?)
A$_2$-nin-ga$_2$-ta	*MVN* 21 243 obv. 2–3; *SAT* 2 7 obv. 3, 5	(?)	(?)
^{d}Šara$_2$-i$_3$-sa$_6$	*Nebraska* 64 obv. 4–5	(?)	(?)
E$_2$-mah-zi-mu	*Nisaba* 6 12 rev. i 24–25	UN-il$_2$	*Nisaba* 6 12 rev. ii 22
Lugal-bad$_3$	*Nisaba* 6 12 rev. i 26–27	UN-il$_2$	*Nisaba* 6 12 rev. ii 22
Lu$_2$-me-lam$_2$	*Nisaba* 6 12 rev. i 28–29	UN-il$_2$	*Nisaba* 6 12 rev. ii 22
Lugal-mu-ba-zi-ge	*Nisaba* 6 12 rev. i 30–31	UN-il$_2$	*Nisaba* 6 12 rev. ii 22
DINGIR-šu-ra-NI	*Nisaba* 6 12 rev. i 32–33	UN-il$_2$	*Nisaba* 6 12 rev. ii 22
Lugal-mas-su$_2$	*Nisaba* 6 12 rev. i 34–35	UN-il$_2$	*Nisaba* 6 12 rev. ii 22
^{d}Šara$_2$-i$_3$-sa$_6$	*Nisaba* 6 12 rev. i 36–37	UN-il$_2$	*Nisaba* 6 12 rev. ii 22
^{d}En-lil$_2$-la$_2$-i$_3$-sa$_6$	*Nisaba* 6 12 rev. ii 1–2	UN-il$_2$	*Nisaba* 6 12 rev. ii 22
etc. (9 PNs)	*Nisaba* 6 12 rev. ii 3–20	UN-il$_2$	*Nisaba* 6 12 rev. ii 22
^{d}Šara$_2$-an-dul$_3$	*Nisaba* 6 17 obv. ii 22–23	UN-il$_2$ (?)	*Nisaba* 6 17 rev. i 14 (?) (may not apply)
Šeš-kal-la	*Nisaba* 6 27 obv. v 1–2	UN-il$_2$ (?)	*Nisaba* 6 27 rev. vii 2 (?) (ditto)[416]
Lu$_2$-bala-sig$_5$	*Nisaba* 6 27 rev. i 45–46	UN-il$_2$ (?)	*Nisaba* 6 27 rev. vii 2 (?) (ditto)
Lugal-he$_2$-gal$_2$	*Nisaba* 6 27 rev. i 49–50	UN-il$_2$ (?)	*Nisaba* 6 27 rev. vii 2 (?) (ditto)
En-um-i$_3$-li$_2$	*Nisaba* 33 435 obv. 1, 5	(?)	(?)
Igi-ni-da-a	*Nisaba* 33 435 obv. 2, 5	(?)	(?)
Lu$_2$-^{d}Hendur-sag-ka	*Nisaba* 33 435 obv. 4–5	(?)	(?)
Lugal-a-i$_3$-sa$_6$-mu	Peters, *ARRIM* 4, 21 24 obv. 1–2	(?)	(?)
A-al-la	*Princeton* 1 325 obv. 1–2	UN-il$_2$ (?)[417]	(?)
Giri$_3$-ni	Römer, *OMRO* 66, 50 16 obv. 1, 3	(?)	(?)
Ma-an-gu-ul$^{?}$	Römer, *OMRO* 66, 50 16 obv. 2–3	(?)	(?)
^{d}Šara$_2$-uru-mu	*SA* 145 pl. 165 obv. 5, rev. 1	UN-il$_2$ (?)[418]	(?)
^{d}Utu-ba-e$_3$	*SA* 145 pl. 165 obv. 6–rev. 1	UN-il$_2$ (?)	(?)
Lu$_2$-$^{d\lceil}$Nin$^{\rceil}$-šu[bur]	*SACT* 2 281 obv. 1–2	(?)	(?)
Lu$_2$-^{d}Suen	*Santag* 6 115 rev. 4–5; *UCP* 9/2-1 95 rev. i 4	(?)	(?)
Ma-an-ba	*SAT* 2 7 obv. 2, 5	(?)	(?)
Lugal-da$_5$-ba-an	*SAT* 2 7 obv. 4–5	(?)	(?)
Šu-na-mu-gi$_4$	*SAT* 2 483 obv. 2–3	UN-il$_2$	*SAT* 2 483 obv. 1

416. Since this text records barley allotments for geme$_2$ dumu, it is possible that Šeškala, Lubalasig, and Lugalhegal were UN-il$_2$.

417. A'ala may have been an UN-il$_2$ since he is notated as full-time in this sealed receipt.

418. Šaraurumu and Utubae were both probably children of geme$_2$.

Name(s)	Donation Citation(s)	Social Stratum	Social-Stratum Citation(s)
Giri$_3$-^{d}Šara$_2$-i$_3$-dab$_5$	*SAT* 2 1000 rev. 5	UN-il$_2$ (?)[419]	(?)
Ša$_3$-da-nu-šar^1	*SAT* 2 1132 rev. 2	(?)	(?)
A-ba-^{d}Šara$_2$-gen$_7$	*SAT* 3 2051 obv. 2–3	UN-il$_2$ (?)[420]	(?)
^{d}Šara$_2$-mu-dah	*SNAT* 499 obv. 6–7	UN-il$_2$ (?)[421]	(?)
Ga$_2$-e$_2$-še$_3$-he$_2$-ti	*UTI* 5 3011 obv. 1–2	(?)	(?)
A-a-ša$_3$-mu	*UTI* 5 3011 obv. 4–5	(?)	(?)

Appendix 3. Number of Sons per Conscripted Male according to Social Stratum in Umma Inspections and Similar Texts

The number of sons conscripted with their male citizen and UN-il$_2$ fathers who were generally old enough to have children in Umma inspections and similar texts are counted in Tables A3.1–2. Note that only dated and mostly intact texts listing clearly indicated citizens and UN-il$_2$ conscripted as families with age-bracket designations are included.[422] The use of only dated texts, whether their dates are preserved or approximated, is to ensure that the same families are not counted multiple times, unless they are documented across different years. This is because families could change in size over time. Mostly intact texts are needed as well because precise proportions of various family sizes are key to this study, though determining whether a text is intact enough is admittedly subjective. The age-bracket designations that are indicative of potential fathers are AŠ … aga$_3$-us$_2$, AŠ … nu-banda$_3$ gu$_4$, AŠ … šeš-tab-ba, AŠ$_c$, ½$_c$, and

419. Several individuals in this text are known to be UN-il$_2$ in other texts, including Urama (see *AnOr* 1 85 obv. i 11, 14, vi 11, 14; Gomi, *Orient* 16, 65 79 rev. 5, 7; *MVN* 21 199 obv. i 15', 23'), Ludingira, son of HeDU.DU (see *Santag* 6 384 rev. ii 11', iii 35'), and Ur-Guedena (*Organisation administrative, Diss.* 1 230 12 Talon-Vanderroost 5 obv. i 11, rev. ii 3).

420. Two other individuals in this text are geme$_2$. Additionally, this Giri-Šaraidab may have been an UN-il$_2$ in *Torino* 2 703 obv. i 6, but this is not a certain connection.

421. Several individuals in this text are either geme$_2$ or children of geme$_2$.

422. Some texts that are omitted due to damage, uncertain dates, lack of age-bracket designations or unusual concentrations of adults without children or children without adults include *AAICAB* I/1 Ashm. 1911-228; *AnOr* 7 301; BDTNS 196758; CDLI P429776; *CUSAS* 39 140; *Nisaba* 6 17; 11 15; 23 47; *OrSP* 47-49 483; Princeton 1 556; 2 429; *SAT* 2 77, among others.

šu. Individuals who were ill, deceased, or supporting their parents are counted as potential fathers as well if their age brackets can be approximated from context. While there are a few instances of individuals notated only with AŠ that were conscripted with children, individuals of this age bracket are not generally expected to be conscripted with children.[423] Note that indented individuals are not counted, unless they were children of adults with age-bracket individuals, which is a limited phenomenon in the included texts. Family sizes based on the constructions PN_1 dumu PN_2 or PN_1 PN_2 dumu PN_3-me are not counted, because these constructions are not consistently attested. This also aids in reducing uncertainy about family sizes when there are multiple children. There are several instances in which families are restored based on formatting. These instances are generally structured like these two hypothetical examples of citizen families: (1) $AŠ_c$ PN_1 \ DIŠ PN_2 [dumu$^?$-ni$^?$] \ $AŠ_c$ PN_3 and (2) $AŠ_c$ PN_1 \ AŠ PN_2 \ DIŠ PN_3 \ [dumu$^?$-ni$^?$-me$^?$] \ $AŠ_c$ PN_4. In the first example, PN_2 was most likely a son of PN_1, and in the second example, PN_2 and PN_3 were probably sons of PN_1. Depending on the extent of the damage, it is possible that there were other sons in these families, but this is considered in every case. These instances are counted like clear examples, though they are cited with (?) without collations or comments. On some occasions, other texts are cited in footnotes to clarify broken or otherwise uncertain transliterations. Texts in Table A3.2 are bolded and each count is parenthetically noted. Tables A5.2, A6.1, and A7.1–4 are also formatted this way.

Although the maximum number of children documented here is six, there was an individual with nine dumu in *TCL* 5 6166. Given the context of this text (see p. 115), however,

423. See *CUSAS* 39 133 rev. i 31–35; *Santag* 6 384 rev. iii 20'–21'; *YOS* 15 115 obv. v 26–27. Note that the AŠ in *CUSAS* 39 133 rev. i 31 could have been AŠ … šeš-tab-ba. There does appear to be a broken wedge following the PN, which could be the beginning of šeš-tab-ba. *Santag* 6 384 rev. iii 20'–21' is likewise uncertain, since the preceding individuals in 17'–20' could also be part of this family based on typical formatting. Given this uncertainty and the formatting, the individuals in 17'–21' are counted as one uncertain family.

this number may refer to children and grandchildren (see pp. 122–23 for this phenomenon). Based on the data presented here, the average male citizen or UN-il$_2$ old enough to have children was conscripted with about one son, but these numbers may be a little low since larger families are not always well preserved or definitive based on formatting. The most reliable numbers are probably from AS 5, which has the most data, and the totals, which are similar to AS 5. There are also instances in which several elderly individuals were conscripted without their children, perhaps because they no longer belonged to the same household (see, for example, *CUSAS* 39 132), but this is not certain and may not be consistent. Nevertheless, these factors may not have a substantial effect on the overall percentages and arithmetic means.

Table A3.1. Number of Sons per Conscripted Male
according to Social Stratum in Umma Inspections (Counts and Percentages)

Year	No. of Sons	Citizens			UN-il$_2$		
		Count	Percentage	Arithmetic Mean	Count	Percentage	Arithmetic Mean
Š 47	0	19	~59.38%	**~0.72**	9	56.25%	**0.5**
	1	7	~21.88%		6	37.5%	
	2	4	12.5%		1	6.25%	
	3	1	~3.12%		0	0%	
	4	0	0%		0	0%	
	5	1	~3.12%		0	0%	
	6	0	0%		0	0%	
Š 48	0	17	~47.23%	**~1.11**	12	~70.59%	**~0.65**
	1	7	~19.44%		3	~17.65%	
	2	4	~11.11%		1	~5.88%	
	3	7	~19.44%		0	0%	
	4	1	~2.78%		0	0%	
	5	0	0%		0	0%	
	6	0	0%		1	~5.88%	
AS 2	0	28	56%	**0.72**	13	~35.13%	**~1.19**
	1	13	26%		14	~37.84%	
	2	5	10%		5	~13.51%	
	3	3	6%		2	~5.41%	
	4	1	2%		2	~5.41%	
	5	0	0%		0	0%	
	6	0	0%		1	~2.70%	

Year	No. of Sons	Citizens			UN-il$_2$		
		Count	Percentage	Arithmetic Mean	Count	Percentage	Arithmetic Mean
AS 3	0	76	~60.15%	**~0.79**	39	~54.17%	**~0.82**
	1	22	~17.19%		18	25%	
	2	14	~10.94%		7	~9.72%	
	3	10	~7.81%		5	~6.94%	
	4	5	~3.91%		3	~4.17%	
	5	0	0%		0	0%	
	6	0	0%		0	0%	
AS 5	0	172	~54.43%	**~0.99**	80	~59.7%	**~0.71**
	1	54	~17.09%		29	~21.64%	
	2	38	~12.02%		14	~10.45%	
	3	32	~10.13%		6	~4.48%	
	4	15	~4.75%		5	~3.73%	
	5	4	~1.26%		0	0%	
	6	1	~0.32%		0	0%	
AS 6	0	105	52.5%	**0.88**	57	~52.78%	**~0.85**
	1	45	22.5%		24	~22.22%	
	2	29	14.5%		18	~16.67%	
	3	12	6%		4	~3.7%	
	4	8	4%		5	~4.63%	
	5	1	0.5%		0	0%	
	6	0	0%		0	0%	
ŠS 5	0	6	~66.67%	**~0.55**	5	~83.33%	**~0.33**
	1	1	~11.11%		0	0%	
	2	2	~22.22%		1	~16.67%	
	3	0	0%		0	0%	
	4	0	0%		0	0%	
	5	0	0%		0	0%	
	6	0	0%		0	0%	
Total	0	423	~55%	**~0.89**	215	~55.13%	**~0.8**
	1	149	~19.38%		94	~24.1%	
	2	96	~12.48%		47	~12.05%	
	3	65	~8.46%		17	~4.36%	
	4	29	~3.77%		15	~3.85%	
	5	6	~0.78%		0	0%	
	6	1	~0.13%		2	~0.51%	

Table A3.2. Number of Sons per Conscripted Male
according to Social Stratum in Umma Inspections (Citations Only)

Year	No. of Sons	Citations	
		Citizens	**UN-il$_2$**
Š 47	0	***Nisaba* 23 2** obv. ii 27 **(+1)**, iii 3 **(+1)**, 14–15 **(+2)**, 17 **(+1)**, 19–20 **(+1)**,[424] 22 **(+1)**, 28 **(+1)**, 30 **(+1)**, iv 7 **(+1)**, 11 **(+1)**, 13–14 **(+2)**, 16 **(+1)**, 24–25 **(+2)**, 29 **(+1)**, rev. i 8' **(+1)**	***Nisaba* 23 2** obv. ii 25 **(+1)**, iii 7 **(+1)**, 10 **(+1)**, 16 **(+1)**, iv 18–20 **(+3)**, rev. iii 24'–25' **(+2)**
	1	***Nisaba* 23 2** obv. i 9–10 **(+1)**, iii 4–5 **(+1)**, 26–27 **(+1)**, iv 1–2 **(+1)**, 10–11 **(+1)**, 28–29 **(+1)**, rev. iii 20'–21' **(+1)**	***Nisaba* 23 2** obv. ii 23–24 **(+1)**, iii 8–9 **(+1)**, 11–12 **(+1)**, iv 17–18 **(+1)**, rev. i 2–3 **(+1)**, iii 22'–23' **(+1)**
	2	***Nisaba* 23 2** obv. i 26–29 **(+1)**, iv 3–6, rev. iii 1–4 **(+1)**, 5–7 **(+1)**[425]	***Nisaba* 23 2** rev. iv 1–4 **(+1)**
	3	***Nisaba* 23 2** obv. i 1–2, 9, 11–12 **(+1)**[426]	—
	5	***Nisaba* 23 2** obv. i 2–8 **(+1)**	
Š 48	0	***Torino* 2 703** obv. i 20–21 **(+2)**, ii 15–17 **(+3)**, 25 **(+1)**, iii 6–7 **(+1)**, 26 **(+1)**, iv 19' **(+1)**,[427] rev. i 5 **(+1)**, ii 11–13 **(+3)**, 17 **(+1)**, 26 **(+1)**, iii 14 **(+1)**	***Torino* 2 703** obv. i 5 **(+1)**, ii 9 **(+1)**, 12–13 **(+2)**, 18–19 **(+2)**, 29 **(+1)**, iii 10 **(+1)**, 15 **(+1)**, 18 **(+1)**, iv 25'–26' **(+2)**
	1	***Torino* 2 703** obv. i 8–9 **(+1)**, 22–23 **(+1)**, iii 1–2 **(+1)**, 12–13 (?) **(+1)**, 27–28 **(+1)**, rev. i 6–7 **(+1)**, ii 15–16 **(+1)**	***Torino* 2 703** obv. i 6–7 **(+1)**, iv 24'–25' **(+1)**, rev. i 23–24 **(+1)**
	2	***Torino* 2 703** obv. ii 21–24 **(+1)**, iii 19–22 **(+1)**, iv 18'–21' **(+1)**, rev. i 1–4 **(+1)**	***Torino* 2 703** obv. i 1–4 **(+1)**
	3	***Torino* 2 703** obv. ii 4–8 **(+1)**, iii 5–9 **(+1)**, iv 11'–15' **(+1)**, rev. i 17–21 **(+1)**, ii 10–14 **(+1)**, 21–25 **(+1)**, iii 5–9 **(+1)**	—
	4	***Torino* 2 703** rev. ii 28–iii 3 **(+1)**	
	6	—	***Torino* 2 703** rev. i 8–15 **(+1)**
AS 2	0	***BPOA* 7 2457** rev. 13–14 **(+2)**; ***OrSP* 47-49 324** obv. i 3–5 **(+3)**,[428] 8 **(+1)**, 11 **(+1)**, 28 **(+1)**, ii 1 **(+1)**, 19 **(+1)**, 22 **(+1)**, 24 **(+1)**, 26 **(+1)**, iii 7–8 **(+2)**, 11 **(+1)**, 15–18 **(+4)**, 35 **(+1)**, 37 **(+1)**, rev. i 32–33 **(+2)**; ***SNAT* 332** obv. 6–7 **(+2)**, rev. 1 **(+1)**, 3 **(+1)**	***BPOA* 7 2457** obv. 5 **(+1)**, rev. 4 **(+1)**, 18–19 **(+2)**; ***OrSP* 47-49 324** obv. i 21 **(+1)**, ii 30–31 **(+2)**, rev. i 2 **(+1)**, 7 **(+1)**, 17–19 **(+3)**, 26 **(+1)**
	1	***OrSP* 47-49 324** obv. i 1–2 **(+1)**, 10–11 **(+1)**, 19–20 **(+1)**, 26–27 **(+1)**, ii 15–18 **(+2)**,[429] 21–24 **(+2)**, iii 23–24 **(+1)**, 33–34 **(+1)**, rev. i 29–30 **(+1)**; ***SNAT* 332** obv. 11–12 **(+1)**, 17–18 **(+1)**	***BPOA* 7 2457** obv. 2–3 **(+1)**, 11–12 **(+1)**; ***OrSP* 47-49 324** obv. i 6–7 **(+1)**, 13–14 **(+1)**, ii 5–6 **(+1)**, 11–12 **(+1)**, iii 5–6 **(+1)**, rev. i 5–6 **(+1)**, 13–16 **(+1)**, 20–21 **(+1)**, 24–25 **(+1)**, 27–28 **(+1)**; ***SNAT* 332** obv. 15–16 **(+1)**

424. See *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 rev. iv 7'–9'. This final line indicates that the Lu-Šara following Lugalnesage may have been the son of a different person.

425. See rev. iii 8 (coll.).

426. See the discussion of this family on pp. 129–30. The possibly indented individual is not counted because of the uncertainty of the transliteration.

427. Obv. iv 1–28, rev. iii 10–27 in the BDTNS are numbered as obv. iv 1'–28', rev. iii 10'–27' here.

428. These individuals, as well as those in obv. i 1–2 (also counted here) were citizens based on *OrSP* 47-49 324 rev. ii 3–5.

429. These individuals could be UN-il$_2$, but if they were, then the individuals in obv. iii 5–6 would be citizens. Either way, the counts are the same for both social strata.

Year	No. of Sons	Citations	
		Citizens	**UN-il$_2$**
AS 2	2	***OrSP* 47-49 324** obv. i 29–ii 3 **(+1)**, 25–28 **(+1)**, iii 25–32 **(+2)**; ***SNAT* 332** obv. 4–5 **(+1)**	***BPOA* 7 2457** obv. 13–16 **(+1)**; ***OrSP* 47-49 324** obv. i 15–18 **(+1)**, ii 7–10 **(+1)**, 29–32 **(+1)**, rev. i 1–4 **(+1)**
	3	***OrSP* 47-49 324** obv. ii 33–iii 4 **(+1)**, 10–14 **(+1)**, rev. i 31–35 **(+1)**	***BPOA* 7 2457** obv. 17–rev. 3 **(+1)**; ***OrSP* 47-49 324** rev. i 8–12 **(+1)**
	4	***BPOA* 7 2457** rev. 12–17 **(+1)**	***BPOA* 7 2457** rev. 6–11 **(+1)**; ***OrSP* 47-49 324** obv. ii 4–5, 7, 11, 13–14 **(+1)**
	6	—	***BPOA* 7 2457** obv. 1–2, 4–10 **(+1)**
AS 3	0	***CUSAS* 39 128** obv. i 13–14 **(+2)**, 19–20 **(+2)**, 22–23 **(+2)**, ii 7 **(+1)**, 17–18 **(+2)**, 24 **(+1)**, 30 **(+1)**, 36 **(+1)**, iii 2 **(+1)**, 4–5 **(+2)**, 20 **(+1)**, 23 **(+1)**, 29 **(+1)**, rev. i 3 **(+1)**, 17 **(+1)**, 29 **(+1)**; **131** obv. i 5 **(+1)**, 12 **(+1)**, 16–ii 1 **(+2)**, 11 **(+1)**, rev. i 2 **(+1)**, ii 7–8 **(+2)**, 11–12 **(+2)**, 14 **(+1)**; **132** obv. i 3 **(+1)**, 9 **(+1)**, 12–14 **(+3)**, 17 **(+1)**, ii 10–11 **(+2)**, 14–15 **(+2)**, rev. i 20 **(+1)**; ***Organisation administrative, Diss.* 1, 217 7 Talon-Vanderroost 2** obv. i 7 **(+1)**, 14–15 **(+2)**, ii 1–3 **(+3)**, rev. i 2–3 **(+2)**, 9–10 **(+2)**, 18 **(+1)**; ***Santag* 6 384**[430] obv. ii 11' **(+1)**, 21' **(+1)**,[431] iii 16' **(+1)**, 21' **(+1)**, 34' **(+1)**, iv 1' **(+1)**, 10' **(+1)**, 12' **(+1)**, v 1'–2' **(+2)**, rev. i 4' **(+1)**, iv 18' **(+1)**, 20' **(+1)**, 33' **(+1)**, 35'–38' **(+4)**, 40' **(+1)**, vi 13'–14' **(+2)**,[432] 29' **(+1)**	***CUSAS* 39 128** obv. i 18 **(+1)**, 21 **(+1)**, ii 1 **(+1)**, iii 1 **(+1)**, 13 **(+1)**, rev. i 15 **(+1)**, 30 **(+1)**, 33–34 **(+2)**, 38–40 **(+3)**; **131** rev. i 3 **(+1)**, 16–17 **(+2)**, ii 6 **(+1)**;[433] **132** obv. ii 3–7 **(+5)**, 13 **(+1)**, rev. i 7 **(+1)**, 9 **(+1)**, 11 **(+1)**, 13 **(+1)**, 15 **(+1)**, ii 2 **(+1)**; ***Organisation administrative, Diss.* 1, 217 7 Talon-Vanderroost 2** obv. i 17 **(+1)**, ii 23–rev. i 1 **(+2)**; ***Santag* 6 384** obv. v 14' **(+1)**, rev. ii 13' **(+1)**, iii 9' –10' **(+2)**, 13' **(+1)**, iv 28'–29' **(+2)**, 31' **(+1)**, v 16' **(+1)**, 33' **(+1)**, 41'–42' **(+2)**
	1	***CUSAS* 39 128** obv. i 7–8 **(+1)**, 29–30 **(+1)**, ii 5–6 **(+1)**, rev. i 36–37 **(+1)**; **131** obv. i 7, 9 **(+1)**; **132** obv. i 1–2 **(+1)**, 4–5 **(+1)**, 7–8 **(+1)**, ii 8–9 **(+1)**, rev. i 16–17 **(+1)**; ***Organisation administrative, Diss.* 1, 217 7 Talon-Vanderroost 2** obv. i 2–3 **(+1)**, ii 8–9 **(+1)**; ***Santag* 6 384** obv. ii 7', 9' **(+1)**, iii 7'–8' **(+1)**, 23'–30' **(+4)**, iv 1' **(+1)**,[434] 2'–3' **(+1)**, rev. iv 9', 11' **(+1)**,[435] vi 21'–22' **(+1)**[436]	***CUSAS* 39 128** obv. ii 11–12 **(+1)**, 33–34 **(+1)**, iii 36–37 **(+1)**, rev. i 6–7 **(+1)**, 14–15 **(+1)**; **131** ii 9–10 **(+1)**; **132** obv. ii 20–rev. i 1 **(+1)**; ***Organisation administrative, Diss.* 1, 217 7 Talon-Vanderroost 2** obv. i 19–20 **(+1)**, rev. i 5–8 **(+2)**, 16–17 **(+1)**; ***Santag* 6 384** rev. iv 1' (coll.), 2' **(+1)**, 7'–8' **(+1)**, 14'–15' **(+1)**, v 8'–9' (?) **(+1)**, 10'–11' (?) **(+1)**, 12'–15' **(+2)**

430. See n. 361 for this text's possible date.

431. This individual could have been the father of the preceding individuals, but this is not certain. This also applies to *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 obv. iii 14', rev. vi 29 (also counted here).

432. See *Nisaba* 26 17 obv. 13–14.

433. *CUSAS* 39 131 rev. ii 15 should be similar or identical to *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 obv. viii 19. However, *CUSAS* 39 131 rev. ii 15 is difficult to collate since the first damaged sign could be tug$_2$, meaning that the notation may be AŠ. As such, this individual is not counted here or in Appendix 6.

434. The father of the individual in *Santag* 6 384 iv 1' is listed in the preceding lost text. They were citizens based on the son's notation.

435. See *Nisaba* 6 10 obv. i 26–ii 1.

436. See *Nisaba* 26 17 rev. 1–2.

Year	No. of Sons	Citations	
		Citizens	**UN-il_2**
AS 3	2	***CUSAS* 39 128** obv. ii 29–32 **(+1)**, iii 9–12 **(+1)**, 15–21 **(+2)**, rev. i 2–5 **(+1)**; **131** rev. i 4–7 **(+1)**; ***Organisation administrative, Diss.* 1, 217 7 Talon-Vanderroost 2** obv. i 1–2, 4–5 **(+1)**, 13–16 **(+1)**, ii 10–13 **(+1)**, 18–21 **(+1)**; ***Santag* 6 384** obv. ii 2'–5' **(+1)**,[437] iii 33'–36' **(+1)**, v 5'–8' **(+1)**, rev. iv 22'–25' **(+1)**	***CUSAS* 39 128** rev. i 10–13 **(+1)**; **131** rev. ii 2–5 **(+1)**; **132** obv. i 21–ii 1 **(+1)**, 16–19 **(+1)**; ***Organisation administrative, Diss.* 1, 217 7 Talon-Vanderroost 2** obv. ii 14–17 **(+1)**;[438] ***Santag* 6 384** rev. v 25'–28' **(+1)**, vi 1'–4' **(+1)**
	3	***CUSAS* 39 128** obv. i 1–5 **(+1)**, ii 4–5, 7–9 **(+1)**, iii 24–28 **(+1)**; **131** obv. i 1–4 **(+1)**, 11–15 **(+1)**, ii 4–8 **(+1)**, 13–rev. i 1 **(+1)**; **132** obv. i 16–20 **(+1)**; ***Organisation administrative, Diss.* 1, 217 7 Talon-Vanderroost 2** rev. i 22–ii 2 **(+1)**; ***Santag* 6 384** obv. ii 22'–26' **(+1)**	***CUSAS* 39 128** obv. i 24–28 **(+1)**, ii 10–11, 13–16 **(+1)**, iii 30–34 **(+1)**; **131** rev. i 10–14 **(+1)**; ***Santag* 6 384** rev. iii 3'–7' **(+1)**
	4	***CUSAS* 39 128** obv. i 12–17 **(+1)**, ii 23–28 **(+1)**; ***Organisation administrative, Diss.* 1, 217 7 Talon-Vanderroost 2** obv. i 6–11 **(+1)**; ***Santag* 6 384** rev. vi 7'–12' **(+1)**,[439] 15'–20' **(+1)**[440]	***CUSAS* 39 128** rev. i 21–26 **(+1)**; **131** rev. i 9–10, 15–17, 18 (coll.) **(+1)**; ***Santag* 6 384** rev. iii 17'–21' (?) **(+1)**
AS 5	0	***CUSAS* 39 127** obv. ii 8' **(+1)**, iii 3' **(+1)**, rev. i 1 **(+1)**, ii 1 **(+1)**; **129** obv. i 6' (?) **(+1)**, iii 17–18 **(+2)**, 28 **(+1)**, 39 **(+1)**, iv 6 **(+1)**, 14 **(+1)**, 28 **(+1)**, v 24 **(+1)**, vii 20'–21' **(+2)**, 24' **(+1)**, viii 3 **(+1)**, 26'–27' **(+2)**, 29' **(+1)**, rev. i 11'–12' **(+2)**, 17' **(+1)**, 27' **(+1)**, 29' **(+1)**, 34' **(+1)**, ii 31'–34' **(+4)**, iii 6 **(+1)**, 10 **(+1)**, 30' **(+1)**, 33' **(+1)**, 38' **(+1)**,[441] iv 6 **(+1)**, 8 **(+1)**, 10 **(+1)**, 19 **(+1)**, 34–36 **(+3)**, v 3 **(+1)**, 46 **(+1)**, vi 16–17 **(+2)**, 25 **(+1)**, 31–32 **(+2)**, vii 3' **(+1)**, 5'–6' **(+2)**; **133** obv. i 12 **(+1)**, 24–25 **(+2)**, 28 **(+1)**, 33–34 **(+2)**, ii 15–16 **(+2)**, 20 **(+1)**, 24 **(+1)**, 26–27 **(+2)**, iii 26 **(+1)**, 30 **(+1)**, iv 26 **(+1)**,[442] 35–rev. i 1 **(+3)**, 15 **(+1)**, 17 **(+1)**, 21 **(+1)**, 25 **(+1)**, 27 **(+1)**, 40–41 **(+2)**; ***Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1** obv. iii 1' **(+1)**, 5' **(+1)**, 14' **(+1)**, iv 14' **(+1)**, 40' **(+1)**, v 10 **(+1)**, 15–16 **(+2)**, 22–25 **(+4)**, 31 **(+1)**, 39 **(+1)**, vi 12–13 **(+2)**, 22 **(+1)**	***CUSAS* 39 127** rev. ii 9 **(+1)**; **129** obv. iii 7 **(+1)**, 12 **(+1)**, 21 **(+1)**, 23 **(+1)**, 30–31 **(+2)**, iv 2 **(+1)**, v 7 **(+1)**, 13 (coll.) **(+1)**, 26–28 **(+1)**, vi 1–4 **(+4)**, 6 **(+1)**, 9 **(+1)**, 16' **(+1)**, vii 5 **(+1)**, viii 25' **(+1)**, 36' **(+1)**, rev. ii 27'–29' **(+3)**, 35'–36' **(+2)**, iii 5 **(+1)**, iv 27' **(+1)**, v 4 **(+1)**, 7–8 **(+1)**, 20–21 **(+2)**, 32 **(+1)**, 36 **(+1)**, vi 7 **(+1)**; **133** rev. i 18 **(+1)**; ***Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1** obv. iii 21' **(+1)**, 28'–29' **(+2)**, iv 4' **(+1)**, 8' **(+1)**, 11' **(+1)**, 21'–22' **(+2)**, 26' **(+1)**, 28' **(+1)**, 35' **(+1)**, v 18 **(+1)**, 36 **(+1)**, vi 5 **(+1)**, 25 **(+1)**, vii 31 **(+1)**, 39 **(+1)**, 45–46 **(+2)**, viii 19 **(+1)**, ix 25–26 **(+2)**, rev. i 27 **(+1)**, ii 3–6 **(+4)**,[443] 33 **(+1)**,[444] iii 16' (?) **(+1)**, 19' **(+1)**, 37' **(+1)**, iv 4' **(+1)**, 32' **(+1)**, 41' **(+1)**, v 1 **(+1)**, 12 **(+1)**, vi 37 **(+1)**, 44–45 **(+2)**, vii 1 **(+1)**, 9–10 **(+2)**, viii 30 **(+1)**, ix 16 **(+1)**

437. This family is attested in *Santag* 6 384 obv. ii 2' (?), 3', 4' (coll.), 5', iii 31'–32'. In the first set of attestations there are two children and in the second there is one. Although this family is probably indented in the first set of attestations, they are counted according to their larger size.

438. See *Santag* 6 384 rev. vi 24'–27', which is synchronous and not counted.

439. See *Nisaba* 26 17 obv. 7–12.

440. See *Nisaba* 26 17 obv. 15–19. The notations of the children are uncertain, however.

441. See *CUSAS* 39 129 rev. iii 39' (coll.).

442. See Table 4.7 for this family.

443. See BDTNS 196758 obv. ii 1–4, which indicate that these individuals lacked conscripted sons.

444. *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 rev. ii 33–35 are not counted because it is difficult to determine possible familial relationships due to the lost line.

Year	No. of Sons	Citations	
		Citizens	**UN-il$_2$**
AS 5	0 (cont.)	***Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1** obv. vi 23 **(+1)**,[445] vii 11–12 **(+2)**, 16–17 **(+2)**, 30 **(+1)**, viii 9 **(+1)**, 12 **(+1)**, 18 **(+1)**, 32 **(+1)**, 39–40 **(+2)**, ix 2 **(+1)**, 5 **(+1)**, 13 **(+1)**, 27–28 **(+2)**, 35–36 **(+2)**,[446] rev. i 1 **(+1)**, 20 **(+1)**, 30–32 **(+3)**, 40–42 **(+3)**, 45 **(+1)**, ii 10–11 **(+2)**, 19 **(+1)**, 24 **(+1)**, 28 **(+1)**, 42 **(+1)**, iii 1' **(+1)**, 11' **(+1)**, 20' **(+1)**, 28' **(+1)**, iv 5' **(+1)**, 7'–9' **(+3)**, 11' **(+1)**, 19'–20' **(+2)**, 24' **(+1)**, 27' **(+1)**, 34' **(+1)**, v 18 **(+1)**, 27–28 **(+2)**, vi 27 **(+1)**, 29 **(+1)**, vii 2 **(+1)**, 17–18 **(+2)**, 23–25 **(+3)**, 37–39 **(+3)**, 41 **(+1)**, viii 12–13 **(+2)**, 24–25 **(+2)**, 40 **(+1)**, 46–47 **(+2)**, ix 5–6 **(+2)**, 10 **(+1)**,[447] 13 **(+1)**, 17–18 **(+2)**, 41–42 **(+2)**	
	1	***CUSAS* 39 127** obv. iii 2'–3' **(+1)**, rev. i 5–6 **(+1)**; **129** obv. iv 21–22 **(+1)**, vii 29'–30' **(+1)**, viii 23'–24' **(+1)**, 37'–38' (?) **(+1)**, rev. i 14' (coll.), 16' **(+1)**, ii 18'–19' **(+1)**, 21'–22' **(+1)**, iv 12–13 **(+1)**, v 18–19 **(+1)**, 29–30 **(+1)**, 49–50 (?) **(+1)**; **133** obv. i 22–23 **(+1)**, 26–27 **(+1)**, ii 9, 11–13 **(+2)**, 17–20 **(+2)**, 22–23 **(+1)**, iii 31, 33 **(+1)**, iv 22–24 **(+2)**, rev. i 6–7 **(+1)**, 28–29 (?) **(+1)**; ***Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1** obv. iii 2'–3' **(+1)**, 6'–7' **(+1)**, 19'–20' **(+1)**, v 13–14 **(+1)**, vi 2–4 **(+1)**,[448] 6–7 **(+1)**, 10–11 **(+1)**, 19–20 **(+1)**, vii 22–23 **(+1)**, viii 7–8 **(+1)**, ix 3–4 **(+1)**, 10–11 **(+1)**, rev. i 16–17 (?) **(+1)**, 18–19 **(+1)**, 23–24 **(+1)**,[449] 25–26 **(+1)**, ii 8–9 **(+1)**, 17–18 **(+1)**, 22–23 **(+1)**, 40–41 **(+1)**, iii 29'–30' **(+1)**, v 23–24 **(+1)**, vi 15–16 **(+1)**, 19–20 **(+1)**, 21–22 **(+1)**, 40–41 **(+1)**, vii 4–5 **(+1)**, 21–22 **(+1)**, viii 37, 39 **(+1)**	***CUSAS* 39 127** rev. ii 6–7 **(+1)**; **129** obv. iii 10–11 **(+1)**, iv 32–33 **(+1)**, v 12–13 **(+1)**; ***Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1** obv. ii 4'–5' **(+1)**, iii 26'–27' **(+1)**; iv 10'–11' (?) **(+1)**, 20'–21' **(+1)**, 23'–24' **(+1)**, v 19–20 **(+1)**, vii 20–21 **(+1)**, 43–44 **(+1)**, viii 5–6 **(+1)**, 43–44 **(+1)**, ix 30–31 **(+1)**,[450] 42–43 **(+1)**, rev. i 36–37 **(+1)**, 46–ii 1 **(+1)**, 13–14 **(+1)**, iii 26'–27' **(+1)**, 33'–36' **(+2)**, v 8–11 **(+2)**, 15–16 **(+1)**, 35–36 **(+1)**, vii 6, 8 **(+1)**, viii 29–30 **(+1)**,[451] 43–44 **(+1)**[452]

445. See *CST* 880 obv. ii 16'.

446. See *Organisation administrative, Diss.* 1, 217 7 Talon-Vanderroost 2 rev. i 9–10. While the notations and allotments cannot be certain, they both clearly lacked conscripted sons.

447. *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 rev. ix 11 is not counted because the notation should probably be AŠ rather than AŠ$_c$ based on the lack of šuku land and *BCT* 2 288 rev. iii 17.

448. *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 obv. vi 4 is unusually formatted if there is only one son, but the preceding family is certain based on *AAICAB* I/1 Ashm. 1911-228 obv. i 1–5. It is possible that there is an extra son that is lost in the transliteration, but there does not seem to be any damage or reason for missing this individual.

449. See BDTNS 196758 obv. i 1–2.

450. See *Organisation administrative, Diss.* 1, 217 7 Talon-Vanderroost 2 rev. i 5–6.

451. See *Nisaba* 11 15 obv. ii 4–7. *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 rev. viii 31–32 are unclear, however, and the restorations in the transliteration are not considered certain here.

452. These individuals were probably UN-il$_2$ based on their allotments.

Year	No. of Sons	Citations	
		Citizens	**UN-il$_2$**
AS 5	2	***CUSAS* 39 129** obv. iii 27–29 **(+1)**, 35–39 **(+2)**,[453] iv 38–39 **(+1)**,[454] rev. i 23'–26' **(+1)**, ii 13'–16' **(+1)**, iii 1–4 **(+1)**, 29'–32' **(+1)**, 37'–39' **(+1)**, vi 3–6 **(+1)**, 20–27 **(+2)**;[455] **133** obv. i 1–4 **(+1)**, ii 1–8 **(+2)**, 31–32, 34–iii 1 **(+1)**, iv 25–27 **(+1)**; ***Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1** obv. ii 1'–3' **(+1)**,[456] v 37, 39–40, 42 **(+1)**,[457] vi 26–29 **(+1)**, 40'–vii 4 **(+1)**,[458] 32–35 **(+1)**, viii 13, 15–17 **(+1)**,[459] 24–25, 29–30 **(+1)**, 38–41 **(+1)**, ix 12–15 **(+1)**, 20–23 **(+1)**, rev. iii 3'–6' **(+1)**, v 26–29 **(+1)**, vi 7–14 **(+2)**, 30–33 **(+1)**, vii 28–31 **(+1)**, viii 5–7 **(+1)**, 9–11 **(+1)**, 20–23 **(+1)**, ix 9–12 **(+1)**, 40–43 **(+1)**	***CUSAS* 39 129** obv. ii 4–7 **(+1)**, rev. v 40–43 **(+1)**, vi 12–15 **(+1)**; ***Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1** obv. ii 6'–9' **(+1)**, iii 31'–34' **(+1)**, iv 2'–3', 8'–9' **(+1)**, 29'–32' **(+1)**, viii 1–4 **(+1)**, ix 16–19 **(+1)**, 32–34 **(+1)**, rev. ii 29–32 **(+1)**, v 19–22 **(+1)**, 37–40 **(+1)**, vi 34–36 (?) **(+1)**
	3	***CUSAS* 39 129** obv. ii 11–12, 14–16 **(+1)**, iii 3–6 **(+1)**, v 33–35 (?) **(+1)**, viii 7–8, 13–15 **(+1)**, 8–12 **(+1)**, rev. i 33'–37' **(+1)**, ii 4'–8' **(+1)**, iv 22–26 **(+1)**, vii 10'–14' **(+1)**; **133** obv. i 17–21 **(+1)**, ii 21–22, 24–25, 30 **(+1)**, 25–29 **(+1)**, iv 30–34 **(+1)**, rev. i 31–35 **(+1)**, 39–43 **(+1)**, ii 3–7 **(+1)**; ***Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1** obv. iii 15'–18' **(+1)**, iv 39'–v 3 **(+1)**, 12–13, 15–17 **(+1)**, 44–vi 1 **(+1)**, 9–10, 12–14 **(+1)**, 34–37 **(+1)**,[460] vii 6–10 **(+1)**, 15–19 **(+1)**, 25–29 **(+1)**, viii 25–28 **(+1)**, rev. ii 16–17, 19–21 **(+1)**, vii 16–20 **(+1)**, 40–49 **(+2)**, viii 45–49 **(+1)**, ix 4–8 **(+1)**	***CUSAS* 39 129** rev. ii 26'–30' **(+1)**; ***Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1** obv. iii 8'–12' **(+1)**, iv 3'–7' **(+1)**, vii 38–42 **(+1)**, rev. iv 40'–44' **(+1)**, ix 20–24 **(+1)**
	4	***CUSAS* 39 127** rev. i 7–12 **(+1)**, 13–18 **(+1)**, 19–24 **(+1)**; **133** obv. iv 29–30, 35, rev. i 3–4, 30–31, 36–37 **(+1)**;[461] ***Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1** obv. iv 13'–17', 19' **(+1)**, v 4–9 **(+1)**, 30–35 **(+1)**, rev. i 6–11 **(+1)**, 39–44 **(+1)**, iv 18'–23' **(+1)**, 26'–31' **(+1)**, 33' (coll.), 34'–38' **(+1)**, vii 50–viii 4 **(+1)**, 14–19 **(+1)**, 31–36 **(+1)**	***CUSAS* 39 127** rev. ii 8–13 **(+1)**; **129** obv. v 6–11 **(+1)**; ***Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1** obv. ii 10'–15' **(+1)**, vii 37–38, 43, 45–47 **(+1)**, rev. ix 30–35 **(+1)**

453. See *CUSAS* 39 128 obv. iii 15–21.

454. See *CUSAS* 39 128 rev. i 2–5. *CUSAS* 39 129 obv. v 1 may include either dumu-ni-me or an additional son.

455. See *TCL* 5 6048 rev. i 37–38. Note that *CUSAS* 39 129 rev. vi 23 is collated as [dumu-ni]-ˈmeˈ and that the following line should include Ur-Zabalam, the father of Ur-Dumuzida and Ur-Šulpae.

456. See *CST* 880 obv. i 18'–21'.

457. *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 obv. v 38 is uncertain and may list the father of the elderly individual in the preceding line. In any case, it is not counted.

458. See *CUSAS* 39 131 obv. i 7–9.

459. See *CUSAS* 39 131 rev. ii 12, which indicates that Ur-Nintu was the father of Dadu (see PIN 86) rather than his son. While it is difficult to collate *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 obv. viii 13–14, the TUR sign should be dumu, and the DIŠ before Ur-Nintu is uncertain but should not be present.

460. See *CUSAS* 39 131 obv. i 1–4.

461. See pp. 127–29 for a discussion of this family.

Year	No. of Sons	Citations	
		Citizens	**UN-il$_2$**
AS 5	5	***CUSAS* 39 127** obv. iii 4'–10' **(+1)**; **129** rev. iii 9–15 **(+1)**; ***Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1** rev. ii 39–40, 42–46 **(+1)**, vi 18–19, 21, 23–26 **(+1)**	—
	6	***CUSAS* 39 133** rev. ii 12–19 **(+1)**	
AS 6	0	***BCT* 2 288** obv. i 2 **(+1)**, 11 **(+1)**, 13 **(+1)**, 18 **(+1)**, 29 **(+1)**, ii 1 **(+1)**, 11 **(+1)**, 15 **(+1)**, 19 **(+1)**, 26–27 **(+2)**, iii 7 **(+1)**, 12 **(+1)**, 14 **(+1)**, 26 **(+1)**, rev. iii 1 **(+1)**, 11–12 **(+2)**, 18 **(+1)**, iv 4–5 **(+2)**, 14 **(+1)**, 35–36 **(+2)**; ***CUSAS* 39 130** obv. i 6 **(+1)**, 10 **(+1)**, rev. i 2 **(+1)**; **135** obv. i 38 **(+1)**, ii 21–22 **(+2)**,[462] 36–37 **(+2)**, 46 **(+1)**,[463] iii 18 **(+1)**, 24 **(+1)**, 26–27 **(+2)**, 30 **(+1)**, 32 **(+1)**, iv 11 **(+1)**, v 1–2 **(+2)**, 8 **(+1)**, 11 **(+1)**, 21 **(+1)**, 23 **(+1)**, 28 **(+1)**, 33–34 **(+2)**, vi 4 (coll.) **(+1)**, 12–13 **(+2)**, 19 **(+1)**, 40 **(+1)**, vii 21–22 **(+2)**, 24 **(+1)**, viii 19' **(+1)**, 21'–23' **(+3)**, 39' **(+1)**, rev. ii 3'–4' **(+2)**, 7' **(+1)**, 32' **(+1)**; ***Nisaba* 6 10** obv. i 5 **(+1)**, 16–17 **(+2)**, ii 1–3 **(+3)**, 10 **(+1)**,[464] 12 **(+1)**, 25 **(+1)**, 27–rev. i 2 **(+4)**, 4 **(+1)**; **26 17** obv. 5 **(+1)**, 13–14 **(+2)**, 16–18 **(+3)**,[465] rev. 9 **(+1)**, 12 **(+1)**; **Sigrist, *RA* 73, 115-120**[466] obv. i 6 **(+1)**, 11 **(+1)**, 14 **(+1)**, 22–23 **(+2)**, 25 **(+1)**, rev. i 6 **(+1)**, 16 **(+1)**, ii 17 **(+1)**; ***YOS* 4 232** obv. i 14–15 **(+2)**, 25 **(+1)**, rev. i 12 **(+1)**, 28 **(+1)**, ii 7 **(+1)**, 14 **(+1)**, 26 **(+1)**	***BCT* 2 288** obv. i 7 **(+1)**, iii 4 **(+1)**,[467] 25 **(+1)**, 27 **(+1)**, rev. iii 20 **(+1)**; ***CUSAS* 39 130** obv. ii 6 **(+1)**, 10–12 **(+3)**, 21 **(+1)**, rev. i 8–9 **(+2)**, 13–14 **(+2)**; **135** obv. i 13 **(+1)**, ii 44 (coll.) **(+1)**, iii 13 **(+1)**, 19 **(+1)**, iv 14 **(+1)**, 26 **(+1)**, 31–32 **(+2)**, v 26 (coll.) **(+1)**, vi 39 **(+1)**, vii 3 **(+1)**, 9 **(+1)**, 29–30 **(+2)**, 32 **(+1)**, rev. ii 27'–29' **(+3)**,[468] iii 24–25 **(+2)**, iv 16 **(+1)**, 23 **(+1)**, 26–28 **(+3)**, 35 **(+1)**; ***Nisaba* 6 10** obv. ii 20–21 **(+2)**, 23 **(+1)**; **26 17** rev. 11 **(+1)**; **Sigrist, *RA* 73, 115-120** obv. ii 4 **(+1)**, 16 **(+1)**, 23 **(+1)**, rev. i 26 **(+1)**, ii 6 **(+1)**, 15 **(+1)**; ***YOS* 4 232** obv. i 26 **(+1)**, ii 15 **(+1)**, rev. i 8 **(+1)**, 9–10 **(+2)**,[469] 19 **(+1)**, 25 **(+1)**

462. The following line is not counted (see its collation).

463. The following lines in this column are uncertain and not counted.

464. The following line may not list an individual (see *Santag* 6 384 rev. iv 18'–19').

465. *Nisaba* 26 17 obv. 18 reads: ½$_c$ gan$_2$ ab Giri$_3$-ni-i$_3$-sa$_6$. If this transliteration is accurate, this may be the only documented instance of an ab(-ba)-il$_2$ or ama-il$_2$ notated with a curviform sign and receiving land. As such, this transliteration is not certain, but this individual is counted as an adult old enough to have children.

466. Sigrist, *RA* 73, 115-120 dates to around AS 6 based on Lugalmagure, Eurbi, Ku-Šara, Urgigir, and Šaramutum (see *Nisaba* 24 28 obv. vi 33' [coll.], 38', rev. i 5; Sigrist, *RA* 73, 115-120 obv. ii 7, rev. i 24, ii 4–5, 9; *Torino* 2 705 rev. ii 6, 27, iii 5 [coll.], 7).

467. The age-bracket designation for this individual is uncertain, but it may be šu.

468. *CUSAS* 39 135 rev. ii 29' probably lists an UN-il$_2$ based on the allotments. Perhaps the following line with the UN sign belongs to this line, but these lines are difficult to read.

469. See *OrSP* 47-49 324 obv. ii 30–31.

Year	No. of Sons	Citations	
		Citizens	**UN-il$_2$**
AS 6	1	***BCT* 2 288** obv. i 5–6 **(+1)**, 8–11 **(+2)**, ii 17–18 **(+1)**, 22–25 **(+2)**, iii 1–2 **(+1)**, 15–16 **(+1)**, rev. iii 7–8 **(+1)**, iv 1–2 **(+1)**; ***CUSAS* 39 130** obv. i 11–12 **(+1)**, 15–16 **(+1)**, 25–ii 1 **(+1)**, 8–9 **(+1)**, 19–20 **(+1)**; **135** obv. i 39–40 **(+1)**, 42–43 **(+1)**, ii 6–7 **(+1)**, 17–20 **(+2)**, 25–28 **(+2)**, iii 2–3 **(+1)**, 20–23 **(+2)**, 33–34 **(+1)**, iv 22–23 **(+1)**, 34–35 (?) **(+1)**,[470] vi 34–37 **(+2)**, viii 27'–28' (?) **(+1)**, 32'–35' **(+2)**, 37'–38' **(+1)**, rev. ii 1'–2' **(+1)**; ***Nisaba* 6 10** obv. i 26–ii 1 **(+1)**; **26 17** rev. 1–2 **(+1)**; **Sigrist, *RA* 73, 115-120** obv. i 9–10 **(+1)**, 15–16 **(+1)**, 26–ii 1 **(+1)**, rev. i 5–8 **(+2)**,[471] 15–16 **(+1)**; ***YOS* 4 232** obv. i 1–2 **(+1)**, rev. ii 6–7 **(+1)**	***BCT* 2 288** obv. i 22–23 **(+1)**, ii 20–21 **(+1)**; ***CUSAS* 39 130** obv. ii 22–23 (?) **(+1)**, rev. i 11–12 **(+1)**; **135** obv. ii 9–10 (both coll.) **(+1)**, iv 1–2 **(+1)**, 24–25 **(+1)**, v 9–10 **(+1)**,[472] 12–13 **(+1)**, vii 26–27 **(+1)**, rev. iii 7–8 **(+1)**; ***Nisaba* 6 10** obv. i 18–19 **(+1)**, 24–25 **(+1)**, ii 4–5 **(+1)**; **Sigrist, *RA* 73, 115-120** obv. ii 2–3 **(+1)**, 7–8 **(+1)**, 21–22 **(+1)**, rev. i 31–32 **(+1)**, ii 1–2 **(+1)**, 12–13 **(+1)**; ***YOS* 4 232** rev. ii 1, 3–5 **(+2)**, 8–9 **(+1)**, 22–23 **(+1)**
	2	***BCT* 2 288** obv. i 1–4 **(+1)**, rev. iii 15–17 **(+1)**, iv 3–6 **(+1)**, 13–16 **(+1)**, 23–25 **(+1)**, 34–35, 40–41 (?) **(+1)**; ***CUSAS* 39 130** obv. i 1–4 **(+1)**, ii 2–5 **(+1)**; **135** obv. i 16–19, 21–23 **(+2)**,[473] 28–29, 35–36 **(+1)**, ii 3–4, 5 (coll.) **(+1)**, 29–30, 31 (?) **(+1)**, 32–38 **(+2)**, iii 30, 32–33, 35 **(+1)**,[474] v 4–7 **(+1)**, 22–25 **(+1)**, vi 11–14 **(+1)**, viii 6'–13' **(+2)**, 29'–31' (?) **(+1)**, 40'–43' **(+1)**; ***Nisaba* 6 10** obv. i 1–4 **(+1)**, ii 14–17 **(+1)**; **Sigrist, *RA* 73, 115-120** rev. i 19–22 **(+1)**; ***YOS* 4 232** obv. i 3–6 **(+1)**, rev. i 13–15 (?) **(+1)**, ii 10–11, 12 (coll.) **(+1)**	***BCT* 2 288** rev. iv 27–29 **(+1)**; ***CUSAS* 39 130** obv. i 20–23 **(+1)**, rev. i 15–18 **(+1)**; **135** obv. i 24–27 **(+1)**, ii 40–43 **(+1)**, iv 13–20 **(+2)**, 27–30 **(+1)**, rev. vi 31–34 **(+1)**; ***Nisaba* 26 17** obv. 1–4 **(+1)**, rev. 4–7 **(+1)**; **Sigrist, *RA* 73, 115-120** obv. ii 9–12 **(+1)**, 15–18 **(+1)**, rev. i 10–13 **(+1)**, 33–36 **(+1)**, ii 5–7 **(+1)**, 8–11 **(+1)**; ***YOS* 4 232** rev. i 21–23 **(+1)**
	3	***BCT* 2 288** obv. i 24–28 **(+1)**, rev. iii 2–6 **(+1)**, 10–14 **(+1)**; ***CUSAS* 39 130** obv. i 5–9 **(+1)**, 14–15, 17–19 **(+1)**, ii 14–18 **(+1)**; **135** obv. ii 11–15 **(+1)**, iv 5–9 **(+1)**; ***Nisaba* 26 17** obv. 15–19 **(+1)**; **Sigrist, *RA* 73, 115-120** obv. i 1–5 **(+1)**, 8 (coll.), 9, 11–13 **(+1)**; ***YOS* 4 232** obv. i 13–17 **(+1)**	***CUSAS* 39 130** rev. i 3–7 **(+1)**; **135** obv. iii 7–11 **(+1)**, v 15–19 **(+1)**, rev. iii 31–35 **(+1)**

470. The first sign of *CUSAS* 39 135 obv. iv 35 appears to be DIŠ.

471. dumu-ˈni-meˈ in Sigrist, *RA* 73, 115-120 rev. i 8 is uncertain and difficult to confirm. If it is present, then it would be unusual and could indicate that ʾElua in rev. i 4 was the father of Šeškala, Urlugal, and Šešani. This is not likely since ʾElua is indented, indicating that he was probably still alive. As such, it is not likely that an elderly individual like Šeškala would have been the son of ʾElua if the latter were still alive at that time (see, however, the Pada family in Table 4.1 and Figure 4.1). The fact that ʾElua's name is Amorite, whereas Šeškala, Urlugal, and Šešani have Sumerian names, may also indicate that they were not related. Due to these reasons and the difficult reading, dumu-ˈni-meˈ is treated as if it were dumu-ˈniˈ.

472. *CUSAS* 39 135 obv. v 9 is difficult to read, though it should list an UN-il$_2$.

473. These lines are all difficult to read, but lines 16–18 may be structured as PN$_1$ PN$_2$ PN$_3$ dumu-ni-me and lines 19–23 may be structured as PN$_1$ dumu PN$_2$ PN$_3$ PN$_4$ dumu-ni-me.

474. While *CUSAS* 39 135 obv. iii 36 can be read, it is difficult to understand in this context.

Year	No. of Sons	Citations	
		Citizens	UN-il$_2$
AS 6	4	***BCT* 2 288** obv. i 12–17 **(+1)**, ii 3–8 (?) **(+1)**, iii 6–11 **(+1)**, 18, 20–24 **(+1)**, rev. iv 35–39 (?) **(+1)**; ***CUSAS* 39 135** obv. i 29–34 **(+1)**, iii 25–29 **(+1)**;[475] ***Nisaba* 26 17** obv. 7–12 **(+1)**	***CUSAS* 39 135** obv. vii 9–20 **(+2)**;[476] **Sigrist, *RA* 73, 115-120** rev. i 24, 26–30 **(+1)**; ***YOS* 4 232** obv. ii 14–25 **(+2)**
	5	***CUSAS* 39 135** obv. viii 20'–26' **(+1)**	—
ŠS 5	0	***CST* 880** obv. i 14' **(+1)**, ii 6' **(+1)**, 8' **(+1)**, 11'–12' **(+2)**, 16' **(+1)**	***CST* 880** obv. i 8' **(+1)**, 15' **(+1)**, ii 4'–5' **(+2)**, 14' **(+1)**
	1	***CST* 880** obv. i 2'–3' **(+1)**	—
	2	***CST* 880** obv. i 18'–21' **(+1)**, rev. i 2–5 **(+1)**	***CST* 880** obv. i 7'–10' **(+1)**

Appendix 4. House Sizes (in sar) according to Location

Virtually all documented house sizes in Ur III texts are documented in Table A4.1 according to their location. It is assumed that every house shares its location with its text's provenience, unless otherwise stated in the text, as is the case in Maekawa, *ASJ* 18, 167 9. House sizes include a variety of conditions and features, including e$_2$ du$_3$-a, e$_2$-ki-gal$_2$, e$_2$ šub, and kislah, among others, though distinguishing these may be useful in a future treatment.[477] In his discussion of housing at GARšana, Heimpel (2009b, 135–37) estimates the sizes of some houses based on the quantities of their building materials, which are not counted here. He also tabulates the sizes of various houses that are included here.[478] House sizes that are tabulated here but are uncertain due to damage are cited with (?).

475. These familial relationships fit the formatting, and ˹dumu˺-ni in the following line according to the transliteration, which is difficult to confirm, may apply to this preceding family.

476. Although *CUSAS* 39 135 obv. vii 9 is difficult to read, it appears to list an elderly UN-il$_2$ who was the father of the following four UN-il$_2$.

477. For a discussion on some of these terms, see Steinkeller 1989, 122–24.

478. Some house sizes that are omitted here, due to damage or other uncertainties, are attested in texts from the Aradmu archive (*JCS SS* 5 108; 128), Girsu/Lagaš (Maekawa, *ASJ* 19, 290 14), Nippur (*AOS* 32 Noor 2), Umma (*AAICAB* I/2 Ashm. 1937-97; 1971-382; *Nik.* 2 147; *OrSP* 47-49 504; *RIAA* 86; *Syracuse* 479 obv. 5–6, 11 [omitted in Steinkeller 2013d]), Ur (*UET* 3 31; 9 389), and an unknown provenience (*TCS* 1 310), among others that are clearly too damaged to use.

Table A4.1. House Sizes (in sar) according to Location

Provenience	Size (in sar)	Count	Citation(s)
Adab	13/30	1	*Nisaba* 32 213 obv. 1
	1 13/30	1	*MVN* 3 268 obv. 1
	2	1	BDTNS 059331 obv. 13[479]
	2 ½	1	*CRRAI* 61, 221 13 obv. 1
	8	1	*Nisaba* 32 35 obv. 1
Aradmu Archive	6	1	*JCS SS* 5 134 obv. 1
Girsu/Lagaš	⅓	1	*TUT* 164-14 rev. i 17
	91/120	1	*ITT* 5 6754 rev. 2
	1	1	Virolleaud, *RevSem* 11, 181 4 rev. 4
	1 ⅓	1	*ITT* 5 6837 obv. 2 (?)
	1 ⅔	1	*ITT* 3 6567 obv. 6
	1 ⅚	1	*ITT* 3 6533 obv. 2
	2 23/60	1	*RTC* 293 obv. 2, 13
	2 ⅚	1	*ITT* 3 5279 obv. i 2
	3	4	*ITT* 3 6544 obv. 2; Waetzoldt and Sigrist, *Studies Hallo*, 279 BM 19972 obv. i 15, rev. i 21, ii 7
	4 ½	1	Waetzoldt and Sigrist, *Studies Hallo*, 279 BM 19972 obv. ii 10
	5	3	Waetzoldt and Sigrist, *Studies Hallo*, 279 BM 19972 obv. ii 23, rev. i 12, 29
Nippur	½	1	*Nisaba* 30 52 obv. 1
	1 691/4800	1	*MVN* 10 153 obv. 5
	1 ⅙	1	Fish, *Iraq* 5, 179 37 obv. 1
	1 ⅓	1	*NATN*, 31 CBS 11573 obv. 4
	1 ½	1	*NATN* 131 rev. 4
	1 ⅚	1	*NATN*, 31 CBS 11573 obv. 3
	2	1	*NRVN* 1 223+251 obv. 1
	2 1/12	1	*NATN*, 31 CBS 11573 obv. 2
	3	1	*NATN* 966 obv. 1 (?)
	3 ⅓	2	*NATN*, 31 CBS 11573 obv. 5 (?), rev. 2
	4 9/10	1	Çiğ, Kızılyay, and Falkenstein, *ZA* 53, 81 21 obv. 1
	6	1	*NATN* 911 obv. 1
Sugan	10	1	Maekawa, *ASJ* 18, 167 9 rev. i 2
Umma	½	5	*Nisaba* 11 19 obv. i 11, ii 11, rev. ii 7, 12, 20
	⅔	3	*Nisaba* 11 19 obv. ii 4, 10, rev. ii 9
	1	16	Kamil, *AoF* 44, 211 obv. 1; *Nisaba* 11 19 obv. i 1, 17, 23 (?), iii 5, 24, rev. i 7, 10, 17–18, ii 5, 10–11, 16, 18; *MVN* 3 213 obv. 1
	1 ⅙	1	*Sale Documents* 95 obv. 1
	1 ¼	1	*Nisaba* 11 19 rev. ii 6
	1 ⅓	6	*Nisaba* 11 19 obv. i 14, 20, 22, rev. ii 23, iii 8; *Sale Documents* 88* obv. 1
	1 ½	8	*Nisaba* 11 19 obv. i 9, ii 5, iii 9, rev. i 13, 16,[480] 24, ii 1, 13
	1 ⅔	1	*Nisaba* 11 19 rev. ii 8
	1 ¾	1	*Syracuse* 479 rev. 8
	2	19	*Nisaba* 11 19 obv. i 5–7, ii 17, 19, 21, 25, iii 2, 7, 14, 16, 19–20, rev. i 1–2, 6, 14, ii 2, iii 14
	2 ⅙	1	*Nisaba* 11 19 rev. i 3

479. The provenience of BDTNS 059331 is possibly Adab, but this is uncertain.

480. This is the average of *Nisaba* 11 19 rev. i 16: 2 Gu-da-ti and *YOS* 4 300 obv. 6–8: 1 sar e_2 sa_{10}-a \ 1 sar nig_2-gal_2-la \ Gu-du-ti.

Provenience	Size (in sar)	Count	Citation(s)
Umma	2 ¼	2	*Nisaba* 11 19 obv. ii 24, iii 27
	2 ½	1	*Nisaba* 11 19 rev. ii 5
	2 ⅔	1	*Nisaba* 11 19 obv. i 10
	3	16	*Nisaba* 11 19 obv. i 4, ii 3, 12, 16, 18, 22, iii 10, 13, 15, 17, rev. i 15, 19, iii 5, 7; *Sale Documents* 89 obv. 2; *SNAT* 334 obv. 3
	3 ⅙	1	*Nisaba* 11 19 rev. ii 14
	3 ⅓	1	*Nisaba* 11 19 obv. ii 6
	3 ½	4	*Nisaba* 11 19 obv. iii 12, rev. i 25–26, ii 24
	3 ⅔	1	*Sale Documents* 126 obv. 1
	4	5	Molina, *Studies Owen*, 208 5 BM 106509 obv. 4; *Nisaba* 11 19 obv. iii 1, rev. iii 3, 11–12
	4 ½	2	*Nisaba* 11 19 obv. i 12, rev. ii 20
	5	5	*Nisaba* 11 19 obv. ii 7, iii 18, 25, rev. i 20, iii 4
	6	2	*Nisaba* 11 19 obv. i 21, iii 6
	7	3	*Nisaba* 11 19 obv. i 15, ii 14, rev. i 23
	7 ⅜	1	Edzard, *JCS* 16, 81 HSM 7500 obv.[481]
	7 ⅔	1	*Syracuse* 479 obv. 8
	8	1	*Nisaba* 11 19 obv. i 16
	9	2	*Nisaba* 11 19 obv. iii 8; *Syracuse* 479 rev. 6
	11	1	*Nisaba* 11 19 obv. i 13
	12	1	*YOS* 15 178 rev. 7, 26
	12 ⅔	1	*Syracuse* 479 rev. 2[482]
	13	1	*Syracuse* 479 obv. 1
	13 ½	1	*Syracuse* 479 rev. 4
Ur	2 ⅔	1	*UET* 3 27 obv. 1
	6	1	Maekawa, *ASJ* 18, 167 9 rev. i 1
	16	1	Maekawa, *ASJ* 18, 167 9 obv. i 20
Urusagrig	7	1	*Nisaba* 15/2 17 obv. 1
Ursagpae	8	1	Maekawa, *ASJ* 18, 167 9 obv. ii 1

Appendix 5. Half-time versus Full-time Conscription of Male Citizens and UN-il$_2$ according to Occupation in Umma

Male citizens and UN-il$_2$ notated as half-time with ½$_c$ or full-time with AŠ$_c$ according to their occupations in Umma texts are counted and cited in Tables A5.1–2. All occupations are grouped according to five occupational categories. As noted in 5.1.2. Occupational Categories, these categories are broadly defined, and some occupations are difficult to situate in one specific

481. The line counts on this tablet are difficult to establish because it is a house plan. Steinkeller (2013d) considers this text to be from Umma and to record the house of a lu$_2$-mah priest.

482. For the sizes of this house and the one documented in rev. 4 according to their house plans, see p. 139.

category. Nevertheless, there are broad trends shared among occupations within the same categories. For this study, there are several guidelines to how occupations are counted. Occupations are often simplified, such that engar and engar gu are both counted as engar, for example, though dub-sar and dub-sar gu_4 (10|niga) are considered separate occupations. Terms like nu-^{giš}$kiri_6$ and sag-apin, which can refer to a variety of occupations collectively, are not counted.[483] Some phrases including $giri_3$-se_3-ga provide information similar to occupations, such as $giri_3$-se_3-ga e_2 amar-ra-ka-me (*CUSAS* 39 129 rev. vii 9'), though many do not. These phrases are not included, however. The occupation $eren_2$ diri (see p. 88) is hardly attested in these contexts and is not counted due to difficulties in grouping it according to a single occupational category. šu-i is also limitedly attested and omitted for this reason (see Kleinerman 2013 for a discussion on their various and uncertain roles). Occupations modified with -$še_3$ and -ta are not counted. This is because it is not clear if and when these individuals are notated according to these occupations. Sigrist, *RA* 73, 115-120 obv. i 6 reads: AŠ$_c$ Lugal-ab-ba šeš-tab-ba-$še_3$. If this is valid, then this individual is not notated with AŠ, which would have been the case if he were an assistant. However, *OrSP* 47-49 324 reads: AŠ$_c$ UN 0.1.0 4 Lugal-he_2-gal_2 nagar tug_2-du_8-$še_3$, and this individual is counted as a tug_2-du_8 in rev. ii 15. As for -ta, *YOS* 4 232 obv. i 1 reads: AŠ$_c$ gan_2 Lu_2-sig_5 šeš-tab-ba ugula uš-bar-ta, but this line corresponds to rev. ii 27 (coll.): šu-$nigin_2$ AŠ$_c$ gan_2 guruš ugula. It is possible that the scribe intended to write obv. i 1 as: AŠ$_c$ gan_2 Lu_2-sig_5 ugula uš-bar šeš-tab-ba-ta, which would indicate that the AŠ$_c$ notation corresponds to ugula uš-bar rather than šeš-tab-ba-ta. In instances where an individual could have one of two occupations, which is often the

483. For a helpful discussion on gardeners, see Greco 2015. For this reason, the apin-la_2-land sizes of nu-^{giš}$kiri_6$ are not counted in Appendix 7.

case with the phrase u_2-il_2 kir_4-dab_5-me (see, for example, Snell, *ASJ* 11, 182 obv. vi 3, rev. iii 18), neither is counted.

It is important to mention that all possible attestations are counted, including duplicates of named individuals as well as counts of anonymous individuals. As such, the proportions of each count may not be representative of Umma overall, though they may indicate strong tendencies for certain occupations to be notated with $½_c$ versus $AŠ_c$, depending on social stratum. Comparing the data overall with those from Snell, *ASJ* 11 182 indicates, however, that may be fairly representative of Umma overall. Note that only the line including the notation is cited, even though the corresponding social stratum or occupation may be given on different lines. Where possible, lines in totals sections are cited rather than the various lines to which they refer. Only texts in which male citizens and UN-il_2 are explicit are included.[484] Instances in which an individual's notation, occupation, or social stratum are uncertain and cannot be easily collated but are otherwise assumed are cited with (?) without comments. Counts of Snell, *ASJ* 11 182 are bolded so they can be easily identified.

484. Some texts and lines that are not included for this reason or for other difficulties, which are not addressed case by case, include *AAICAB* I/1 Ashm. 1911-484; I/4 Bod. S 565; *AnOr* 1 276; *AOS* 32 G7; *BCT* 2 217 obv. 4; *BIN* 5 300; *BPOA* 2 2685 obv. 1; 6 151; *CUSAS* 39 135 obv. v 9, 13, vii 2, viii 4', rev. ii 15', iii 19; Fish, *MCS* 8, 84-87; *L'uomo* 62; *MVN* 20 107; *Nisaba* 6 17 obv. i 6, ii 20, rev. i 4–7; 23 2 obv. iv 16; 86; 24 5; 28; *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 rev. viii 5; *Princeton* 1 556 obv. i 14; *Santag* 6 384 obv. iv 31'; 7 34; *Torino* 2 703 rev. iii 10; 704; 705; *UTI* 6 3790; *YOS* 4 211; *YOS* 15 115.

Table A5.1. Half-time versus Full-time Conscription of Male Citizens and UN-il$_2$ according to Occupation in Umma (Counts and Percentages Only)

Occupation	Occupational Category	Social Stratum	Conscription Notation		Percentage of Occupation
			½$_c$ Count (Percentage)	AŠ$_c$ Count (Percentage)	
a-bala	Resource Extraction	Citizen	—	—	0%
		UN-il$_2$	—	1	100%
ad-KID	Construction and Manufacturing	Citizen	1	—	20%
		UN-il$_2$	—	2+**2**	80%
agar$_4$-nigin$_2$	Resource Extraction[485]	Citizen	—	**42**	~95.45%
		UN-il$_2$	—	**2**	~4.55%
aga$_3$-us$_2$	Nonproductive Activities	Citizen	—	**52**	~98.11%
		UN-il$_2$	—	**1**	~1.89%
a-igi-du$_8$	Resource Extraction	Citizen	**1** (25%)	**3** (75%)	80%
		UN-il$_2$	—	1	20%
ašgab	Construction and Manufacturing	Citizen	**1** (~11.11%)	5+**3** (~88.89%)	~81.82%
		UN-il$_2$	—	1+**1**	~18.18%
azlag$_7$	Construction and Manufacturing	Citizen	10 (62.5%)	6 (37.5%)	~47.06%
		UN-il$_2$	—	17+**1**	~52.94%
bahar$_3$	Construction and Manufacturing	Citizen	1+**2** (75%)	**1** (25%)	~18.18%
		UN-il$_2$	—	17+**1**	~81.82%
dam-gar$_3$	Management	Citizen	—	**3**	100%
dub-sar	Management	Citizen	—	13+**24**	~94.87%
		UN-il$_2$	—	**2**	~5.13%
dub-sar gu$_4$ (10|niga)	Management	Citizen	—	1+**4**	100%
e$_2$-da tuš-a	Nonproductive Activities	Citizen	—	**1**	100%
egir ensi$_2$-ka	Nonproductive Activities	Citizen	—	**1**	100%
engar	Resource Extraction	Citizen	—	73+**40**	~70.62%
		UN-il$_2$	—	27+**20**	~29.38%
enku	Management	Citizen	—	1	100%
gab$_2$-ra	Resource Extraction	Citizen	—	26	~49.06%
		UN-il$_2$	—	27	~50.94%
gu$_4$-diri	Resource Extraction[486]	Citizen	1	—	100%
gu-za-la$_2$	Nonproductive Activities	Citizen	—	**3**	50%
		UN-il$_2$	—	**3**	50%
i$_3$-du$_8$	Nonproductive Activities	Citizen	**1** (25%)	**3** (75%)	80%
		UN-il$_2$	—	**1**	20%
i$_3$-ra$_2$-ra$_2$	Construction and Manufacturing	Citizen	**1**	—	100%
ka-guru$_7$	Management	Citizen	—	**1**	100%

485. For a discussion on the role of the agar$_4$-nigin$_2$, see Maeda 1996. While he notes that they sometimes had authority similar to nu-banda$_3$ gu$_4$, he also indicates that they could be under the authority of a sag-du$_5$, so they are considered here to be more focused on resource extraction than management.

486. The role of this occupation is not certain, but they are often documented in close proximity with engar and ša$_3$-gu$_4$ (see, for example, *BPOA* 1 1660 rev. 1).

Occupation	Occupational Category	Social Stratum	Conscription Notation		Percentage of Occupation
			½$_c$ Count (Percentage)	AŠ$_c$ Count (Percentage)	
kaš-a gub-ba	Construction and Manufacturing	Citizen	10	—	~24.39%
		UN-il$_2$	—	29+**2**	~75.61%
kinkin$_{(2)}$	Construction and Manufacturing	Citizen	1	—	~33.33%
		UN-il$_2$	—	2	~66.67%
kir$_4$-dab$_5$	Nonproductive Activities	UN-il$_2$	—	**1**	100%
kisal-luh	Nonproductive Activities	Citizen	—	**1**	100%
kurušda	Resource Extraction	Citizen	—	**1**	25%
		UN-il$_2$	—	3	75%
lu$_2$-i$_3$-dub	Nonproductive Activities	Citizen	**1** (12.5%)	4+**3** (87.5%)	100%
lu$_2$-mar-sa	Nonproductive Activities	Citizen	—	1	50%
		UN-il$_2$	—	1	50%
lu$_2$-nisig(-ga)	Resource Extraction	Citizen	**3** (~33.33%)	4+**2** (~66.67%)	100%
(lu$_2$-)ŠIM	Construction and Manufacturing	Citizen	—	3+**5**	~52.94%
		UN-il$_2$	—	9	~47.06%
(lu$_2$-^{giš})tir(-ra)	Resource Extraction	Citizen	—	28	~82.35%
		UN-il$_2$	—	6	~17.65%
lu$_2$-ur$_3$-ra	Construction and Manufacturing	Citizen	—	**1**	100%
ma$_2$-du$_3$	Construction and Manufacturing	Citizen	1 (~16.67%)	4+**1** (~83.33%)	100%
ma$_2$-gid$_2$	Nonproductive Activities	UN-il$_2$	—	22	100%
ma$_2$-gin$_2$	Construction and Manufacturing	Citizen	—	1	100%
ma$_2$-lah$_5$	Nonproductive Activities	UN-il$_2$	—	9+**3**	100%
muhaldim	Construction and Manufacturing	Citizen	—	1+**6**	87.5%
		UN-il$_2$	—	**1**	12.5%
munu$_4$-mu$_2$	Construction and Manufacturing	Citizen	1 (50%)	1 (50%)	~22.22%
		UN-il$_2$	—	6+**1**	~77.78%
mu$_6$-sub$_3$	Resource Extraction	Citizen	1 (50%)	1 (50%)	~66.67%
		UN-il$_2$	—	1	~33.33%
muš-lah$_5$	Nonproductive Activities	Citizen	1	—	100%
nagar	Construction and Manufacturing	Citizen	3+**1** (50%)	2+**2** (50%)	~72.73%
		UN-il$_2$	—	2+**1**	~27.27%
na-gada	Management	Citizen	—	16	80%
		UN-il$_2$	—	4	20%
nu-banda$_3$ gu$_4$	Management	Citizen	—	14	100%
ra$_{(2)}$-gaba	Nonproductive Activities	Citizen	—	**1**	50%
		UN-il$_2$	—	1	50%
sag-du$_5$	Management	Citizen	—	**1**	100%
sagi	Nonproductive Activities	Citizen	—	**2**	~66.67%
		UN-il$_2$	—	**1**	~33.33%
santana	Management	Citizen	—	1	50%
		UN-il$_2$	—	1	50%

Occupation	Occupational Category	Social Stratum	Conscription Notation		Percentage of Occupation
			½$_c$ Count (Percentage)	AŠ$_c$ Count (Percentage)	
simug	Construction and Manufacturing	Citizen	**1** (20%)	1+**3** (80%)	100%
sipa	Resource Extraction	Citizen	—	9+**1**	10%
		UN-il$_2$	—	14	20%
šabra	Management	Citizen	—	2+**2**	100%
ša$_3$-gu$_4$	Resource Extraction	Citizen	—	44+**12**	~7.39%
		UN-il$_2$	—	9+**160**	~90.91%
šar$_2$-ra-ab-du	Management	Citizen	**1** (~11.11%)	5+**3** (~88.89%)	90%
		UN-il$_2$	—	1	10%
ša$_3$-sahar-ra	Construction and Manufacturing	Citizen	62 (~95.38%)	3 (~4.62%)	65%
		UN-il$_2$	—	35	35%
šu-ku$_6$	Resource Extraction	Citizen	1+**3** (~15.38%)	21+**1** (~84.62%)	100%
šuš$_3$	Management	Citizen	—	2	100%
tug$_2$-du$_8$	Construction and Manufacturing	UN-il$_2$	—	3	100%
ugula	Management	Citizen	—	11+**3**	~58.33%
		UN-il$_2$	—	10	~41.67%
u$_2$-il$_2$	Nonproductive Activities	Citizen	**1**	—	50%
		UN-il$_2$	—	**1**	50%
um-mi-a	Resource Extraction	Citizen	—	57	~87.69%
		UN-il$_2$	—	8	~12.31%
unu$_3$	Resource Extraction	Citizen	—	22	~81.48%
		UN-il$_2$	—	5	~18.52%
zi$_3$-il$_2$	Nonproductive Activities	UN-il$_2$	—	1	100%

Table A5.2. Half-time versus Full-time Conscription of Male Citizens and UN-il$_2$ according to Occupation in Umma (Citations Only)

Occupation	Social Stratum	Conscription Notation	
		½$_c$ Citations	AŠ$_c$ Citations
a-bala	Citizen	—	—
	UN-il$_2$	—	***OrSP* 47-49 324** obv. i 21 **(+1)**
ad-KID	Citizen	***LAOS* 1 2** obv. ii 12 **(+1)**	—
	UN-il$_2$	—	***LAOS* 1 2** obv. ii 11 **(+1)**; ***OrSP* 47-49 324** rev. iii 25 (?) **(+1)**;[487] **Snell, *ASJ* 11, 182** rev. i 25 **(+1)**, ii 26 **(+1)**
agar$_4$-nigin$_2$	Citizen	—	**Snell, *ASJ* 11, 182** obv. iv 11 **(+42)**
	UN-il$_2$	—	**Snell, *ASJ* 11, 182** obv. iv 17 **(+2)**
aga$_3$-us$_2$	Citizen	—	**Snell, *ASJ* 11, 182** obv. i 4 **(+15)**, v 29 **(+35)**, rev. ii 34 **(+2)**
	UN-il$_2$	—	**Snell, *ASJ* 11, 182** obv. i 10 **(+1)**

487. Rev. iii 25 reads: šu-nigin$_2$ [x] UN 0.1.0 4. Since there is no distributive -ta, this line can perhaps be restored as šu-nigin$_2$ [AŠ$_c$] UN 0.1.0 4.

Occupation	Social Stratum	Conscription Notation	
		½$_c$ Citations	AŠ$_c$ Citations
a-igi-du$_8$	Citizen	**Snell, *ASJ* 11, 182** obv. iii 27 **(+1)**	**Snell, *ASJ* 11, 182** obv. iii 25 **(+3)**
	UN-il$_2$	—	***Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1** rev. viii 30 **(+1)**
ašgab	Citizen	**Snell, *ASJ* 11, 182** obv. iii 2 **(+1)**	***Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1** rev. ix 5 **(+1)**, 10–11 **(+2)**, 13–14 **(+2)**; **Snell, *ASJ* 11, 182** obv. ii 36 **(+2)**, vi 11 **(+1)**
	UN-il$_2$	—	***Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1** rev. ix 16 **(+1)**; **Snell, *ASJ* 11, 182** obv. iii 6 **(+1)**
azlag$_7$	Citizen	***OrSP* 47-49 324** rev. iii 10 **(+10)**	***OrSP* 47-49 324** rev. iii 4 **(+6)**
	UN-il$_2$	—	***OrSP* 47-49 324** rev. iii 18 **(+16)**, 22 **(+1)**; **Snell, *ASJ* 11, 182** obv. vi 18 **(+1)**
bahar$_3$	Citizen	***CUSAS* 39 127** rev. ii 1 (CDLI) **(+1)**; **Snell, *ASJ* 11, 182** rev. i 22 **(+1)**, iii 19 **(+1)**	**Snell, *ASJ* 11, 182** obv. vi 14 **(+1)**
	UN-il$_2$	—	***BPOA* 7 2457** rev. 6 **(+1)**; ***LAOS* 1 2** obv. i 18–19 **(+16)**; **Snell, *ASJ* 11, 182** rev. iii 20 **(+1)**
dam-gar$_3$	Citizen	—	**Snell, *ASJ* 11, 182** rev. i 32 **(+3)**
dub-sar	Citizen	—	***CUSAS* 39 132** obv. i 1 **(+1)**; ***LAOS* 1 2** obv. i 1 **(+11)**; ***OrSP* 47-49 324** rev. ii 29 **(+1)**; **Snell, *ASJ* 11, 182** obv. i 3 **(+2)**, iv 7 **(+3)**, 27 **(+5)**, rev. i 38–ii 1 **(+6)**, 21 **(+2)**, 36 **(+4)**, iii 34 **(+1)**, 39 **(+1)**
	UN-il$_2$	—	**Snell, *ASJ* 11, 182** obv. i 9 **(+2)**
dub-sar gu$_4$ (10|niga)	Citizen	—	***SAT* 2 77** rev. ii 11 **(+1)**; **Snell, *ASJ* 11, 182** obv. i 1–2 **(+4)**
e$_2$-da tuš-a	Citizen	—	**Snell, *ASJ* 11, 182** obv. vi 36 **(+1)**
egir ensi$_2$-ka	Citizen	—	**Snell, *ASJ* 11, 182** obv. iv 22 **(+1)**
engar	Citizen	—	***AAICAB* I/1 Ashm. 1911-228** rev. i 15 **(+3)**; **BDTNS 196758** obv. i 7 **(+1)**, 17 **(+1)**, ii 6 **(+1)**, 15 (?) **(+1)**; ***CST* 880** obv. i 18' **(+1)**, ii 11' **(+1)**; ***CUSAS* 39 130** obv. i 15 **(+1)**, ii 8 **(+1)**, 14 (coll.) **(+1)**, rev. i 2 **(+1)**; **131** obv. i 11 **(+1)**, ii 5 **(+1)**, 13 **(+1)**, rev. ii 11 **(+1)**; **133** rev. i 21 **(+1)**, 28 **(+1)**, 40 **(+1)**; ***Nisaba* 23 2** obv. iii 3 **(+1)**, 14 **(+1)**, 20 **(+1)**, 26 **(+1)**, iv 10 **(+1)**, 24 **(+1)**; **33 1076** obv. 16 **(+1)**; ***Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1** obv. iii 14' **(+1)**, v 13 **(+1)**, 22 **(+1)**, 30 **(+1)**, 44 **(+1)**, vi 10 **(+1)**, vii 7 (?) **(+1)**,[488] 16 **(+1)**, 25 **(+1)**, viii 12 **(+1)**, 39 **(+1)**, ix 2 **(+1)**, 10 **(+1)**, rev. i 30 **(+1)**, 40 **(+1)**, ii 8 **(+1)**, 17 **(+1)**, 28 **(+1)**, iv 8' **(+1)**, v 27 **(+1)**, vi 21 **(+1)**, 29 **(+1)**, 40 **(+1)**, vii 4 **(+1)**; **217 7 Talon-Vanderroost 2** obv. i 14 **(+1)**, ii 1 **(+1)**, 8 **(+1)**; ***OrSP* 47-49 324** rev. ii 19 **(+1)**; ***SAT* 2 77** obv. i 8 **(+1)**, 12 **(+1)**

488. The uncertainties in the preceding and following line make this line uncertain as well.

Occupation	Social Stratum	Conscription Notation	
		½$_c$ Citations	AŠ$_c$ Citations
engar	Citizen (cont.)		***SAT* 2 77** obv. i 16 **(+1)**, 21 **(+1)**, 24 **(+1)**, ii 9 **(+1)**, 13 **(+1)**, 15 **(+1)**, 18 **(+1)**; **Snell, *ASJ* 11, 182** obv. i 14 **(+20)**, 28 **(+20)**; ***Torino* 2 703** obv. ii 4 **(+1)**, 16 **(+1)**, 21 **(+1)**, iii 5 **(+1)**, 12 **(+1)**, iv 18 **(+1)**, rev. i 1 **(+1)**, 17 **(+1)**, ii 11 **(+1)**
	UN-il$_2$	—	***AAICAB* I/1 Ashm. 1911-228** obv. i 13 **(+1)**, ii 21 **(+1)**, rev. i 4 **(+1)**; **BDTNS 196758** obv. ii 1 **(+1)**; ***CST* 880** obv. i 7' **(+1)**, ii 4' (coll.) **(+1)**; ***CUSAS* 39 130** rev. i 11 **(+1)**; **131** rev. i 10 **(+1)**, ii 2 **(+1)**; ***Nisaba* 23 2** obv. ii 23 **(+1)**, iii 7 **(+1)**; ***Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1** obv. iv 3' **(+1)**, 26' **(+1)**, vii 38 **(+1)**, ix 30 **(+1)**, 42 **(+1)**, rev. ii 4 **(+1)**, iii 19' **(+1)**, 26' **(+1)**, iv 40' **(+1)**, v 16 **(+1)**, 35 **(+1)**; **217 7 Talon-Vanderroost 2** obv. ii 23 **(+1)**, rev. i 5 **(+1)**, 16 **(+1)**; ***OrSP* 47-49 324** rev. ii 22 **(+1)**; **Snell, *ASJ* 11, 182** obv. ii 3 **(+20)**; ***Torino* 2 703** obv. i 1 **(+1)**
enku	Citizen	—	***CUSAS* 39 133** rev. ii 13 **(+1)**
gab$_2$-ra	Citizen	—	***CUSAS* 39 128** obv. i 14 **(+1)**, 19–20 **(+2)**, 22–23 **(+2)**, 29 **(+1)**, ii 7 **(+1)**, 17–18 **(+2)**, 24 **(+1)**, 30 **(+1)**, iii 2 **(+1)**, 5 **(+1)**, 20 **(+1)**, 24 **(+1)**, 29 **(+1)**, rev. i 3 **(+1)**, 36 **(+1)**; **129** obv. ii 15 **(+1)**, 35 (coll.) **(+1)**, iii 18 **(+1)**, 39 **(+1)**, iv 14 **(+1)**, 21 **(+1)**, 28 **(+1)**, 39 (coll.) **(+1)**
	UN-il$_2$	—	***CUSAS* 39 128** obv. i 18 **(+1)**, 21 **(+1)**, 24 **(+1)**, ii 1 **(+1)**, 11 **(+1)**, 13 **(+1)**, 33 **(+1)**, iii 1 **(+1)**, 13 **(+1)**, 30 **(+1)**, rev. i 6 **(+1)**, 15 **(+1)**, 21 **(+1)**, 30 **(+1)**, 39–40 **(+2)**; **129** obv. ii 4 **(+1)**, iii 7 **(+1)**, 10 **(+1)**, 12 **(+1)**, 21 **(+1)**, 23 **(+1)**, 30–31 **(+2)**, iv 2 **(+1)**, 33 **(+1)**, v 13 (coll.) **(+1)**
gu$_4$ diri	Citizen	***CUSAS* 39 135** obv. vii 22 **(+1)**	—
gu-za-la$_2$	Citizen	—	**Snell, *ASJ* 11, 182** rev. i 19 **(+1)**, ii 15 **(+2)**
	UN-il$_2$	—	**Snell, *ASJ* 11, 182** rev. i 17 **(+1)**, ii 7 **(+1)**, 17 **(+1)**
i$_3$-du$_8$	Citizen	**Snell, *ASJ* 11, 182** obv. ii 30 **(+1)**	**Snell, *ASJ* 11, 182** obv. vi 23 **(+3)**
	UN-il$_2$	—	**Snell, *ASJ* 11, 182** obv. ii 33 **(+1)**
i$_3$-ra$_2$-ra$_2$	Citizen	**Snell, *ASJ* 11, 182** rev. i 28 **(+1)**	—
ka-guru$_7$	Citizen	—	**Snell, *ASJ* 11, 182** rev. ii 19 **(+1)**
kaš-a gub-ba	Citizen	***LAOS* 1 2** rev. i 20 (CDLI) **(+4)**, 21 **(+6)**	—
	UN-il$_2$	—	***LAOS* 1 2** rev. i 22 **(+29)**; **Snell, *ASJ* 11, 182** obv. v 7 **(+2)**
kinkin$_{(2)}$	Citizen	***SAT* 2 77** rev. i 17 **(+1)**	—
	UN-il$_2$	—	***BPOA* 7 2457** obv. 11 (coll.) **(+1)**; ***Nisaba* 23 47** obv. i 1 **(+1)**
kir$_4$-dab$_5$	UN-il$_2$	—	**Snell, *ASJ* 11, 182** rev. iii 16 **(+1)**
kisal-luh	Citizen	—	**Snell, *ASJ* 11, 182** obv. vi 30 **(+1)**

Occupation	Social Stratum	Conscription Notation	
		½$_c$ Citations	AŠ$_c$ Citations
kurušda	Citizen	—	**Snell, *ASJ* 11, 182** obv. vi 37 **(+1)**
	UN-il$_2$	—	***LAOS* 1 2** obv. ii 6 **(+3)**
lu$_2$-i$_3$-dub	Citizen	**Snell, *ASJ* 11, 182** obv. iii 34 **(+1)**	***Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1** rev. vii 17 **(+1)**, 21 **(+1)**, 24 **(+1)**, 28 **(+1)**; **Snell, *ASJ* 11, 182** obv. iii 32 **(+3)**
lu$_2$-mar-sa	Citizen	—	***CUSAS* 39 132** obv. ii 10 **(+1)**
	UN-il$_2$	—	***CUSAS* 39 132** obv. ii 16 (coll.) **(+1)**
lu$_2$-nisig(-ga)	Citizen	**Snell, *ASJ* 11, 182** obv. iii 21 **(+3)**	***Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1** rev. viii 13 **(+1)**, 14 (?) **(+1)**, 20 (?) **(+1)**, 24 **(+1)**; **Snell, *ASJ* 11, 182** obv. iii 19 **(+2)**
(lu$_2$-)ŠIM(×GAR)	Citizen	—	***LAOS* 1 2** rev. i 5 **(+3)**; **Snell, *ASJ* 11, 182** obv. v 3 **(+1)**, rev. i 20 **(+1)**, ii 40 **(+3)**
	UN-il$_2$	—	***BPOA* 7 2457** obv. 2 **(+1)**; ***CUSAS* 39 127** rev. ii 9 **(+1)**; ***LAOS* 1 2** rev. i 7 **(+5)**; ***Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1** obv. viii 43 **(+1)**; **217 7 Talon-Vanderroost 2** obv. i 19 **(+1)**
(lu$_2$-^{giš})tir(-ra)	Citizen	—	***AAICAB* I/1 Ashm. 1911-228** rev. i 8 **(+1)**; **CDLI P429776** rev. ii' 8 **(+2)**; ***OrSP* 47-49 382**[489] rev. iii 6–7 **(+24)**, 11 **(+1)**
	UN-il$_2$	—	**CDLI P429776** rev. ii' 12 **(+1)**; ***OrSP* 47-49 382** rev. iii 14–15 **(+5)**
lu$_2$-ur$_3$-ra	Citizen	—	**Snell, *ASJ* 11, 182** obv. v 13 **(+1)**
ma$_2$-du$_3$	Citizen	***CUSAS* 39 133** obv. iii 26 (coll.) **(+1)**	***CUSAS* 39 133** rev. ii 21 **(+1)**, 25 **(+1)**, 28–29 **(+2)**; **Snell, *ASJ* 11, 182** rev. iii 28 **(+1)**
ma$_2$-gid$_2$	Citizen	—	—
	UN-il$_2$	—	***LAOS* 1 2** obv. ii 16–17 **(+22)**
ma$_2$-gin$_2$	Citizen	—	***CUSAS* 39 132** obv. i 7 **(+1)**
ma$_2$-lah$_5$	UN-il$_2$	—	***LAOS* 1 2** obv. i 22–23 **(+9)**; **Snell, *ASJ* 11, 182** obv. vi 4 **(+2)**, rev. iii 29 **(+1)**
muhaldim	Citizen	—	***Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1** rev. vii 38 (?) **(+1)**; **Snell, *ASJ* 11, 182** obv. v 18 **(+4)**, rev. iii 1 **(+2)**
	UN-il$_2$	—	**Snell, *ASJ* 11, 182** rev. iii 4 **(+1)**
munu$_4$-mu$_2$	Citizen	***LAOS* 1 2** rev. i 12 **(+1)**	***LAOS* 1 2** rev. i 11 **(+1)**
	UN-il$_2$	—	***LAOS* 1 2** rev. i 15 **(+6)**; **Snell, *ASJ* 11, 182** obv. v 9 (coll.) **(+1)**
mu$_6$-sub$_3$	Citizen	***CUSAS* 39 135** obv. iv 5 **(+1)**	***BPOA* 7 2457** rev. 12 (coll.) **(+1)**
	UN-il$_2$	—	***CUSAS* 39 135** obv. i 13 **(+1)**
muš-lah$_5$	Citizen	***CUSAS* 39 135** obv. i 42 (coll.) **(+1)**	—
nagar	Citizen	***OrSP* 47-49 324** rev. ii 7 **(+2)**; **Snell, *ASJ* 11, 182** obv. ii 23 **(+1)**; ***Torino* 2 703** rev. iii 14 **(+1)**	***Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1** rev. viii 46 **(+1)**, ix 17 **(+1)**; **Snell, *ASJ* 11, 182** obv. ii 21 **(+2)**

489. This text lists many of the same individuals in *BCT* 2 288, but the latter does not include the term tir, which is probably lost in the damaged colophon.

Occupation	Social Stratum	Conscription Notation	
		½$_c$ Citations	AŠ$_c$ Citations
nagar	UN-il$_2$	—	***Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1** rev. viii 43 (?) **(+1)**; ***OrSP* 47-49 324** rev. ii 11 **(+1)**; **Snell, *ASJ* 11, 182** obv. ii 27 **(+1)**
na-gada	Citizen	—	***CUSAS* 39 129** obv. v 33 **(+1)**, vi 14 **(+1)**, rev. i 33' **(+1)**, ii 4' **(+1)**, iii 1 **(+1)**, 9 **(+1)**, 29' **(+1)**, 38' **(+1)**, iv 18 **(+1)**, 34' (CDLI) **(+1)**, v 1 **(+1)**, 18 **(+1)**, 29 **(+1)**, 46 **(+1)**, 49 (?) **(+1)**, vi 3 **(+1)**
	UN-il$_2$	—	***CUSAS* 39 129** obv. vi 9 **(+1)**, rev. ii 27' **(+1)**, v 7 **(+1)**, 36 **(+1)**
nu-banda$_3$ gu$_4$	Citizen	—	**BDTNS 196758** obv. i 1 (coll.) **(+1)**; ***CUSAS* 39 130** obv. i 1 **(+1)**; **131** obv. i 1 **(+1)**; ***Nisaba* 23 2** obv. i 2 **(+1)**, iv 1 **(+1)**; ***Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1** obv. vi 34 (?) **(+1)**, viii 25 **(+1)**, rev. i 23 **(+1)**, ii 40 **(+1)**, iv 19' **(+1)**, vi 7 **(+1)**; **217 7 Talon-Vanderroost 2** obv. i 2 **(+1)**; ***SAT* 2 77** rev. ii 13 (CDLI) **(+2)**
ra$_{(2)}$-gaba	Citizen	—	**Snell, *ASJ* 11, 182** rev. i 4 **(+1)**
	UN-il$_2$	—	***CUSAS* 39 135** obv. vii 10 (?) **(+1)**
sag-du$_5$	Citizen	—	**Snell, *ASJ* 11, 182** obv. iv 6 **(+1)**
sagi	Citizen	—	**Snell, *ASJ* 11, 182** obv. iv 30 **(+2)**
	UN-il$_2$	—	**Snell, *ASJ* 11, 182** obv. iv 33 **(+1)**
santana	Citizen	—	***Nisaba* 11 27** obv. 11 **(+1)**
	UN-il$_2$	—	**CDLI P429776** obv. i 1 **(+1)**
simug	Citizen	**Snell, *ASJ* 11, 182** obv. iii 10 **(+1)**	***Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1** rev. viii 40 **(+1)**; **Snell, *ASJ* 11, 182** obv. iii 8 **(+3)**
sipa	Citizen	—	***CUSAS* 39 129** obv. v 24 **(+1)**, rev. iv 19 (?) **(+1)**, 22' **(+1)**, 35'–36' **(+2)**, v 3 **(+1)**, 49 **(+1)**, vii 10' **(+1)**; ***OrSP* 47-49 483** rev. ii 1 **(+1)**; **Snell, *ASJ* 11, 182** obv. vi 38 **(+1)**
	UN-il$_2$	—	***CUSAS* 39 129** obv. v 26–27 **(+2)**, 28 (?) **(+1)**, vi 16' **(+1)**, vii 5 **(+1)**, rev. iv 27' **(+1)**, v 4 **(+1)**, 8 **(+1)**, 20–21 **(+2)**, 32 **(+1)**, vi 7 **(+1)**; ***OrSP* 47-49 483** obv. ii 23 **(+2)**
šabra	Citizen	—	**Snell, *ASJ* 11, 182** rev. i 15 **(+1)**, ii 30 **(+1)**; ***Torino* 2 703** obv. i 20 **(+1)**, iii 26 **(+1)**
ša$_3$-gu$_4$	Citizen	—	***AAICAB* I/1 Ashm. 1911-228** rev. i 16–17 **(+18)**; ***SNAT* 332** rev. 3 **(+1)**; ***SAT* 2 77** obv. i 9–10 **(+2)**, 13–14 **(+2)**, 17–19 **(+3)**, 22 **(+1)**, 25 **(+1)**, ii 3–7 **(+5)**, 10 **(+1)**, 14 **(+1)**, 16 **(+1)**, 19–20 **(+2)**, 22–25 **(+4)**, rev. i 20 **(+1)**, ii 2 **(+1)**; **Snell, *ASJ* 11, 182** obv. i 29 **(+12)**[490]

490. This line is unfortunately damaged, so there were probably more than twelve such individuals.

Occupation	Social Stratum	Conscription Notation	
		½$_c$ Citations	AŠ$_c$ Citations
ša$_3$-gu$_4$	UN-il$_2$	—	***AAICAB* I/1 Ashm. 1911-228** rev. ii 1–2 **(+3)**; ***CST* 880** rev. ii 2 (?) **(+5)**; ***CUSAS* 39 135** obv. vii 27 **(+1)**; **Snell, *ASJ* 11, 182** obv. ii 4 **(+160)**
šar$_2$-ra-ab-du	Citizen	**Snell, *ASJ* 11, 182** obv. iii 42 **(+1)**	***CUSAS* 39 129** rev. vi 16–17 **(+2)**; ***Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1** rev. vii 41 (?) **(+1)**, 45 (?) **(+1)**, 50 (?) **(+1)**; **Snell, *ASJ* 11, 182** obv. iii 40 **(+3)**
	UN-il$_2$	—	***CUSAS* 39 129** rev. vi 12 **(+1)**
ša$_3$-sahar-ra	Citizen	***CUSAS* 39 135** obv. i 17 **(+1)**, 21 **(+1)**, 38–39 **(+2)**, ii 3 **(+1)** 12 **(+1)**, 17 **(+1)**, 19 **(+1)**, 21–22 **(+2)**, 25 **(+1)**, 27 **(+1)**, 30 **(+1)**, 32 **(+1)** 46 (?) **(+1)**, iii 18 **(+1)**, 21–22 **(+2)**, 24 **(+1)**, 26–27 **(+2)**, 30 **(+1)**, 32–33 **(+2)**, iv 11 **(+1)**, 22 **(+1)**, 34 **(+1)**, v 1–2 **(+2)**, 4 **(+1)**, 8 **(+1)**, 11 **(+1)**, 21 **(+1)**, 23 **(+1)**, 28 **(+1)**, 33 (?) **(+1)**, 34 **(+1)**, vi 4 (coll.) **(+1)**, 27 **(+1)**, 40 (?) **(+1)**, vii 21 **(+1)**, 24 **(+1)**, viii 6' (?) **(+1)**, 19' **(+1)**, 21'–23' (?) **(+3)**, 27' (?) **(+1)**, 29' (?) **(+1)**, 34' **(+1)**, 37' **(+1)**, 39'–40' **(+2)**, 44' (?) **(+1)**, 46' (?) **(+1)**, rev. ii 2'–4' **(+3)**, 7' (?) **(+1)**, 12' (?) **(+1)**, 32' (coll.) **(+1)**, 34' (coll.) **(+1)**	***CUSAS* 39 131** rev. ii 12 **(+1)**; **135** obv. ii 36 **(+1)**, vi 34 (both CDLI) **(+1)**
	UN-il$_2$	—	***CUSAS* 39 135** obv. i 24 **(+1)**, ii 9 (coll.) **(+1)**, 40 (coll.) **(+1)**, 44 (?) **(+1)**, iii 7 **(+1)**, 19 **(+1)**, iv 1 **(+1)**, 17 **(+1)**, 24 (coll.) **(+1)**, 26–28 **(+3)**, 32 **(+1)**, v 15 **(+1)**, vi 39 **(+1)**, vii 3 **(+1)**, 15 **(+1)**, 29–30 **(+2)**, 36 **(+1)**, rev. ii 9' (?) **(+1)**, 21' (?) **(+1)**, 27'–29' (?) **(+3)**, iii 24 (coll.) **(+1)**, 25 **(+1)**, iv 16 **(+1)**, 20 **(+1)**, 23 **(+1)**, 26–28 **(+3)**, 35 **(+1)**, vi 31 **(+1)**
šu-ku$_6$	Citizen	***CUSAS* 39 133** obv. ii 31 (coll.) **(+1)**; **Snell, *ASJ* 11, 182** obv. vi 7 **(+3)**	***CUSAS* 39 127** obv. ii 8' **(+1)**, iii 3'–4' **(+2)**, rev. i 1 **(+1)**, 5 **(+1)**, 7 **(+1)**, 13 **(+1)**, 19 **(+1)**; **133** obv. i 24 **(+1)**, 26 **(+1)**, 33 **(+1)**, ii 1 **(+1)**, 9 **(+1)**, 14–15 **(+2)**, 17 **(+1)**, 22 **(+1)**, 26 **(+1)**, rev. ii 33–34 **(+2)**, iii 2 **(+1)**; **Snell, *ASJ* 11, 182** obv. vi 6 **(+1)**
šuš$_3$	Citizen	—	***CUSAS* 39 128** obv. i 1 **(+1)**; **129** obv. vii 13 **(+1)**
tug$_2$-du$_8$	UN-il$_2$	—	***BCT* 2 288** rev. iv 33 **(+1)**; ***Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1** rev. ix 20 **(+1)**; ***OrSP* 47-49 324** rev. ii 15 **(+1)**
ugula	Citizen	—	***BCT* 2 288** obv. i 2 **(+1)**, iii 18 **(+1)**; ***CUSAS* 39 133** obv. i 1 **(+1)**, iii 30 **(+1)**; ***Nisaba* 6 10** obv. i 1 (CDLI) **(+1)**; ***OrSP* 47-49 382** obv. i 2 **(+1)**, ii 16 **(+1)**; ***Santag* 6 384** rev. iv 43' (?) **(+1)**; ***SAT* 2 77** rev. i 1 **(+1)**, ii 8 **(+1)**; **Snell, *ASJ* 11, 182** obv. v 28 **(+1)**, vi 44 **(+1)**, rev. ii 14 **(+1)**; ***YOS* 4 232** rev. ii 27 (coll.) **(+1)**

Occupation	Social Stratum	Conscription Notation	
		½$_c$ Citations	AŠ$_c$ Citations
ugula	UN-il$_2$	—	***CUSAS* 39 134** rev. ii 1 (?) **(+1)**; **135** obv. iv 14 **(+1)**, rev. iii 7 **(+1)**, iv 41 **(+1)**; ***LAOS* 1 2** obv. ii 22 **(+1)**; ***Nisaba* 26 17** rev. 13 (coll.) **(+1)**; ***Organisation administrative, Diss.* 1, 230 12 Talon-Vanderroost 5** rev. ii 1 **(+1)**; ***Santag* 6 384** obv. iv 15' **(+1)**, rev. iii 23' **(+1)**, vi 1' (coll.) **(+1)**
u$_2$-il$_2$	Citizen	**Snell, *ASJ* 11, 182** rev. iii 15 **(+1)**	—
	UN-il$_2$	—	**Snell, *ASJ* 11, 182** obv. vi 34 **(+1)**
um-mi-a	Citizen	—	**CDLI P429776** obv. i 10 **(+1)**, 16 **(+1)**, 25' **(+1)**, 32' **(+1)**,[491] ii 2 **(+1)**, 4 **(+1)**, 11 **(+1)**, 19 **(+1)**, 27 **(+1)**; ***Nisaba* 11 27** obv. 16–17 **(+41)**; ***OrSP* 47-49 324** obv. iii 10 **(+1)**; ***Princeton* 2 492** obv. ii 11 **(+1)**, 23 **(+1)**, rev. i 24 **(+1)**, 34 **(+1)**; ***SNAT* 332** obv. 4 **(+1)**, 11 **(+1)**
	UN-il$_2$	—	***Nisaba* 11 27** rev. 11 **(+5)**; ***OrSP* 47-49 324** rev. iii 16 **(+1)**; ***Princeton* 2 492** obv. ii 1 **(+1)**, rev. i 7 **(+1)**
unu$_3$	Citizen	—	***CUSAS* 39 128** obv. i 13 **(+1)**, ii 5 **(+1)**, 36 **(+1)**, iii 4 **(+1)**, 9 **(+1)**, 16 **(+1)**, 23 **(+1)**, rev. i 2 **(+1)**, 17 **(+1)**; **129** obv. i 11' (coll.) **(+1)**, ii 14 **(+1)**, iii 3 **(+1)**, 17 **(+1)**, 27 **(+1)**, 36 **(+1)**, iv 6 **(+1)**, 38 **(+1)**, vii 21 **(+1)**, 29 **(+1)**, viii 3 **(+1)**, 8 **(+1)**; ***Santag* 7 32** obv. ii' 9' **(+1)**
	UN-il$_2$	—	***CUSAS* 39 128** obv. iii 36 **(+1)**, rev. i 10 **(+1)**, 33 **(+1)**; **129** obv. iv 32 **(+1)**, v 7 **(+1)**
zi$_3$-il$_2$	UN-il$_2$	—	***LAOS* 1 2** obv. ii 25 (coll.) **(+1)**

Appendix 6. Allotments of Barley or šuku Land as well as of Garments or Wool corresponding to Age-Bracket Designations for Male Citizens and UN-il$_2$ in Umma

The allotments of barley or šuku land as well as of garments or wool corresponding to age-bracket designations for male citizens and UN-il$_2$ in Umma are cited in Table A6.1. All Umma texts are included in which male citizens and UN-il$_2$ are clearly identified and in which the allotments of all or virtually all individuals notated with age-bracket designations are specified or

491. This line is renumbered with '.

clearly inferred.[492] As noted on p. 224, four texts are singled out, including *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 (Text 1), *CUSAS* 39 129 (Text 2), 135 (Text 3), and *LAOS* 1 2 (Text 4). While those allotted 0.0.4 or 0.0.3 are combined in Table 5.17, they are differentiated here, even though they may be difficult to distinguish. There are no UN-il$_2$ notated with ½$_c$ according to Table A6.1, but there may be some questionable exceptions. *Nisaba* 6 10 obv. i 24 (coll.) reads: AŠ$_c$'(½$_c$) 0.1.0 1 tug$_2$ UN Tur-ra-am-i$_3$-li$_2$, which corresponds to rev. i 14 (CDLI): šu-nigin$_2$ 3(AŠ$_c$) guruš 0.1.0 1 tug$_2$-ta. There is also an UN-il$_2$ notated with in *SAT* 2 77 rev. i 16 (coll.), but this text has some issues. The most relevant for this discrepancy is that rev. ii 18 (coll.) reads: šu-nigin$_2$ 8(AŠ$_c$) UN guruš, but there are perhaps eleven UN-il$_2$ in this text (see obv. i 15, 20, 23, ii 8, 12, 17, 21, rev. i 3–4, 16, ii 4), all of whom are notated with AŠ$_c$ except for this one exception. The citizens notated with ½$_c$ are also not clearly accounted for in the totals section.[493] Instances in which an individual's allotments, familial relationships, notation, or social stratum are uncertain and cannot be easily collated but are otherwise assumed are cited with (?) without comments.

492. For example, Snell, *ASJ* 11 182 is not included because it is difficult to determine the allotments of some adults, but *OrSP* 47-49 493 is included because the exceptions are limited and easy to resolve. Note that the balanced accounts in which some individuals are notated with age-bracket designations are not included. Other texts and lines that are not counted for a variety of reasons, such as damage or uncertainty, include *AnOr* 7 301; *BCT* 2 217 obv. 4; 288 obv. ii 26, iii 4, rev. iv 24, 35; *BPOA* 7 2457; CDLI P429776; *CST* 880 obv. i 20'; *CUSAS* 39 127; 128 obv. i 9; 129 obv. vii 26', viii 4, 29', rev. iii 40–41, iv 12–13, v 32, 37, 40–42, vi 32; 130 obv. ii 11; 132 obv. i 4–5, rev. i 16–17; 133; 134 rev. ii 1, 3, 6; 135 obv. ii 7, 47–48, iii 34, v 9, 12–13, vi 20, vii 10, viii 12', 14', 32'–33', rev. ii 9', 21', iv 10, 19, v 12–13, 16; 136 obv. 2; 140 obv. ii 12'; *LAOS* 1 2 obv. i 15 (see Neumann 2011b, 10), 16; *Nisaba* 6 10 obv. 14–16; 17; 11 15; 27; 23 2 rev. ii 6', 8'; 9; 47; 86; 24 5; 28; 26 17 obv. 18, rev. 5–6, 11; 33 435; *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 obv. iii 5', iv 5'–6', v 37, vi 19, 22, ix 4, r. ii 3, iv 7', 45'–48', v 4–7, 12, 21, vii 1, 39, viii 5–7, 11, 37, 39, 43–44, ix 32–34; *OrSP* 47-49 324; 382 obv. iii 20; 501; *Princeton* 1 367; 556; 2 492; *Santag* 6 384 obv. ii 10', iii 16', 33'–35', rev. ii 13', iii 10', 26', v 10'–11'; 7 32; *SAT* 2 77; 1000; Sigrist, *RA* 73, 115-120 obv. i 6; *SNAT* 332; Snell, *ASJ* 11, 182; *StOr* 9/1 31 pl. 12; *TCL* 5 6038 obv. iv 34; *Torino* 2 703; 705; 706 A rev. iii' 2'; *YOS* 4 211; 232 obv. i 5, 7–8; 15 115; 175; 178.

493. See also *CUSAS* 39 135 obv. ii 9 (coll.), which is likely an error, especially given that there are about thirty other UN-il$_2$ notated with AŠ$_c$ who were allotted 0.1.1 5 4 in this text.

Table A6.1. Allotments of Barley or šuku Land as well as of Garments or Wool corresponding to Age-Bracket Designations for Male Citizens and UN-il$_2$ in Umma

Age-Bracket Designation and Allotment	Text(s)	Citizens		UN-il$_2$	
		Count	Citation(s)	Count	Citation(s)
šu gan$_2$	3	1	obv. ii 29 **(+1)**	—	
	All Others	1	***OrSP* 47-49 483** rev. ii 2 **(+1)**		
šu 0.0.5 tug$_2$	All Others	3	***OrSP* 47-49 483** rev. i 22–23 **(+2)**, 25 **(+1)**[494]	5	***OrSP* 47-49 483** obv. i 14 **(+1)**, rev. i 14 **(+1)**, 17–18 **(+2)**, 24 **(+1)**
šu 0.0.4 tug$_2$	1	—		2	obv. v 18 **(+1)**, rev. ii 6 **(+1)**
	All Others			3	***Nisaba* 23 2** rev. ii 10' **(+1)**; **Sigrist, *RA* 73, 115-120** rev. ii 5 **(+1)**; ***YOS* 4 232** rev. ii 4 **(+1)**
šu 0.0.4 3	All Others	3	***CUSAS* 39 132** rev. ii 15 **(+3)**	12	***CUSAS* 39 132** rev. ii 22 (coll.) **(+12)**[495]
šu (gan$_2$)	1	22	obv. iii 35' (?) **(+1)**, iv 13' **(+1)**, 39' **(+1)**, vii 15 **(+1)**, viii 24 **(+1)**, 38 **(+1)**, ix 12 **(+1)**, rev. i 39 **(+1)**, ii 16 **(+1)**, 39 **(+1)**, iii 3' **(+1)**, iv 18' **(+1)**, 26' **(+1)**, 33' (coll.) **(+1)**, v 23 **(+1)**, 26 **(+1)**, vii 16 **(+1)**, 40 **(+1)**, viii 45 **(+1)**, ix 4 **(+1)**, 9 **(+1)**, 40 **(+1)**	6	obv. iv 2' (?) **(+1)**, 20' **(+1)**, vii 37 **(+1)**, rev. v 15 **(+1)**, 19 **(+1)**, viii 29 **(+1)**
	2	6	obv. i 10' **(+1)**, ii 11 **(+1)**, 34 **(+1)**, vii 20' **(+1)**, viii 7 **(+1)**, rev. iii 37' **(+1)**	3	obv. v 6 **(+1)**, 12 (coll.) **(+1)**, rev. ii 26' **(+1)**
	3	8	obv. i 16 **(+1)**, ii 35 **(+1)**, iii 20 **(+1)**, 25 (?) **(+1)**, v 22 **(+1)**, vi 11 **(+1)**, 26 (?) **(+1)**, viii 20' **(+1)**	1	obv. iv 13 **(+1)**
	4	—		1	rev. i 17 **(+1)**
	All Others	40	***AAICAB* I/1 Ashm. 1911-228** obv. i 1 (coll.) **(+1)**; ***BCT* 2 288** obv. i 1 **(+1)**, 10 **(+1)**, 12 **(+1)**, iii 6 **(+1)**, rev. iii 10 **(+1)**, 15 **(+1)**, iv 3 **(+1)**, 13 **(+1)**, 34 **(+1)**; **BDTNS 196758** obv. i 16 (coll.) **(+1)**, ii 14 **(+1)**; ***CUSAS* 39 128** obv. i 12 **(+1)**, ii 4 **(+1)**, 23 **(+1)**, 29 **(+1)**, iii 15 **(+1)**; **130** obv. i 25 **(+1)**; **131** obv. ii 4 **(+1)**; ***Nisaba* 6 10** rev. i 11 **(+1)**; **23 2** obv. i 1 **(+1)**, 26 **(+1)**; **26 17** obv. 15 **(+1)**; ***Organisation administrative, Diss.* 1, 217 7 Talon-Vanderroost 2** obv. i (?) 1 **(+1)**,[496] 13 **(+1)**; ***OrSP* 47-49 382** obv. i 14 **(+1)**, rev. i 6 **(+1)**	4	***CUSAS* 39 128** obv. ii 10 **(+1)**, rev. i 14 **(+1)**; **131** rev. i 9 **(+1)**; ***Santag* 6 384** rev. iii 17' (?) **(+1)**

494. These lines correspond to rev. ii 5: šu-nigin$_2$ 3 šu guruš 0.0.3 1 tug$_2$-ta, which should be šu-nigin$_2$ 3 šu guruš 0.0.5 1 tug$_2$-ta, but it is difficult to collate this line with present images.

495. See rev. ii 24 (coll.).

496. See *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 obv. viii 24.

Age-Bracket Designation and Allotment	Text(s)	Citizens		UN-il$_2$	
		Count	Citation(s)	Count	Citation(s)
šu (gan$_2$)	All Others (cont.)		***Santag* 6 384** obv. iv 29' (?) **(+6)**; **Sigrist, *RA* 73, 115-120** rev. ii 31 **(+5)**; ***YOS* 4 232** obv. i 13 **(+1)**, rev. ii 6 **(+1)**[497]		
šu (barley allotment)	3	—		1	obv. vii 26 **(+1)**
	4			2	obv. ii 4 **(+1)**, 20 **(+1)**
	All Others			7	***CUSAS* 39 140** rev. i 4 **(+1)**; ***Santag* 6 384** rev. iii 3' **(+1)**, v 8' (?) **(+1)**; **Sigrist, *RA* 73, 115-120** obv. ii 7 **(+1)**, 15 **(+1)**, rev. i 24 **(+1)**; ***YOS* 4 232** obv. ii 14 **(+1)**
AŠ$_c$ gan$_2$	1	116	obv. iii 14'–15' **(+2)**, 19' **(+1)**, 36' **(+1)**, iv 14' **(+1)**, 40' **(+1)**, v 13 **(+1)**, 16 **(+1)**, 22–25 **(+4)**, 30–31 **(+2)**, 39 **(+1)**, 44 **(+1)**, vi 2 **(+1)**, 6 **(+1)**, 10 **(+1)**, 12–13 **(+2)**, 16 **(+1)**, 23 **(+1)**, 26 **(+1)**, vii 7 **(+1)**, 11–12 **(+2)**, 16–17 **(+2)**, 22 **(+1)**, 25 **(+1)**, 30 **(+1)**, 32 **(+1)**, viii 7 **(+1)**, 9 **(+1)**, 12–13 **(+2)**, 18 **(+1)**, 25 **(+1)**, 39–40 **(+2)**, ix 2 **(+1)**, 5 **(+1)**, 10 **(+1)**, 13 **(+1)**, 20 **(+1)**, 27–28 **(+2)**, 35–36 (?) **(+2)**,[498] rev. i 1 **(+1)**, 6 **(+1)**, 16 **(+1)**, 23 **(+1)**, 30–32 **(+3)**, 40 **(+1)**, 42 **(+1)**, 45 **(+1)**, ii 8 **(+1)**, 10 **(+1)**, 11 (?) **(+1)**,[499] 17 **(+1)**, 19 **(+1)**, 22 **(+1)**, 24 **(+1)**, 28 **(+1)**, 40 **(+1)**, iii 4' **(+1)**, 11' **(+1)**, 20' **(+1)**, 28'–29' **(+2)**, iv 5' **(+1)**, 8'–9' **(+2)**, 11' **(+1)**, 19' **(+1)**, 27' **(+1)**, 34' **(+1)**, v 18 **(+1)**, 24 **(+1)**, 27 (?) **(+1)**, 28 **(+1)**, vi 7 **(+1)**, 21 **(+1)**, 23–24 **(+2)**, 27 **(+1)**, 29–30 **(+2)**, 40 **(+1)**, vii 2 **(+1)**, 4 **(+1)**, 17 **(+1)**, 21 **(+1)**, 24 **(+1)**, 28 **(+1)**, 37–38 (?) **(+2)**, 41 (?) **(+1)**, 45 (?) **(+1)**, 50 (?) **(+1)**, viii 13 **(+1)**, 14 (?) **(+1)**, 20 (?) **(+1)**, 24 **(+1)**, 40 **(+1)**, 46 **(+1)**, ix 5 **(+1)**, 10 **(+1)**, 13–14 **(+2)**, 17 **(+1)**, 41 **(+1)**	71	obv. ii 4' (?) **(+1)**, 6' **(+1)**, iii 21' **(+1)**, 26' **(+1)**, 28'–29' **(+2)**, 31' **(+1)**, iv 3'–4' **(+2)**, 8' **(+1)**, 11' **(+1)**, 21'–23' **(+3)**, 26' **(+1)**, 28'–29' **(+2)**, 35' **(+1)**, v 19 **(+1)**, 36 **(+1)**, vi 5 **(+1)**, 25 **(+1)**, vii 20 **(+1)**, 31 **(+1)**, 38–39 **(+2)**, 43 **(+1)**, viii 1 **(+1)**, 5 **(+1)**, 19 **(+1)**, 43 **(+1)**, ix 16 **(+1)**, 25–26 **(+2)**, 30 **(+1)**, 32 **(+1)**, 42 **(+1)**, rev. i 36 **(+1)**, 46 **(+1)**, ii 4–5 **(+2)**, 13 **(+1)**, 29 **(+1)**, 33–34 **(+2)**, iii 16' (?) **(+1)**, 19' **(+1)**, 26' (?) **(+1)**, 35' **(+1)**, 37' (?) **(+1)**,[500] iv 4' **(+1)**, 32' (?) **(+1)**, 40'–41' **(+2)**, v 1 **(+1)**, 8 **(+1)**, 10 **(+1)**, 16 **(+1)**, 20 **(+1)**, 30 **(+1)**, 35 **(+1)**, 37 **(+1)**, vi 37 **(+1)**, 44–45 **(+2)**, vii 6 **(+1)**, 9–10 **(+2)**, viii 30 **(+1)**, ix 20 **(+1)**, 30 **(+1)**

497. See Studevent-Hickman 2006, 2:440.

498. See *Organisation administrative, Diss.* 1, 217 7 Talon-Vanderroost 2 rev. i 9–10.

499. See BDTNS 196758 obv. ii 9.

500. See *Nisaba* 23 2 obv. iii 10.

Age-Bracket Designation and Allotment	Text(s)	Citizens		UN-il$_2$	
		Count	Citation(s)	Count	Citation(s)
AŠ$_c$ gan$_2$	2	60	obv. i 11' (coll.) **(+1)**, ii 14 **(+1)**, 35 (coll.) **(+1)**, iii 3 **(+1)**, 17 **(+1)**, 27 **(+1)**, 36 **(+1)**, iv 6 **(+1)**, 14 **(+1)**, 21 **(+1)**, 28 **(+1)**, 38 **(+1)**, v 24 **(+1)**, 33 **(+1)**, vi 14 **(+1)**, vii 13 **(+1)**, 21' **(+1)**, 24' **(+1)**, 29' **(+1)**, viii 3 **(+1)**, 8 **(+1)**, 23' **(+1)**, 26'–27' **(+2)**, rev. i 1' **(+1)**, 4' **(+1)**, 11'–12' **(+2)**, 14' (coll.) **(+1)**, 17' **(+1)**, 23' **(+1)**, 27' **(+1)**, 29' (CDLI) **(+1)**, 33' **(+1)**, ii 4' **(+1)**, 18' **(+1)**, 21' **(+1)**, 31' **(+1)**, iii 1 **(+1)**, 6 **(+1)**, 9 **(+1)**, 29' **(+1)**, 33' **(+1)**, 38' **(+1)**, iv 6 **(+1)**, 8 **(+1)**, 10 **(+1)**, 18 **(+1)**, 22' **(+1)**, 34' **(+1)**, 36' **(+1)**, v 1 **(+1)**, 18 **(+1)**, 29 **(+1)**, 46 **(+1)**, 49 **(+1)**, vi 3 **(+1)**, 16–17 **(+2)**, vii 10' **(+1)**	39	obv. ii 4 **(+1)**, iii 7 **(+1)**, 10 **(+1)**, 12 **(+1)**, 21 **(+1)**, 23 **(+1)**, 30–31 **(+2)**, iv 2 **(+1)**, 32 **(+1)**, v 7 **(+1)**, 13 (coll.) **(+1)**, 26–27 **(+2)** 28 (?) **(+1)**, vi 1–4 **(+4)**, 6 **(+1)**, 9 **(+1)**, 16' **(+1)**, vii 5 **(+1)**, viii 25' **(+1)**, 36 **(+1)**, rev. i 38' **(+1)**, ii 27' **(+1)**, 29' **(+1)**, 35'–36' **(+2)**, iii 5 **(+1)**, iv 27' **(+1)**, v 4 **(+1)**, 7 **(+1)**, 20–21 **(+2)**, 36 **(+1)**, vi 7 **(+1)**, 12 **(+1)**
	3	4	obv. ii 36 (CDLI) **(+1)**, vi 12 **(+1)**, 34 (CDLI) **(+1)**, vii 2 **(+1)**	5	obv. i 13 **(+1)**, iii 7 **(+1)**, iv 14 **(+1)**, rev. iii 7 **(+1)**, iv 41 **(+1)**
	4	15	obv. i 1 **(+11)**, rev. i 5 **(+3)**, 11 **(+1)**	13	obv. i 9 **(+1)**, ii 22 **(+1)**, rev. i 7 **(+5)**, 15 **(+6)**
	All Others	221	***AAICAB* I/1 Ashm. 1911-228** rev. i 15–17 **(+21)**; ***BCT* 2 288** obv. i 2 **(+1)**, 5 **(+1)**, 8 **(+1)**, 11 **(+1)**, 13 **(+1)**, 18 **(+1)**, 24 **(+1)**, 29 **(+1)**, ii 1 **(+1)**, 3 **(+1)**, 11 **(+1)**, 15 **(+1)**, 17 **(+1)**, 19 **(+1)**, 22 **(+1)**, 24 **(+1)**, 27 **(+1)**, iii 1 (coll.) **(+1)**, 7 **(+1)**, 12 **(+1)**, 14–15 **(+2)**, 18 **(+1)**, 26 **(+1)**, 29 (CDLI) **(+1)**, rev. iii 1 **(+1)**, 11 **(+1)**, iv 4 **(+1)**, 23 **(+1)**; **BDTNS 196758** obv. i 1 (coll.) **(+1)**, 7–8 **(+2)**, 10 **(+1)**, 17–18 **(+2)**, 22 **(+1)**, ii 6 **(+1)**, 8–9 **(+2)**, 15–16 **(+2)**, 19 **(+1)**, 21 **(+1)**, 24 **(+1)**; ***CST* 880** obv. i 14' **(+1)**, 18' **(+1)**, ii 6' **(+1)**, 8' **(+1)**, 11'–12' **(+2)**, 16' **(+1)**, rev. i 2 **(+1)**, 7 **(+1)**, 10 **(+1)**; ***CUSAS* 39 128** obv. i 1 **(+1)**, 13–14 **(+2)**, 19–20 **(+2)**, 22–23 **(+2)**, 29 **(+1)**, ii 5 **(+1)**, 7 **(+1)**, 17–18 **(+2)**, 24 **(+1)**, 30 **(+1)**, 36 **(+1)**, iii 2 **(+1)**, 4–5 **(+2)**, 9 **(+1)**, 16 **(+1)**, 20 **(+1)**, 23–24 **(+2)**, 29 **(+1)**, rev. i 2–3 **(+2)**, 17 **(+1)**, 29 **(+1)**, 36 **(+1)**; **130** obv. i 1 **(+1)**, 15 **(+1)**, 17 **(+1)**, ii 1–2 **(+2)**, 8 **(+1)**, 14 **(+1)**, 19 **(+1)**, rev. i 2 **(+1)**; **131** obv. i 1 **(+1)**, 11–12 **(+2)**, 16 **(+1)**, ii 1 **(+1)**, 5–6 **(+2)**, 11 **(+1)**	110	***AAICAB* I/1 Ashm. 1911-228** obv. i 13 **(+1)**, 15 **(+1)**,[501] ii 14 **(+1)**, 21–22 **(+2)**, rev. i 4 **(+1)**; ***BCT* 2 288** obv. i 22 **(+1)**, ii 20 **(+1)**, iii 25 **(+1)**, 27 **(+1)**, rev. iv 27 **(+1)**; **BDTNS 196758** obv. i 13 **(+1)**, 23 **(+1)**, ii 1–4 **(+4)**, 11 **(+1)**, 25 **(+1)**; ***CST* 880** obv. i 7'–8' **(+2)**, 15' **(+1)**, ii 4' (coll.) **(+1)**, 5' **(+1)**, 14' **(+1)**; ***CUSAS* 39 128** obv. i 18 **(+1)**, 21 **(+1)**, 24 **(+1)**, ii 1 **(+1)**, 11 **(+1)**, 13 **(+1)**, 33 **(+1)**, iii 1 **(+1)**, 13 **(+1)**, 36 **(+1)**, rev. i 6 **(+1)**, 10 **(+1)**, 15 **(+1)**, 21 **(+1)**, 30 **(+1)**, 33 **(+1)**, 38–40 **(+3)**; **130** obv. i 20 **(+1)**, ii 6 **(+1)**, 10 **(+1)**, 12 **(+1)**, 21–22 **(+2)**, rev. i 3 **(+1)**, 8–9 **(+2)**, 11 **(+1)**, 13–15 **(+3)**; **131** obv. ii 9 **(+1)**, rev. i 3 **(+1)**, 10–11 **(+2)**, 15 (coll.) **(+1)**, 17 **(+1)**, rev. ii 2 **(+1)**, 6 **(+1)**; ***Nisaba* 23 2** obv. ii 23 **(+1)**, 25 **(+1)**, iii 7–8 **(+2)**, 10–11 **(+2)**, 16 **(+1)**, iv 18 **(+1)**, 19–20 (?) **(+2)**, rev. i 3–4 (?) **(+2)**, ii 9' **(+6)**, iii 22' **(+1)**, 24'–25' **(+2)**, iv 1 **(+1)**; ***Organisation administrative, Diss.* 1, 217 7 Talon-Vanderroost 2** obv. i 17 **(+1)**, 19 **(+1)**, ii 14 **(+1)**

501. e$_2$ šuš$_3$-ta in the BDTNS transliteration here is a PN, possibly understood as E$_2$-sahar-ta.

Age-Bracket Designation and Allotment	Text(s)	Citizens		UN-il$_2$	
		Count	Citation(s)	Count	Citation(s)
AŠ$_c$ gan$_2$	All Others (cont.)		***CUSAS* 131** obv. ii 13 **(+1)**, rev. i 2 **(+1)**, 4 **(+1)**, ii 7–8 **(+2)**, 11–12 **(+2)**, 14 **(+1)**; **132** rev. ii 4 **(+1)**, 9 **(+4)**; ***Nisaba* 6 10** rev. i 6 (CDLI) **(+1)**; **23 2** obv. i 2 **(+1)**, 27 **(+1)**, ii 27 **(+1)**, iii 3–4 **(+2)**, 14–15 **(+2)**, 17 **(+1)**, 20 **(+1)**, 22 **(+1)**, 26 **(+1)**, 28 **(+1)**, 30 **(+1)**, iv 1 **(+1)**, 10–11 **(+2)**, 13–14 **(+2)**, 16 (?) **(+1)**, 24–25 **(+2)**, 28–29 **(+2)**, rev. ii 5' **(+13)**, iii 1 **(+1)**, 20' **(+1)**; ***Organisation administrative, Diss.* 1, 217 7 Talon-Vanderroost 2** obv. i 2 **(+1)**, 14–15 **(+2)**, ii 1–3 **(+3)**, 8 **(+1)**, 10 **(+1)**, 18 **(+1)**, rev. i 2–3 **(+2)**, 9–10 **(+2)**, 18 **(+1)**, 22 **(+1)**; ***OrSP* 47-49 382** obv. i 2–3 **(+2)**, 5 **(+1)**, 11 **(+1)**, 15 **(+1)**, 18 **(+1)**, 24 **(+1)**, ii 5 **(+1)**, 13 **(+1)**, 16 **(+1)**, 18 **(+1)**, iii 3 **(+1)**, 6 **(+1)**, 9 **(+1)**, 14 **(+1)**, 17 **(+1)**, 22 **(+1)**, 24 **(+1)**, rev. i 7 **(+1)**, 13 **(+1)**, 16 **(+1)**, 18 **(+1)**, ii 6 **(+1)**, 10 **(+1)**, 13 **(+1)**, 15 **(+1)**, 17 **(+1)**; **483** rev. ii 1 **(+1)**; ***Santag* 6 384** obv. iv 31' **(+1)**, rev. iv 35'–36' **(+2)**; ***Torino* 2 706** B obv. ii' 2' (CDLI) **(+1)**; ***YOS* 4 232** rev. ii 27 (coll.) **(+1)**		***Organisation administrative, Diss.* 1, 217 7 Talon-Vanderroost 2** obv. ii 23 **(+1)**, rev. i 1 **(+1)**, 5 **(+1)**, 7 **(+1)**, 16 **(+1)**; ***OrSP* 47-49 382** rev. iii 14 **(+4)**; **483** obv. ii 23 **(+2)**, 24 **(+3)**; ***Santag* 6 384** obv. iv 15' **(+1)**, v 14' **(+1)**, rev. iii 23'–24' **(+3)**; **Sigrist, *RA* 73, 115-120** rev. ii 33 **(+1)**
AŠ$_c$ 0.1.4	4	—		1	obv. i 18 **(+1)**
AŠ$_c$ 0.1.1 5 4	3	—		27	obv. i 24 (coll.) **(+1)**, ii 9 (coll.) **(+1)**, 40 **(+1)**, 44 (both coll.) **(+1)**, iii 19 **(+1)**, iv 1 (coll.) **(+1)**, 17 **(+1)**, 24 (coll.) **(+1)**, 26–28 **(+3)**, 32 **(+1)**, v 15 **(+1)**, 26 (coll.) **(+1)**, vi 39 **(+1)**, vii 3 (coll.) **(+1)**, 15 **(+1)**, 27 **(+1)**, 29 **(+1)**, 30 (coll.) **(+1)**, 32 **(+1)**, 36 **(+1)**, rev. ii 27'–29' (?) **(+3)**, iii 24 (coll.) **(+1)**, vi 31 **(+1)**
	All Others	1	***Santag* 6 384** obv. iv 21' **(+1)**	46	***BCT* 2 288** obv. i 7 **(+1)**, iv 2' (?) **(+1)**, rev. ii 7' (?) **(+1)**, 11' (?) **(+1)**; ***Nisaba* 6 10** rev. i 13 **(+3)**;[502] **26 17** obv. 1 **(+1)**, rev. 4 **(+1)**; ***OrSP* 47-49 382** rev. iii 15 **(+1)**; ***Santag* 6 383** rev.[?] ii' 4' (?) **(+1)**; **384** rev. iv 1' (coll.) **(+1)**, 14' **(+1)**, 31' **(+1)**, v 3'–4' **(+2)**, 10' (?) **(+1)**, 12' **(+1)**, 14' **(+1)**, 16' **(+1)**, 25' **(+1)**, 33' **(+1)**, vi 1' (coll.) **(+1)**, 24' (coll.) **(+1)**

502. 3 here should be 3(AŠ$_c$), but this cannot be visually confirmed. The same applies to the 17 and 3 in rev. i 9, 14, respectively.

Age-Bracket Designation and Allotment	Text(s)	Citizens		UN-il$_2$	
		Count	Citation(s)	Count	Citation(s)
AŠ$_c$ 0.1.1 5 4	All Others (cont.)				**Sigrist, *RA* 73, 115-120** rev. ii 34 **(+14)**; ***Torino* 2 706** A obv. ii' 1' **(+1)**, B rev. iii' 10' **(+1)**; ***YOS* 4 232** rev. ii 35 **(+6)**
AŠ$_c$ 0.1.1 5	4	—		85	obv. i 10 **(+9)**, 19 **(+15)**, 22 **(+8)**, ii 6 **(+3)**, 16 **(+20)**, 25 **(+1)**, rev. i 22 (CDLI) **(+29)**
AŠ$_c$ 0.1.0 tug$_2$	1	—		1	rev. vi 34 (?) **(+1)**
	3			8	rev. iii 25 (coll.) **(+1)**, iv 16 (CDLI) **(+1)**, 20 **(+1)**, 26 (CDLI) **(+1)**, 27–28 **(+2)**, 35 **(+1)**, v 2 **(+1)**
	All Others	3	***Santag* 6 384** obv. iv 22' **(+3)**	14	***Nisaba* 6 10** rev. i 14 (CDLI) **(+3)**; ***Santag* 6 384** rev. iii 25' **(+6)**, 27' **(+1)**, iv 28'–29' **(+2)**; **Sigrist, *RA* 73, 115-120** obv. ii 23 **(+1)**;[503] ***YOS* 4 232** rev. i 25 **(+1)**
AŠ$_c$ 0.1.0 4	1	—		1	rev. ix 16 **(+1)**
	3			1	rev. iv 23 **(+1)**[504]
	All Others			25	***BCT* 2 288** rev. iii 20 **(+1)**; ***CUSAS* 39 128** obv. iii 30 (CDLI) **(+1)**; **132** rev. ii 18 **(+3)**; ***Organisation administrative, Diss.* 1, 230 12 Talon-Vanderroost 5** obv. i 1 **(+1)**; ***OrSP* 47-49 483** obv. ii 25 **(+11)**, rev. ii 8 **(+3)**; ***Santag* 6 383** rev.? ii' 8'–9' **(+2)**; **384** rev. iii 13' **(+1)**, v 41'–42' (both coll.) **(+2)**; ***Torino* 2 706** A obv. ii' 2'–3' **(+2)**, 5' **(+1)**, iii' 5' **(+1)**, B rev. ii' 4' **(+1)**, 6' **(+1)**, iii' 5' **(+1)**; ***YOS* 4 232** rev. i 8 **(+1)**, 19 **(+1)**, 21 **(+1)**
AŠ$_c$ 0.1.0	4	—		5	obv. i 11 **(+1)**, 23 **(+1)**, ii 11 **(+1)**, 17 **(+2)**
AŠ$_c$ (gan$_2$)	2	15	obv. ii 15 **(+1)**, iii 18 (?) **(+1)**,[505] 28 **(+1)**, iv 39 (coll.) **(+1)**, vii 30' (?) **(+1)**, viii 13 (?) **(+1)**, rev. i 2' (?) **(+1)**, 34' **(+1)**, ii 32'–34' **(+3)**, iii 2 **(+1)**, 10 **(+1)**, 30' **(+1)**, iv 19 (?) **(+1)**	4	obv. iv 33 **(+1)**, vi 10 **(+1)**, rev. ii 28' **(+1)**, v 8 **(+1)**

503. Rev. ii 35 (translit. mine) reads: šu-nigin$_2$ 2(AŠ$_c$) guruš 0.1.0 tug$_2$, but only one such individual is apparent in this text (see obv. ii 23). The lack of a distribute -ta in rev. ii 35 may indicate that 2(AŠ$_c$) should be AŠ$_c$.

504. While this line is difficult to collate, AŠ$_c$ 0.1.0 4 is visible.

505. See n. 382.

Age-Bracket Designation and Allotment	Text(s)	Citizens		UN-il$_2$	
		Count	Citation(s)	Count	Citation(s)
½$_c$ gan$_2$	2	7	rev. vi 20 **(+1)**, 25 **(+1)**, 28 **(+1)**, 31 **(+1)**, vii 3' **(+1)**, 5'–6' (all coll.) **(+2)**	—	
	3	69	obv. i 17 **(+1)**, 21 **(+1)**, 38–39 **(+2)**, 42 (coll.) **(+1)**, ii 3 (coll.) **(+1)**, 12 **(+1)**, 17 **(+1)**, 19 **(+1)**, 21–22 **(+2)**, 25 **(+1)**, 27 **(+1)**, 30 **(+1)**, 32 **(+1)**, 46 **(+1)**, iii 2 **(+1)**, 18 **(+1)**, 21–22 **(+2)**, 24 **(+1)**, 26–27 **(+2)**, 30 **(+1)**, 32–33 **(+2)**, iv 5 **(+1)**, 11 **(+1)**, 22 **(+1)**, 34 **(+1)**, v 1–2 **(+2)**, 4 **(+1)**, 8 **(+1)**, 11 **(+1)**, 21 **(+1)**, 23 **(+1)**, 28 **(+1)**, 33 (?) **(+1)**,[506] 34 **(+1)**, vi 4 (coll.) **(+1)**, 19 **(+1)**, 27 **(+1)**, 40 **(+1)**, vii 21–22 **(+2)**, 24 **(+1)**, viii 6' (?) **(+1)**, 19' **(+1)**, 21' **(+1)**, 22' (?) (coll.) **(+1)**, 23' **(+1)**, 27' **(+1)**, 29' **(+1)**, 34' **(+1)**, 37' **(+1)**, 39' **(+1)**, 40' **(+1)**,[507] 44' **(+1)**, 46' (coll.) **(+1)**, rev. i 1' (?) **(+1)**, 3' (?) **(+1)**, ii 2'–4' **(+3)**, 7' **(+1)**, 12' **(+1)**, 32' (CDLI) **(+1)**, 34' (?) **(+1)**		
	4	13	obv. i 5 **(+8)**, rev. i 12 (coll.) **(+1)**, 20 (CDLI) **(+4)**		
	All Others	123	***BCT* 2 288** rev. iii 2 **(+1)**, 7 (both CDLI) **(+1)**, 16 **(+1)**, 18 (coll.) **(+1)**, iv 1 **(+1)**, 14 (coll.) **(+1)**; ***CUSAS* 39 130** obv. i 11 **(+1)**; **132** rev. ii 11 (coll.) **(+1)**; ***Nisaba* 6 10** rev. i 9 (CDLI) **(+17)**; **26 17** rev. 14 **(+9)**; ***OrSP* 47-49 483** rev. ii 4 **(+1)**; ***Santag* 6 384** obv. iv 20' **(+30)**, v 1'–2' **(+2)**, 5' **(+1)**, rev. i 4' (?) **(+1)**, iv 47' **(+17)**, vi 5' (?) **(+1)**, 13' (?) **(+1)**, 21' (?) **(+1)**, 29' (?) **(+1)**; **Sigrist, *RA* 73, 115-120** obv. i 15 **(+1)**, 25–26 **(+2)**, rev. i 6–7 **(+2)**, 16 **(+1)**, 20 **(+1)**, ii 17 **(+1)**; ***Torino* 2 706** A obv. i' 2' (?) **(+1)**, ii' 8' (CDLI) **(+1)**, iii' 12'–13' **(+2)**, iv' 2' **(+1)**, C obv. ii' 2' (all coll.) **(+1)**, B rev. i' 3' **(+1)**,[508] ii' 12' **(+1)**, iii' 2' **(+1)**, 7' **(+1)**, A rev. i' 2' **(+1)**, ii' 1' **(+1)**, 4' **(+1)**, 7' **(+1)**; ***YOS* 4 232** rev. ii 28 **(+11)**		
½$_c$ 0.1.1 5	4	6	rev. i 21 **(+6)**	—	

506. See n. 392 for the possible notation here.

507. See PIN 120.

508. B rev. i' 3' is difficult to collate, but the notation and allotment are clearly ½$_c$ gan$_2$. Note that the remaining lines from *Torino* 2 706 in this cell are collated.

Age-Bracket Designation and Allotment	Text(s)	Citizens		UN-il$_2$	
		Count	Citation(s)	Count	Citation(s)
AŠ gan$_2$ … šeš-tab-ba	1	15	obv. v 4 **(+1)**, viii 31 **(+1)**, rev. i 25 **(+1)**, ii 42 **(+1)**, iv 20' **(+1)**, vi 11 **(+1)**, vii 18 **(+1)**, 23 **(+1)**, 25 **(+1)**, viii 12 **(+1)**, 25 **(+1)**, 47 **(+1)**,[509] ix 6 **(+1)**, 18 **(+1)**, 42 (coll.) **(+1)**	—	
	3	3	obv. ii 37 **(+1)**, vi 13 **(+1)**, 36 **(+1)**		
	4	4	obv. i 2 **(+4)**	1	obv. ii 23 **(+1)**
	All Others	17	***BCT* 2 288** rev. iii 12 **(+1)**, iv 5 **(+1)**, 36 (?) **(+1)**; **BDTNS 196758** obv. i 3 **(+1)**; ***CST* 880** obv. i 2' (CDLI) **(+1)**; ***CUSAS* 39 130** obv. i 6 (coll.) **(+1)**; **131** obv. i 5 **(+1)**; **132** rev. ii 5 **(+1)**, 10 **(+4)**; ***Nisaba* 23 2** obv. iv 3 **(+1)**, rev. iii 5 **(+1)**; ***Organisation administrative, Diss.* 1, 217 7 Talon-Vanderroost 2** obv. i 6 **(+1)**; **Sigrist, *RA* 73, 115-120** obv. i 11 **(+1)**, 23 (coll.) **(+1)**	1	***Santag* 6 384** obv. iv 16' **(+1)**
AŠ gan$_2$ … aga$_3$-us$_2$	1	9	obv. iii 2' **(+1)**, v 10 **(+1)**, vi 40' (?) **(+1)**,[510] viii 32 **(+1)**, rev. i 18 **(+1)**, 20 **(+1)**, iii 1' (?) **(+1)**, iv 24' **(+1)**, vi 15 **(+1)**	1	rev. i 27 (?) **(+1)**
	All Others	5	***CUSAS* 39 128** obv. i 7 **(+1)**; **130** obv. i 10 **(+1)**; **131** obv. i 7 **(+1)**; ***Nisaba* 23 2** obv. iv 7 **(+1)**; ***Organisation administrative, Diss.* 1, 217 7 Talon-Vanderroost 2** obv. i 7 **(+1)**	1	**BDTNS 196758** obv. i 5 (coll.) **(+1)**
AŠ 0.0.4 tug$_2$	3	1	rev. iv 39 **(+1)**	22	obv. ii 41 **(+1)**, iii 8 **(+1)**, 15 **(+1)**, vi 16 **(+1)**, rev. iii 9 **(+1)**, 11–12 **(+2)**, 19–21 **(+3)**, 36 (?) **(+1)**, iv 11 **(+1)**, 13–15 **(+3)**, 17 **(+1)**, 25 **(+1)**, 30 **(+1)**, 37 **(+1)**, 46 (?) **(+1)**, v 1 **(+1)**, 3 **(+1)**

509. This line is difficult to collate, but the notation and allotment are assumed to be AŠ gan$_2$.

510. Note that this line is renumbered with ' and see *CUSAS* 39 131 obv. i 7.

Age-Bracket Designation and Allotment	Text(s)	Citizens		UN-il$_2$	
		Count	Citation(s)	Count	Citation(s)
AŠ 0.0.4 tug$_2$	All Others	4	***OrSP* 47-49 483** obv. ii 19 **(+2)**; ***Santag* 6 384** obv. iv 23' **(+2)**	48	***CUSAS* 39 132** rev. ii 19 (coll.) **(+1)**; **136** rev. 15 (CDLI) **(+11)**;[511] ***Nisaba* 6 10** rev. i 16 (?) **(+1)**;[512] ***Organisation administrative, Diss.* 1, 230 12 Talon-Vanderroost 5** rev. ii 2 **(+2)**;[513] ***OrSP* 47-49 483** obv. ii 26 **(+2)**; ***Santag* 6 384** rev. iii 28' **(+23)**,[514] v 9' (?) **(+1)**; **Sigrist, *RA* 73, 115-120** rev. i 27 **(+1)**, ii 7 **(+1)**, 18 **(+1)**; ***YOS* 4 232** rev. ii 37 **(+4)**
AŠ 0.0.4 3	All Others	1	***CUSAS* 39 140** obv. iii 11' **(+1)**	—	
AŠ 0.0.4	2	—		1	obv. vi 26' **(+1)**
AŠ 0.0.3 tug$_2$	1	—		1	rev. iii 34' **(+1)**
	3			26	obv. iii 9 **(+1)**, iv 18 **(+1)**, vi 6 **(+1)**, 7 (?) **(+1)**,[515] 9 **(+1)**, rev. iii 13 (?) **(+1)**, 14 **(+1)**, 16–17 **(+2)**, 22–23 **(+2)**, 32 **(+1)**, iv 7–8 (?) **(+2)**, 22 **(+1)**, 47–48 (?) **(+2)**, v 4–5 **(+2)**, 14 **(+1)**, 23–24 **(+2)**, 33 **(+1)**, vi 21 **(+1)**, 24–25 **(+2)**
	All Others	3	***BCT* 2 288** obv. iii 28 (coll.) **(+1)**; ***OrSP* 47-49 483** obv. ii 20 **(+2)**	103	***CUSAS* 39 128** obv. iii 31 (?) **(+1)**; **134** rev. ii 2 **(+21)**; **136** rev. 16 (CDLI) **(+16)**; **140** obv. i 20' (CDLI) **(+1)**, ii 3' (?) **(+1)**, 4' (coll.) **(+1)**, 7' **(+1)**, 9'–10' **(+2)**, 13'–14' **(+2)**, 16' **(+1)**, iii 17'–18' **(+2)**, 21' **(+1)**, rev. i 5–6 **(+2)**, 10 **(+1)**, 13–14 **(+2)**, 17–18 **(+2)**, 21 **(+1)**; ***Organisation administrative, Diss.* 1, 230 12 Talon-Vanderroost 5** rev. ii 3 **(+17)**; ***OrSP* 47-49 483** obv. ii 27 **(+1)**, rev. ii 10 **(+2)**; ***Santag* 6 384** rev. iii 29' **(+18)**

511. All the individuals counted in *CUSAS* 39 131 rev. 15–17 were allotted garments in addition to barley.

512. Rev. i 17 is transliterated as šu-nigin$_2$ 1 UN 0.0.5 1 tug$_2$, which corresponds to obv. ii 18: 0.0.4 1 tug$_2$ UN Engar-zi. While these lines cannot be visually confirmed, rev. i 17 could be restored as šu-nigin$_2$ 1(AŠ) UN 0.0.4 1 tug$_2$, but this is not a certain collation.

513. 2 here should be 2(AŠ), but this cannot be visually confirmed. The same applies to the 16 in rev. ii 3, which should actually be 17(AŠ) (see Vanderroost 2013, 1:230 n. 574).

514. While the individuals in this line are counted with DIŠ signs rather than AŠ signs as expected, the individuals in the following line are counted with AŠ signs as expected. The lack of a distributive -ta in rev. iii 28' is further evidence that this line has minor errors.

515. While tug$_2$ is visible in the lower margin, it is difficult to determine whether the barley allotment is 0.0.4 or 0.0.3.

Age-Bracket Designation and Allotment	Text(s)	Citizens		UN-il$_2$	
		Count	Citation(s)	Count	Citation(s)
AŠ 0.0.3 tug$_2$	All Others (cont.)				**Sigrist, *RA* 73, 115-120** obv. i 17 **(+1)**, ii 5 **(+1)**, 13 **(+1)**, 17 (coll.) **(+1)**, rev. i 2 **(+1)**, 28 **(+1)**; ***YOS* 4 232** rev. ii 38 **(+1)**
AŠ 0.0.3	4	—		1	obv. i 24 **(+1)**
	All Others	1	***CUSAS* 39 128** obv. i 31 **(+1)**	—	
AŠ 0.0.2 tug$_2$	3	—		17	rev. v 15 **(+1)**, 18 **(+1)**, 21 **(+1)**, 25 **(+1)**, 27 **(+1)**, 31 **(+1)**, 35 **(+1)**, 37 **(+1)**, 40 **(+1)**, 42 **(+1)**, vi 9 (?) **(+1)**, 11 **(+1)**, 13 **(+1)**, 15 **(+1)**, 17 **(+1)**, 19 **(+1)**, 23 **(+1)**
	All Others			4	***CUSAS* 39 136** rev. 17 (CDLI) **(+1)**; **140** obv. ii 20' **(+1),** iii 13'–14' **(+2)**
(dumu) AŠ 0.0.2 2	1	2	rev. iii 12'–13' **(+2)**	3	obv. iii 32' **(+1)**, iv 30' **(+1)**, rev. ix 31 **(+1)**
	3	—		8	obv. ii 42 (coll.) **(+1)**, iii 10 **(+1)**, iv 2 **(+1)**, 19 (coll.) **(+1)**, 29 (coll.) **(+1)**, v 16 **(+1)**, vii 11 **(+1)**, rev. iii 33 (both coll.) **(+1)**
	All Others	2	***Santag* 6 384** obv. iv 24' **(+2)**	24	***AAICAB* I/1 Ashm. 1911-228** rev. ii 4 (coll.) **(+2)**; ***BCT* 2 288** rev. ii 5' (?) **(+1)**; ***CST* 880** obv. i 11' **(+1)**; ***CUSAS* 39 128** obv. iii 32 (?) **(+1)**, **130** rev. i 4 (coll.) **(+1)**; **132** rev. ii 20 (coll.) **(+2)**; **140** obv. ii 17'–19' **(+3)**, 22' **(+1)**, iii 7'–8' **(+2)**; ***Nisaba* 23 2** rev. iv 2 (?) **(+1)**; ***Santag* 6 384** rev. v 26' **(+1)**; **Sigrist, *RA* 73, 115-120** obv. ii 22 **(+1)**, rev. i 14 **(+1)**, 29 **(+1)**, 35 **(+1)**, ii 9 **(+1)**; ***YOS* 4 232** le. ed. i 1 **(+3)**
(dumu) AŠ 0.0.2	4	—		15	obv. i 20 **(+1)**, ii 7 **(+1)**, 13 **(+1)**, 18 **(+12)**
(dumu) AŠ (gan$_2$)	1	32	obv. iv 15' **(+1)**, v 5 **(+1)**, 32 **(+1)**, 45 **(+1)**, vii 8 **(+1)**, 26 **(+1)**, 33 **(+1)**, viii 29 **(+1)**, 33 **(+1)**, ix 11 **(+1)**, 21 **(+1)**, rev. i 26 **(+1)**, 33 **(+1)**, ii 20 **(+1)**, 44 **(+1)**, iv 21'–22' **(+2)**, 35'–36' **(+2)**, vi 8 **(+1)**, 12 **(+1)**, 31 **(+1)**, vii 22 **(+1)**, 29 **(+1)**, 42 **(+1)**, 46 **(+1)**, viii 1 **(+1)**, 15 **(+1)**, 21 **(+1)**, 26 **(+1)**, ix 7 **(+1)**, 11 (?) **(+1)**[516]	11	obv. vii 21 **(+1)**, 40 **(+1)**, 45 (?) **(+1)**,[517] rev. ii 14 **(+1)**, 43 **(+1)**,[518] iii 27' (?) **(+1)**, iv 42' **(+1)**, v 9 **(+1)**, 36 **(+1)**, 38–39 **(+2)**

516. See *BCT* 2 288 rev. iii 17.

517. See *CUSAS* 39 131 rev. i 16.

518. [ga]n$_2$ could be [a]b or [am]a.

Age-Bracket Designation and Allotment	Text(s)	Citizens		UN-il$_2$	
		Count	Citation(s)	Count	Citation(s)
(dumu) AŠ (gan$_2$)	2	12	obv. iii 4 **(+1)**, 19 **(+1)**, iv 39 (coll.) **(+1)**, v 34 (?) **(+1)**, viii 14 **(+1)**, 24' **(+1)**, rev. ii 22' **(+1)**, iii 11 **(+1)**, v 19 **(+1)**, vi 26 **(+1)**, 29 **(+1)**, vii 11' **(+1)**	2	obv. ii 5 **(+1)**, rev. i 39' (?) **(+1)**
	3	10	obv. i 22 **(+1)**, 30 **(+1)**, ii 4 **(+1)**,[519] 13 **(+1)**, 20 **(+1)**, 23 (coll.) **(+1)**, 26 **(+1)**, v 29 **(+1)**, viii 7' **(+1)**, 41' **(+1)**	3	obv. i 14 (?) **(+1)**,[520] iv 15 **(+1)**, rev. iii 8 **(+1)**
	4	3	obv. i 6 **(+3)**	1	rev. i 18 (coll.) **(+1)**
	All Others	69	***AAICAB* I/1 Ashm. 1911-228** obv. i 4 (coll.) **(+1)**, ii 12 **(+1)**; ***BCT* 2 288** obv. i 3 **(+1)**, 19 **(+1)**, 25 **(+1)**, rev. iii 13 **(+1)**, 17 **(+1)**, iv 15 **(+1)**, 37 **(+1)**, 40 **(+1)**; **BDTNS 196758** obv. i 9 **(+1)**, 19 **(+1)**, ii 17 **(+1)**; ***CST* 880** obv. i 3' (coll.) **(+1)**, 19' **(+1)**, rev. i 3 **(+1)**; ***CUSAS* 39 128** obv. i 2 **(+1)**, 6 **(+1)**, 15–16 **(+2)**, ii 8 **(+1)**, 25 **(+1)**, iii 6 **(+1)**, 25 **(+1)**, rev. i 4 **(+1)**, 18 **(+1)**; **130** obv. i 7 **(+1)**, 16 **(+1)**, 18 **(+1)**; **131** obv. i 13 **(+1)**, ii 14 **(+1)**, rev. i 5 **(+1)**; **132** obv. i 18 **(+1)**; ***Nisaba* 6 10** rev. i 7 **(+1)**; **23 2** obv. i 3 **(+1)**, 9 **(+1)**, 28 **(+1)**, iv 2 **(+1)**, rev. ii 2' (?) **(+1)**, iii 2 **(+1)**, 6 **(+1)**; ***Organisation administrative, Diss.* 1, 217 7 Talon-Vanderroost 2** obv. i 4 **(+1)**, 8 **(+1)**, ii 11 **(+1)**, 19 **(+1)**; ***OrSP* 47-49 382** obv. i 19 **(+1)**, 25 (?) **(+1)**,[521] ii 6 **(+1)**, 17 **(+1)**, 19 **(+1)**, iii 7 **(+1)**, rev. i 8 **(+1)**, 19 **(+1)**; ***Santag* 6 384** obv. iv 25'–27' (?) **(+5)**, v 3' **(+1)**;[522] **Sigrist, *RA* 73, 115-120** obv. i 12 **(+1)**, rev. i 8 **(+1)**, 21 **(+1)**; ***Torino* 2 706** A obv. iv' 3' (coll.) **(+1)**, B rev. iii' 3' **(+1)**, A rev. i' 4' (?) **(+1)**, ii' 2' **(+1)**; ***YOS* 4 232** obv. i 16 **(+1)**, rev. ii 11 **(+1)**,[523] 17 (?) **(+1)**[524]	8	***AAICAB* I/1 Ashm. 1911-228** rev. ii 3 **(+1)**; **BDTNS 196758** obv. ii 12 **(+1)**; ***CUSAS* 39 128** obv. ii 14 **(+1)**, rev. i 22 **(+1)**; **131** rev. i 12 **(+1)**, 16 **(+1)**; ***Nisaba* 23 2** obv. iii 12 **(+1)**; **Sigrist, *RA* 73, 115-120** obv. ii 3 **(+1)**

519. See obv. ii 5 (coll.).

520. See n. 181 for a possible restoration of part of this line.

521. See *BCT* 2 288 obv. i 19.

522. Koslova (2004, 58 n. 70) transliterates obv. v 4' as: "**dumu u$_3$-ma-ni [x] ba-uš$_2$-me**."

523. See rev. ii 12 (coll.).

524. See p. 113 for a discussion on this individual.

Age-Bracket Designation and Allotment	Text(s)	Citizens		UN-il$_2$	
		Count	Citation(s)	Count	Citation(s)
DIŠ 0.0.2 2	1	5	obv. iv 16'–17' (both CDLI) **(+2)**, v 26 **(+1)**, rev. iii 14' (?) **(+1)**,[525] vi 20 (coll.) **(+1)**	5	obv. ii 12' (CDLI) **(+1)**, ix 37 (?) **(+1)**,[526] 38–39 (both coll.) **(+2)**, rev. vi 35 **(+1)**
	3	—		3	obv. vii 12 **(+1)**, rev. iii 3 (both coll.) **(+1)**, 34 **(+1)**
	All Others	1	***OrSP* 47-49 483** obv. ii 21 **(+1)**	16	***CUSAS* 39 130** rev. i 5 (coll.) **(+1)**, 16 **(+1)**; **132** obv. i 22 (?) **(+1)**;[527] ***Organisation administrative, Diss.* 1, 217 7 Talon-Vanderroost 2** rev. i 11–13 **(+3)**; ***OrSP* 47-49 483** obv. ii 28 **(+1)**, rev. ii 11 **(+2)**; ***Santag* 6 384** rev. iii 30' **(+3)**; **Sigrist, *RA* 73, 115-120** obv. i 18 **(+1)**, rev. i 32 **(+1)**; ***YOS* 4 232** le. ed. i 2 **(+2)**
DIŠ 0.0.2	4	—		1	obv. i 12 **(+1)**
DIŠ 0.0.1 5 1 ½	1	2	obv. v 40 **(+1)**, vi 20 (both CDLI) **(+1)**	3	obv. ii 13' (CDLI) **(+1)**, iv 31' (?) **(+1)**, rev. vi 36 (?) **(+1)**
	3	—		9	obv. ii 10 **(+1)**, v 17–18 (all coll.) **(+2)**, vii 13 **(+1)**,[528] 17 (coll.) **(+1)**, 19 **(+1)**, viii 18' (coll.) **(+1)**, rev. vi 32–33 **(+2)**
	All Others	2	***CUSAS* 39 132** rev. ii 14 **(+1)**; ***OrSP* 47-49 483** rev. i 30 **(+1)**	48	***CST* 880** obv. i 12' **(+1)**; ***CUSAS* 39 128** obv. iii 33 (coll.) **(+1)**; **132** rev. ii 21 (CDLI) **(+3)**; **134** rev. ii 4 **(+3)**; **140** rev. i 1 (coll.) **(+1)**; ***Organisation administrative, Diss.* 1, 230 12 Talon-Vanderroost 5** rev. ii 4 **(+1)**; ***OrSP* 47-49 483** obv. ii 29 **(+3)**, rev. ii 12 **(+1)**; ***Nisaba* 6 10** obv. i 19 **(+1)**, 25 **(+1)**, ii 5 (all coll.) **(+1)**;[529] **23 2** rev. iv 3 **(+1)**;[530] **26 17** obv. 2 (coll.) **(+1)**; ***Santag* 6 384** rev. iii 31' **(+4)**, iv 2' **(+1)**, 15' **(+1)**, v 5'–6' (?) **(+2)**, 13' **(+1)**, 15' **(+1)**, 27' **(+1)**, vi 2' (coll.) **(+1)**;

525. 0.1.2 in the BDTNS transliteration should be DIŠ 0.0.2. While it is not certain if there was a wool allotment, these allotments were generally included in this text.

526. See *Organisation administrative, Diss.* 1, 217 7 Talon-Vanderroost 2 rev. i 11.

527. See rev. ii 20 (coll.).

528. This line is difficult to collate, but the notation and allotments are visible.

529. There appears to be three UN-il$_2$ children notated with DIŠ and receiving 0.0.1 5 1 ½ rather than two (see rev. i 17).

530. This line is challenging to collate (the sila$_3$ sign is probably not present), but the notation and allotments should be DIŠ 0.0.1 5 1 ½.

Age-Bracket Designation and Allotment	Text(s)	Citizens		UN-il$_2$	
		Count	Citation(s)	Count	Citation(s)
DIŠ 0.0.1 5 1 ½	All Others (cont.)				**Sigrist, *RA* 73, 115-120** le. ed. i 2 **(+7)**;[531] **706** A obv. ii' 4' **(+1)**, C obv. ii' 1' (coll.) **(+1)**, B rev. ii' 5' **(+1)**; ***YOS* 4 232** le. ed. i 3 **(+7)**[532]
DIŠ 0.0.1 5	4	1	obv. ii 14 **(+1)**	17	obv. i 13 (CDLI) **(+5)**, ii 2 (?) **(+4)**, 8 (coll.) **(+1)**, 19 **(+6)**, rev. i 2 (?) **(+1)**
DIŠ 0.0.1 1	3	—		1	obv. iv 25 **(+1)**
	All Others			6	***Nisaba* 26 17** obv. 3 (coll.) **(+1)**; ***Santag* 6 384** rev. iii 32' **(+1)**, vi 3' (coll.) **(+1)**; **Sigrist, *RA* 73, 115-120** le. ed. i 3 (coll.) **(+3)**
DIŠ 0.0.1	4	—		6	obv. ii 3 (CDLI) **(+1)**, 9 **(+2)**, rev. i 26 (?) **(+3)**
DIŠ (gan$_2$)	1	70	obv. iii 3' **(+1)**, 16'–17' **(+2)**, 20' **(+1)**, v 6–8 **(+3)**, 14 **(+1)**, 33–34 **(+2)**, 46–47 **(+2)**, vi 3 **(+1)**, 7 **(+1)**, 11 **(+1)**, 27–28 **(+2)**, vii 2–3 **(+2)**,[533] 9 **(+1)**, 18 **(+1)**, 23 **(+1)**, 27–28 **(+2)**, 34 **(+1)**, viii 8 **(+1)**, 14–16 **(+3)**, 26–28 **(+3)**, 34–35 **(+2)**, ix 14 **(+1)**, 22 **(+1)**, rev. i 7–10 **(+4)**, 17 (?) **(+1)**, 19 **(+1)**, 24 (?) **(+1)**,[534] 34 (coll.) **(+1)**, 43 **(+1)**, ii 9 **(+1)**, 23 **(+1)**, 41 **(+1)**, 45 **(+1)**, iii 5' **(+1)**, 30' **(+1)**, vi 9 **(+1)**, 13 **(+1)**, 16 **(+1)**, 22 **(+1)**, 25 **(+1)**, 32 **(+1)**, 41 **(+1)**, vii 5 **(+1)**, 19 **(+1)**, 26 **(+1)**, 30 **(+1)**, 43 **(+1)**, 48 **(+1)**, viii 2–3 **(+2)**, 16–18 **(+3)**, 22 **(+1)**	26	obv. ii 5' (?) **(+1)**, iii 27' **(+1)**, 33' **(+1)**, v 20 **(+1)**, vii 41 **(+1)**, 44 **(+1)**, viii 2–3 **(+2)**, 6 **(+1)**, 44 **(+1)**, ix 17–18 **(+2)**, 31 **(+1)**, 33–34 (?) **(+2)**,[535] 43 **(+1)**, rev. i 37 **(+1)**, ii 1 **(+1)**,[536] 30–31 **(+2)**, iii 36' **(+1)**, iv 43' **(+1)**, v 11 **(+1)**, vii 8 **(+1)**, ix 22–23 **(+2)**

531. See Sigrist 1979–1980, 120.

532. See Studevent-Hickman 2006, 2:440.

533. See *CUSAS* 39 131 obv. i 7–9.

534. See BDTNS 196758 obv. i 2.

535. See *CST* 880 obv. i 11'–12'; *Organisation administrative, Diss.* 1, 217 7 Talon-Vanderroost 2 rev. i 8.

536. See BDTNS 196758 obv. i 24.

Age-Bracket Designation and Allotment	Text(s)	Citizens		UN-il$_2$	
		Count	Citation(s)	Count	Citation(s)
DIŠ (gan$_2$)	2	29	obv. ii 13 **(+1)**,[537] iii 5 **(+1)**, 29 **(+1)**, iv 22 **(+1)**, v 35 (?) **(+1)**, vii 22' (coll.) **(+1)**, viii 9–11 **(+3)**, rev. i 5' **(+1)**, 16' **(+1)**, 24'–25' **(+2)**, iii 3 **(+1)**, 13–14 **(+2)**, 31' **(+1)**, 39' **(+1)**, iv 20 (?) **(+1)**, 23'–25' **(+3)**, v 30 **(+1)**, 50 (?) **(+1)**, vi 4–5 **(+2)**, 22 (?) **(+1)**, vii 12'–13' **(+2)**	8	obv. ii 6 **(+1)**, iii 11 **(+1)**, 37 **(+2)**, v 8–10 **(+3)**, 14 **(+1)**
	3	30	obv. i 31–33 **(+3)**, 43 **(+1)**, ii 5 (coll.) **(+1)**, 14 **(+1)**, 18 **(+1)**, 28 **(+1)**, 31 **(+1)**, 33–34 **(+2)**, iii 3 **(+1)**, 23 **(+1)**, 28–29 (?) **(+2)**, iv 6–8 **(+3)**, v 5–6 **(+2)**, 24 **(+1)**, vi 35 **(+1)**, 37 **(+1)**, viii 8' **(+1)**, 25' **(+1)**, 28' (?) **(+1)**, 30' (?) **(+1)**, 31' (?) **(+1)**, 35' **(+1)**, 42' **(+1)**	—	
	4	13	obv. i 3 **(+6)**, 7 **(+3)**, rev. i 6 **(+3)**, 1 (?) **(+1)**	6	obv. ii 24 **(+1)**, rev. i 8 **(+2)**, 16 (?) **(+3)**
	All Others	156	***BCT* 2 288** obv. i 6 **(+1)**, 9 **(+1)**, 14–16 **(+3)**, 20 **(+1)**, 26–27 **(+2)**, ii 4–7 (?) **(+4)**, 12–13 **(+2)**, 18 **(+1)**, 23 **(+1)**, 25 **(+1)**, iii 2 **(+1)**, 8–10 **(+3)**, 16 **(+1)**, 20–23 **(+4)**, 30 **(+1)**, 31 **(+1)**, rev. iii 8 (CDLI) **(+1)**, iv 2 **(+1)**, 25 **(+1)**, 38–39 **(+2)**; **BDTNS 196758** obv. i 2 **(+1)**, 11 **(+1)**, 20 **(+1)**, ii 7 **(+1)**, 20 (?) **(+1)**; ***CST* 880** rev. i 4 **(+1)**, 8 **(+1)**; ***CUSAS* 39 128** obv. i 3–4 **(+2)**, 8 **(+1)**, 30 **(+1)**, ii 6 **(+1)**, 19–20 **(+2)**, 26–27 **(+2)**, 31 **(+1)**, 37 **(+1)**, 38 (coll.) **(+1)**, iii 10–11 **(+2)**, 17–18 **(+2)**, 26–27 **(+2)**, rev. i 19 **(+1)**,[538] 37 **(+1)**; **130** obv. i 8 **(+1)**, ii 3–4 **(+2)**, 9 **(+1)**, 17 **(+1)**, 20 **(+1)**; **131** obv. i 2–4 **(+3)**, 9 **(+1)**, 14 **(+1)**, ii 7 **(+1)**, 15–16 **(+2)**, rev. i 6 **(+1)**; **132** obv. i 2 **(+1)**, 8 **(+1)**, 19 **(+1)**; ***Nisaba* 6 10** obv. i 3 **(+1)**; **23 2** obv. i 4–7 **(+4)**, 10–11 **(+2)**, iii 5 **(+1)**, 27 **(+1)**, iv 4–5 **(+2)**, rev. ii 3' (?) **(+2)**, 7' **(+1)**, iii 3 (?) **(+1)**,[539] 7 (?) **(+1)**, 21' (?) **(+1)**, 23' (?) **(+1)**; **26 17** obv. 8–11 **(+4)**, rev. 2 **(+1)**	43	***BCT* 2 288** obv. i 23 **(+1)**, ii 21 **(+1)**, rev. iv 28–29 **(+2)**; **BDTNS 196758** obv. i 14 **(+1)**, 24 **(+1)**; ***CST* 880** obv. i 9' **(+1)**; ***CUSAS* 39 128** obv. i 25–27 **(+3)**, ii 12 **(+1)**, 15 **(+1)**, 34 **(+1)**, iii 37 **(+1)**, rev. i 7 **(+1)**, 11–12 **(+2)**, 23 **(+1)**, 25 **(+1)**; **130** obv. i 21–22 **(+2)**, ii 23 (?) **(+1)**, rev. i 6 **(+1)**, 12 **(+1)**, 17 **(+1)**; **131** obv. ii 10 **(+1)**, rev. i 13 **(+1)**, ii 3–4 **(+2)**; ***Nisaba* 23 2** obv. ii 24 **(+1)**, iii 9 **(+1)**, rev. ii 11' (?) **(+1)**; ***Organisation administrative, Diss.* 1, 217 7 Talon-Vanderroost 2** obv. i 20 **(+1)**, ii 15–16 **(+2)**, rev. i 6 **(+1)**, 8 **(+1)**, 17 **(+1)**; ***OrSP* 47-49 382** rev. iii 16 **(+2)**; **483** obv. i 6 **(+1)**; ***Santag* 6 384** obv. iv 17' **(+1)**, rev. iii 21' (?) **(+1)**

537. While Šaramutum's father was deceased (see *CUSAS* 39 129 obv. ii 12 [coll.]), he could be supported by his uncle Abbagena's šuku land (see *CUSAS* 39 129 obv. ii 14).

538. See rev. i 20 (coll.).

539. For rev. iii 3, 7, 21', 23', see *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 rev. vi 9, 13, vii 5, 8.

Age-Bracket Designation and Allotment	Text(s)	Citizens		UN-il$_2$	
		Count	Citation(s)	Count	Citation(s)
DIŠ (gan$_2$)	All Others (cont.)		***Organisation administrative, Diss.*** **1, 217 7 Talon-Vanderroost 2** obv. i 3 **(+1)**, 9–10 **(+2)**, ii 9 **(+1)**, 12 **(+1)**, 20 **(+1)**, rev. i 23–24 **(+2)**, rev. ii 1 (coll.) **(+1)**; ***OrSP* 47-49 382** rev. iii 3 **(+1)**, 9 **(+11)**, 13 **(+2)**; ***Santag* 6 384** obv. iv 28' (?) **(+19)**, v 6'–7' **(+2)**, rev. iv 23'–24' **(+2)**, vi 22' (?) **(+1)**;[540] **Sigrist, *RA* 73, 115-120** obv. i 10 **(+1)**, 16 **(+1)**, ii 1 **(+1)**; ***Torino* 2 706** A obv. i' 3' **(+1)**, iv' 4' **(+1)**, B obv. ii' 3' (?) **(+1)**; ***YOS* 4 232** obv. i 2 **(+1)**, rev. ii 12 (coll.) **(+1)**		
DIŠ (barley allotment)	4	—		2	rev. i 23 **(+2)**
	All Others			5	***CUSAS* 39 140** rev. i 7 (coll.) **(+1)**, 15 (CDLI) **(+1)**; ***Santag* 6 384** rev. vi 25'–26' (?) **(+2)**;[541] ***YOS* 4 232** rev. ii 23 **(+1)**

Appendix 7. šuku-Land and apin-la$_2$-Land Sizes (in iku) for Male Citizens and UN-il$_2$ in Umma (including according to Occupation)

The šuku-land and apin-la$_2$-land sizes for male citizens and UN-il$_2$ in Umma, including according to occupation, are recorded in Tables A7.1–4. Note that the social strata of individuals with šuku land or apin-la$_2$ land are often not designated. Their social strata can be inferred in some instances from their occupations. All individuals with the occupations, a-zu, dub-sar gu$_4$ 10, gudu$_4$, išib, ka-guru$_7$, nu-banda$_3$, nu-banda$_3$ gu$_4$, sag-du$_5$, šabra, šuš$_3$, and ugula geš$_2$-da are assumed to have been citizens, along with their relatives. As indicated on p. 229, individuals with šuku-land sizes of 36 or more iku are likewise assumed to have been citizens. In several instances, the social strata of individuals are known from prosopographical analyses, but the evidence is not provided, though it would be helpful to make this evidence available in a

540. See *Nisaba* 26 17 rev. 2.

541. See *Nisaba* 26 17 rev. 5–6.

future treatment. It is important to mention that there is no clear evidence that UN-il$_2$ could rent apin-la$_2$ land (see p. 260), but further prosopographic analyses may highlight some exceptions. Only šuku-land or apin-la$_2$-land sizes that are clearly or likely limited to single individuals are included. While *MVN* 21 341; *Nisaba* 26 42, among other texts, provide interesting details about gan$_2$-gu$_4$ and šuku land on large scales, they are not counted. Individuals may be listed multiple times in a single text with various amounts of apin-la$_2$ land that are combined together, though every example is not necessarily certain.[542] Texts that provide similar or the same details are not all counted together, unless they have separate dates (see, for example, *Nebraska* 37; *Nik.* 2 236; *Nisaba* 23 46; *YOS* 4 244). When the šuku-land or apin-la$_2$-land size of an individual is tabulated according to his occupation, occupations modified with -še$_3$ and -ta are not counted (see p. 341). The šuku-land sizes of the governor or prince are also not recorded here because they are rather large and may not be entirely accounted for in a single text (see p. 229). Fallow land (gan$_2$ su$_3$), which is often recorded for apin-la$_2$-land sizes, is also not counted. Identifying šuku land or apin-la$_2$ land can be difficult due to damage or limited details given in some texts. In *OrSP* 47-49 481, for example, a few land sizes are specified as šuku land, whereas the rest are assumed here to be apin-la$_2$ land. These latter land sizes also vary like known apin-la$_2$-land sizes. If there are some minor uncertainties, a citation may include (?) without any comments. Note that only the lines indicating land sizes are cited, which may not include details about an individual's social stratum or occupation.[543]

542. See, for example, *AnOr* 1 49 obv. i 1, 3, 24, 26, rev. i 11', ii 9', 13'; *Farmer's Instruction* 8.3.2. obv. i 2, rev. i 8, 27, 30. These multiple attestations are given in different sections of these texts according to their field locations.

543. Texts and lines that are not counted for a variety of reasons, such as damage, overlaps, or uncertainty, include *AAICAB* I/2 Ashm. 1937-67; 1971-280; I/3 Bod. S 294; 307 obv. 3, 18–19; I/4 Mus. Kaiser Bagh 43.30a; *AnOr* 1 49 obv. ii 29–rev. i 6', 13'–ii 5'; 303; 7 374; *BCT* 2 55 obv. 4'–7'; *BIN* 5 266; *BPOA* 1 447; 563 rev. 3; 577; 1155; 2 2476; 2490; 2514; 6 192 obv. 12–rev. 4; 515; 7 2228; 2441; CDLI P341986; *CST* 538; 540; *CUSAS* 39 138 obv. vi 1', vii 20', x 27', xi 1', rev. i 1'–4', 21', iv 1', vi 2', 33', ix 1', 11', 13', x 1', 3'; 139 obv. i' 1'–ii' 4'; 40/2 1367;

Table A7.1. šuku-Land Sizes (in iku) for Male Citizens and UN-il$_2$ in Umma

šuku-Land Size (in iku)	**Citizens**		**UN-il$_2$**		**Uncertain**	
	Count	**Citations**	**Count**	**Citations**	**Count**	**Citations**
1	0	—	0	—	2	***CUSAS* 39 138** rev. iii 31' **(+1)**; ***UTI* 6 3515** le. ed. 1 **(+1)**
2	0	—	1	**BDTNS 059327** rev. ii 2 **(+1)**	19	**BDTNS 059327** obv. iii 21 **(+1)**, 24 **(+1)**, iv 25 **(+1)**, 27 **(+1)**, rev. i 1 (?) **(+1)**,[544] 3 **(+1)**, 5 **(+1)**, 7 **(+1)**, 9 **(+1)**, 11 **(+1)**, 23 **(+1)**, 29 **(+1)**, 33 **(+1)**, ii 2 **(+1)**, 17 **(+1)**, 19 **(+1)**, 21 **(+1)**; ***Nik.* 2 236** rev. i 12 **(+1)**; ***UTI* 6 3515** obv. 12' **(+1)**
3	29	***CUSAS* 39 138** obv. i 3' (?) **(+1)**, 5' (?) **(+1)**, 14' **(+1)**, xiii 3' **(+1)**, rev. iii 6' **(+1)**, 9' **(+1)**, 25' **(+1)**, iv 4' **(+1)**; ***MVN* 21 342** obv. i 1 (?) **(+1)**,[545] 3 **(+1)**; ***Nebraska* 37** rev. ii 30 **(+1)**; ***Nik.* 2 236** rev. i 30 **(+1)**; ***Nisaba* 6 1** obv. i 6–7 **(+2)**, 18 **(+1)**, ii 15–16 **(+2)**, rev. i 1 **(+1)**, 9–10 **(+1)**, ii 2 **(+1)**, 7 **(+1)**; **23 46** rev. ii 14 **(+1)**; ***Organisation administrative, Diss.* 1, 226 10 Talon-Vanderroost 3** obv. 3 (?) **(+1)**, 4 **(+1)**	25	***BPOA* 6 192** obv. 10–11 (?) **(+2)**; ***CUSAS* 39 138** obv. i 7' (?) **(+1)**, 20' (?) **(+1)**, rev. iii 18' **(+1)**, 21' **(+1)**, iv 13' **(+1)**, v 14' **(+1)**, 16' **(+1)**; ***Nisaba* 6 1** obv. i 5 **(+1)**, 8–17 **(+10)**, ii 7–8 **(+2)**, rev. i 2 **(+1)**, 11 **(+1)**, 18 **(+1)**	425	***AAICAB* I/3 Bod. S 307**[546] obv. 16 (?) **(+1)**; **BDTNS 059327** obv. iii 27 **(+1)**, rev. i 31 **(+1)**, ii 13 **(+1)**; ***BIN* 5 277** iii 24 **(+1)**, 26 **(+1)**, 28 **(+1)**, iv 24 **(+1)**, 28 **(+1)**, 30 **(+1)**; ***BPOA* 6 192** obv. 1–9 **(+9)**; **1179** obv. 6 **(+1)**; ***CUSAS* 39 138** obv. i 12' (?) **(+1)**, 16' **(+1)**, ii 2' **(+1)**, 4' **(+1)**, 9' **(+1)**, 11' **(+1)**, 13' **(+1)**, 19' **(+1)**, 21' **(+1)**, 23' (?) **(+1)**, iii 2' **(+1)**, 5' **(+1)**, 7' **(+1)**, 12' **(+1)**, 14' **(+1)**

Farmer's Instructions 8.3.2 obv. i 3; Gomi, *Orient* 21, 1 BM 105334 (overlaps with Steinkeller, *Studies Postgate* 2, 562 E and its few differences are otherwise not counted); Gomi, *Orient* 21, 2 BM 105330 (difficult to differentiate šuku and apin-la$_2$ land but may be included in further study); *Kyoto* 51; Lewis and Jewell, *ASJ* 4, 66 13; *L'uomo* 50 obv. iii 11–12; *MVN* 4 2; 14 58; 211; 16 954; 975; 18 409; 412; 476; Naster and Sauren, *OLP* 4, 17-70 45; *Nebraska* 56; *Nisaba* 6 1 obv. i 3, ii 6, 14, 22, rev. i 8, 17, ii 1, 6; 11 22; 34; 15/2 925; 23 46 obv. iii 19, rev. i 4, 7; 26 40 (overlaps with Steinkeller, *Studies Postgate* 2, 562 E rev. i 3'–10'); 93 (overlaps with *Nisaba* 6 1); 33 521 obv. i 18, rev. ii 1'–3'; 528 rev. 1; 1078; *OrSP* 47-49 216; 481 obv. i 1, 3, 8, ii 12, 14; Peat, *JCS* 28, 223 50; *PPAC* 5 1646; *SAT* 3 1811; 2093; 2134; 2157 obv. 5–6; 2207; *SET* 266; *SNAT* 340 obv. 22, rev. 1; Snell, *ASJ* 9, 247 24 obv. 3, 7–8, rev. 7; 248 25 obv. 1; Steinkeller, *Studies Postgate* 2, 562 E obv. ii 1'–7', 8' (coll.) (overlaps with *SNAT* 340 rev. 8–10), 9' (overlaps with *SNAT* 340 rev. 11), rev. i 1' (overlaps with *SNAT* 340 rev. 13), 3'; *ŠA* 135 (pl. 74) obv. 1'–5', 8', rev. 6, 15–24; *TCL* 5 6047; *TCS* 1 365; *Texts in the Carnegie Museum, Diss.*, 180 65 CMNH 30498-55 obv. ii' 1, iii' 1–2; *UCP* 9/2-1 100 obv. i 15'; *UTI* 3 2125; 4 2887 obv. 12, 18–rev. 4; 5 3219; 6 3515 rev. 5, 7; 3516 obv. 15–rev. 2, 18; *YOS* 4 310. There are other texts not mentioned here that include šuku engar that is not allotted on an individual basis.

544. There may be 2 iku rather than 3, based on formatting and the image, but this is uncertain.

545. See n. 384.

546. Obv. 14–rev. 1 is probably šuku land, based on its formatting and juxtaposition to apin-la$_2$ land. Rev. 1 may include the phrase (šuku-ra)-am$_3$.

šuku-Land Size (in iku)	Citizens		UN-il$_2$		Uncertain	
	Count	Citations	Count	Citations	Count	Citations
3 (cont.)		***Organisation administrative, Diss.* 1, 226 10 Talon-Vanderroost 3** obv. 6 **(+1)**, 9 **(+1)**, rev. 7 **(+1)**; ***TJAMC* IOS 20 pl. 54** obv. 9 (?) **(+1)**,[547] rev. (?) 5 **(+1)**				***CUSAS* 39 138** obv. iii 16' **(+1)**, 21' **(+1)**, iv 5' **(+1)**,[548] 7' **(+1)**, 9' **(+1)**, 13' **(+1)**, 17' **(+1)**, 21' **(+1)**, 23' **(+1)**, v 3' **(+1)**, 5' **(+1)**, 9' **(+1)**, 11' **(+1)**, 13' **(+1)**, 18' **(+1)**, 20' **(+1)**, 22' **(+1)**, 26' **(+1)**, 28' **(+1)**, 30' **(+1)**, vi 26' **(+1)**, ix 1' (?) **(+1)**, xiii 6' **(+1)**, 9' (?) **(+1)**, rev. i 6' **(+1)**, 12' **(+1)**, 14' **(+1)**, ii 3' **(+1)**, 5' **(+1)**, 15' **(+1)**, 18' **(+1)**, 21' **(+1)**, iii 23' **(+1)**, 34' **(+1)**, 36' (?) **(+1)**, iv 22' **(+1)**, 34' **(+1)**, v 4' **(+1)**, vii 25' **(+1)**, 28' **(+1)**; **139** obv. ii' 7' **(+1)**, 11' **(+1)**, 13' **(+1)**, 15' **(+1)**; ***MVN* 21 342** obv. i 5 **(+1)**, rev. ii 17 **(+1)**; ***Nebraska* 37** rev. i 10 **(+1)**, 14 **(+1)**, ii 28 **(+1)**, iii 23' **(+1)**, 26' **(+1)**, 28' **(+1)**, 30' **(+1)**; ***Nik.* 2 236** rev. i 4 **(+1)**, 14 **(+1)**, 26 **(+1)**, 28 **(+1)**, 32 **(+1)**, ii 10 **(+1)**, 12 **(+1)**; ***Nisaba* 23 46** obv. iii 21 **(+1)**, 23 **(+1)**, 25 **(+1)**, 27 **(+1)**, rev. ii 16 **(+1)**, 18 **(+1)**; ***Organisation administrative, Diss.* 1, 226 10 Talon-Vanderroost 3** obv. 2 **(+1)**, rev. 8 **(+1)**; ***OrSP* 47-49 481** obv. ii 16 **(+1)**; ***SAT* 3 2141** obv. 3 (?) **(+3)**; **Steinkeller, *Studies Postgate* 2, 562 E** obv. i 10 **(+300)**; ***ŠA* 135 (pl. 74)** rev. 13 **(+1)**; ***Texts in the Carnegie Museum, Diss.*, 180 65 CMNH 30498-55** rev. i 4' **(+1)**, 6' **(+1)**, 8' **(+1)**, 12' **(+1)**; ***TJAMC* IOS 20 pl. 54** obv. 5 (?) **(+1)**, 8 (?) **(+1)**, rev. 1–3 (?) **(+3)**; ***UCP* 9/2-1 100** rev. i 5'–6' **(+1)**, 8'–9' **(+1)**, 11'–12' **(+1)**, 14'–15' **(+1)**, 17'–18' **(+1)**, 24'–25' **(+1)**, ii 25' **(+1)**; ***Umma* 96** obv. 1 **(+1)**

547. 0.0.3 ^{giš}Dur$_2$-gar-ni-me (obv. 9) can perhaps be restored as 0.0.3 ^{giš}Dur$_2$-gar-ni išib. This would admittedly be a small šuku-land size for an išib priest, though there are no other sizes documented here to corroborate this assumption.

548. Obv. iii 24'–48' in the BDTNS are numbered as obv. iv 1'–25' here (see Dahl 2020, 344 and the CDLI transliteration).

šuku-Land Size (in iku)	Citizens		UN-il$_2$		Uncertain	
	Count	Citations	Count	Citations	Count	Citations
4	65	***BPOA* 2 2562** obv. 6 (?) **(+1)**; ***MVN* 21 342** rev. i 1 **(+1)**, 3 **(+1)**; **Naster and Sauren, *OLP* 4, 17-70 46** obv. 3 **(+60)**;[549] ***Nisaba* 23 46** rev. ii 4 **(+1)**; ***SAT* 3 1989** obv. 5 **(+1)**	3	***BPOA* 2 2562** obv. 8 (?) **(+1)**; ***SAT* 3 1989** rev. 2 **(+1)**; ***UTI* 6 3515** obv. 3' **(+1)**[550]	31	**BDTNS 059327** obv. iv 23 **(+1)**, rev. ii 11 **(+1)**; ***MVN* 21 342** obv. i 13–14 **(+2)**, 16 **(+1)**, 20 **(+1)**, 22 **(+1)**, ii 17 **(+1)**, 19 **(+1)**, rev. i 22 **(+1)**; ***Nebraska* 37** rev. i 28 (?) **(+2)**; ***SAT* 3 1989** obv. 1–2 **(+2)**, 4 **(+1)**, 6 **(+1)**, 8 **(+1)**, 9 (?) **(+1)**, 10 **(+1)**, rev. 1 **(+1)**, 3 **(+1)**; **Snell, *ASJ* 9, 248 25** rev. 3 **(+1)**; ***ŠA* 135 (pl. 74)** rev. 14 **(+1)**; ***UCP* 9/2-1 100** rev. ii 27' **(+1)**, 31' **(+1)**; ***UTI* 6 3515** obv. 7' **(+1)**, 10' **(+1)**, 15' **(+1)**, 22' **(+1)**, rev. 2 **(+1)**; ***VDI* 1 62** obv. 3 **(+1)**
5	0	—	0	—	7	**BDTNS 059327** rev. ii 15 **(+1)**; ***BIN* 5 277** iv 15 **(+1)**; ***BPOA* 6 1179** obv. 1–2 (?) **(+2)**; ***Nebraska* 37** rev. ii 2 **(+1)**; ***UTI* 6 3515** le. ed. 1 **(+2)**
6	56	**BDTNS 059327** obv. iii 5 **(+1)**, 12 **(+1)**; ***BIN* 5 277** iii 10 **(+1)**, iv 19 **(+1)**; ***CUSAS* 39 138** obv. i 1' (?) **(+1)**, 10' (?) **(+1)**, 18' **(+1)**, iii 19' **(+1)**, v 24' **(+1)**, vi 14' **(+1)**, vii 15' **(+1)**, ix 18' **(+1)**, 20' **(+1)**, 26' **(+1)**, x 19' **(+1)**, 21' **(+1)**, rev. v 25' **(+1)**, 28' **(+1)**; **139** obv. iii' 1' **(+1)**, 3' **(+1)**, 7' **(+1)**, 10' **(+1)**, 12' **(+1)**; ***MVN* 21 342** ob. ii 16 **(+1)**; ***Nebraska* 37** rev. i 1 **(+1)**, ii 18 **(+1)**, 25 **(+1)**; ***Nik.* 2 236** rev. i 8 **(+1)**, ii 1 **(+1)**; ***Nisaba* 23 46** rev. i 12 **(+1)**; ***Organisation administrative, Diss.* 1, 226 10 Talon-Vanderroost 3** obv. 5 **(+1)**, 11 **(+1)**; ***ŠA* 135 (pl. 74)** rev. 7 **(+1)**; ***Texts in the Carnegie Museum, Diss.*, 180 65 CMNH 30498-55** obv. iii' 7 **(+1)**;	2	***CUSAS* 39 138** rev. iv 10' **(+1)**, vi 24' **(+1)**	285	**BDTNS 059327** obv. iii 3 **(+1)**, 7 **(+1)**, iv 8 **(+1)**, 13 **(+1)**, 15 **(+1)**, 21 **(+1)**, rev. i 19 **(+1)**, 21 **(+1)**, 27 **(+1)**; ***BIN* 5 277** iii 13 **(+1)**, 22 **(+1)**, iv 9 **(+1)**, 17 **(+1)**, 21 **(+1)**; ***CHEU* 90** obv. 1 **(+1)**; ***CUSAS* 39 138** obv. ii 7' **(+1)**, 17' **(+1)**, iii 10' **(+1)**, iv 2' (?) **(+1)**, 11' **(+1)**, 19' **(+1)**, v 7' **(+1)**, 16' **(+1)**, vi 9' **(+1)**, 17' **(+1)**, 20' **(+1)**, 23' **(+1)**, 29' (?) **(+1)**, vii 4', 6' **(+1)**, 9' **(+1)**, 12' **(+1)**, viii 1' (?) **(+1)**, 4' **(+1)**, 12' **(+1)**, 15' **(+1)**, 18' **(+1)**, 21' **(+1)**, 24' **(+1)**, ix 4' **(+1)**, 6' **(+1)**, 8' **(+1)**, 10' **(+1)**, 12' **(+1)**, 14' **(+1)**, 16' **(+1)**, 23' **(+1)**, 28' (?) **(+1)**, x 2' **(+1)**, 4' **(+1)**, 8' **(+1)**, 10' **(+1)**, 24' **(+1)**, xi 4' (CDLI) **(+1)**, 7' **(+1)**, 10' **(+1)**, 13' **(+1)**, 16', 18' **(+1)**, xii 3' **(+1)**, 6' **(+1)**, 16' **(+1)**, rev. iv 28' **(+1)**, 31' **(+1)**, v 22' **(+1)**, 31' **(+1)**, vi 5' **(+1)**, 7' **(+1)**, 11' **(+1)**, 14' **(+1)**, 19' **(+1)**

549. šuku eren$_2$ 1-kam 0.0.4-ta (obv. 3) should probably be šuku eren$_2$ 60-kam 0.0.4-ta (see Kraus 1976, 195–96).

550. *UTI* 6 3515 obv. 3'–4' reads: 0.0.4 gan$_2$ 3.0.0 Arad$_2$-mu \ dumu [Lugal$^{?}$]-me-a išib. These individuals were UN-il$_2$ in *Organisation administrative, Diss.* 1, 230 12 Talon-Vanderroost 5 obv. i 1–2, and Lugalmea was an ugula (nam-10), which means that išib in should probably be ugula$^{!}$. If this is the case, then Lugalmea was not both an UN-il$_2$ and an išib.

šuku-Land Size (in iku)	Citizens		UN-il$_2$		Uncertain	
	Count	Citations	Count	Citations	Count	Citations
6 (cont.)		***UCP* 9/2-1 100** obv. i 9'–10' **(+1)**, ii 2–3 **(+1)**,[551] 5–6 **(+1)**, 8–9 **(+1)**, 11–12 **(+1)**, 14–15 **(+1)**, 17–18 **(+1)**, 20–21 **(+1)**, iii 1–2 **(+1)**, 14–23 **(+10)**, 25–26 **(+1)**, rev. i 27'–28' **(+1)**, ii 19' **(+1)**				***CUSAS* 39 138** rev. vi 27' **(+1)**, 30' **(+1)**, vii 8', 10' (?) **(+1)**, 13' **(+1)**, 16' **(+1)**, 19' (coll.), 21' **(+1)**, 31' (?) **(+1)**, viii 8', 10' (CDLI) **(+1)**, 20' **(+1)**, ix 4' **(+1)**, 7' **(+1)**; **139** obv. ii' 9' **(+1)**, iii' 5' **(+1)**, 14' **(+1)**; ***MVN* 21 342** obv. i 18 **(+1)**, ii 1 (?) **(+2)**, rev. ii 1 **(+1)**; ***Nebraska* 37** rev. i 8 **(+1)**, 13 **(+1)**, 19 **(+1)**, 21 **(+1)**, ii 10 **(+1)**, 13 **(+1)**, 15 **(+1)**, 20 **(+1)**, iii 20' **(+1)**; ***Nik.* 2 236** rev. i 6 **(+1)**, 10 **(+1)**, 17 **(+1)**, 20 **(+1)**, 23 **(+1)**; ***Nisaba* 23 46** obv. iii 2 **(+1)**, 4 **(+1)**, 9 (?) **(+1)**, 11 **(+1)**, 13 **(+1)**, 30 **(+1)**, 32 **(+1)**, 36 **(+1)**, rev. i 1 **(+1)**, 10 **(+1)**, 14 **(+1)**, 16 **(+1)**, 32 **(+1)**, 34 **(+1)**, 36 **(+1)**, 39 **(+1)**, ii 12 **(+1)**; **33 521** rev. i 3' **(+1)**, 5'–7' **(+3)**, ii 4'–6' **(+3)**; **528** obv. 4 (?) **(+1)**; ***Ontario* 2 270** obv. 4 (?) **(+1)**; ***Organisation administrative, Diss.* 1, 226 10 Talon-Vanderroost 3** obv. 1 **(+1)**, rev. 6 **(+1)**; ***OrSP* 47-49 481** obv. ii 8 **(+1)**; ***SAT* 3 2141** obv. 4–5 (?) **(+1)**; ***SNAT* 340** rev. 13 **(+7)**; **Snell, *ASJ* 9, 248 25** rev. 1 **(+1)**, 5 **(+1)**; **Steinkeller, *Studies Postgate* 2, 562 E** obv. i 9 **(+100)**; ***ŠA* 135 (pl. 74)** obv. 13' (coll.) **(+1)**, rev. 8–10 **(+3)**; ***Texts in the Carnegie Museum, Diss.*, 180 65 CMNH 30498-55** obv. ii' 10 **(+1)**, iii' 5 **(+1)**; ***TJAMC* IOS 20 pl. 54** obv. 3–4 (?) **(+2)**, 6 (?) **(+1)**; ***UCP* 9/2-1 100** obv. i 2'–3' (?) **(+1)**, ii 23–24 (?) **(+1)**, 26–27 (?) **(+1)**, iii 4–5 **(+1)**, 7–8 **(+1)**, 28 **(+1)**, iv 7–8 **(+1)**, 10–11 **(+1)**, 13–14 **(+1)**, 16 **(+1)**, 18 **(+1)**, 20 **(+1)**, 28 (?) **(+1)**, rev. i 2'–3' **(+1)**, 30' **(+1)**, ii 1' (?) **(+1)**,[552] 3'–4' **(+1)**, 6'–7' **(+1)**, 9'–10' **(+1)**, 12'–13' **(+1)**, 15'–16' **(+1)**, 21' **(+1)**

551. See n. 390.

552. The remainder of this šuku-land size, which is probably 6 iku, is lost to damage.

šuku-Land Size (in iku)	**Citizens**		**UN-il$_2$**		**Uncertain**	
	Count	**Citations**	**Count**	**Citations**	**Count**	**Citations**
6 (cont.)						***UCP* 9/2-1 100** rev. ii 23' **(+1)**, 29' **(+1)**, iii 2'–3' (?) **(+1)**; ***UTI* 3 2124** rev. 2 **(+1)**; **6 3515** obv. 5'–6' **(+2)**, 9' **(+1)**, 11' **(+1)**, 18' **(+1)**, 20'–21' **(+2)**, rev. 1 **(+1)**; **3755** rev. 6 (?) **(+1)**, 10 (?) **(+1)**
7	0	—	0	—	2	***MVN* 4 3** rev. 1 **(+1)**; ***UTI* 6 3515** obv. 14' **(+1)**
7 ½	0	—	0	—	2	***BIN* 5 277** v 2 **(+1)**; ***Nik.* 2 236** rev. i 1 **(+1)**
8	0	—	0	—	1	***CUSAS* 39 138** obv. x 13' **(+1)**
9	8	***BIN* 5 277** iv 2 **(+1)**; ***BPOA* 1 563** lo. ed. 1 (?) **(+1)**;[553] ***CUSAS* 39 138** obv. x 16' **(+1)**, rev. v 9', 11' **(+1)**; ***Nebraska* 37** rev. i 25 **(+1)**; ***Nisaba* 23 46** rev. i 25 **(+1)**; ***Texts in the Carnegie Museum, Diss.*, 180 65 CMNH 30498-55** obv. ii' 4 **(+1)**; ***UCP* 9/2-1 100** obv. i 6'–7' **(+1)**	2	***CUSAS* 39 138** rev. i 10' **(+1)**; ***Nisaba* 33 528** obv. 2 **(+1)**	36	**BDTNS 059327** rev. ii 27 **(+1)**; ***BPOA* 1 563** rev. 4 **(+1)**; ***CUSAS* 39 138** rev. vi 21' **(+1)**; **Foxvog, *ASJ* 18, 80 13** obv. 3 **(+1)**, 9 **(+1)**, 16 **(+1)**; ***MVN* 16 956** rev. 12 **(+5)**;[554] **21 342** obv. ii 20 **(+1)**, rev. i 10 **(+1)**; ***Nisaba* 23 46** rev. i 19, 21 (?) **(+1)**, 28 **(+1)**; **52** rev. 1–10 **(+10)**; **33 528** obv. 1 **(+1)**, 3 (?) **(+1)**, 6 (?) **(+1)**; ***SNAT* 340** rev. 11 **(+1)**; ***ŠA* 135 (pl. 74)** rev. 12 **(+1)**; ***TJAMC* IOS 20 pl. 54** obv. 7 (?) **(+1)**; ***UCP* 9/2-1 100** obv. i 13' **(+1)**, iv 1–2 **(+1)**, 4–5 **(+1)**, rev. i 21'–22' **(+1)**; ***UTI* 6 3515** obv. 8' **(+1)**
10 ½	1	***CUSAS* 39 138** rev. iv 17', 19' **(+1)**	0	—	1	***CUSAS* 39 138** obv. vi 4', 6' **(+1)**
12	2	**BDTNS 059327** obv. iii 17 **(+1)**; ***CUSAS* 39 138** rev. iii 29' **(+1)**	0	—	19	***AAICAB* I/3 Bod. S 307** obv. 14 (?) **(+1)**; **BDTNS 059327** obv. iii 14 **(+1)**; ***CUSAS* 39 138** obv. viii 9' **(+1)**; ***MVN* 16 956** rev. 9 **(+5)**; **21 342** rev. ii 3 **(+1)**; ***Nebraska* 37** rev. ii 5 **(+1)**; ***Nik.* 2 236** rev. ii 8 **(+1)**; ***Nisaba* 23 46** obv. iii 17 **(+1)**; **33 521** rev. i 4' **(+1)**, ii 9' **(+1)**; ***Texts in the Carnegie, Diss.*, 180 *Museum* 65 CMNH 30498-55** obv. ii' 7 **(+1)**; ***TJAMC* IOS 20 pl. 54** obv. 1–2 (?) **(+2)**, rev. 4 (?) **(+1)**; ***UTI* 6 3515** obv. 16' **(+1)**

553. The assistant of a nu-banda$_3$ gu$_4$ was probably his relative and therefore a citizen.

554. *MVN* 16 956 is identical to CDLI P235025; Owen, *JCS* 24, 168 85, which are not counted here. These texts share much of the same content with *Nisaba* 23 52. Given the subtle differences among these texts, only certain portions of *MVN* 16 956; *Nisaba* 23 52 are counted.

šuku-Land Size (in iku)	**Citizens**		**UN-il$_2$**		**Uncertain**	
	Count	**Citations**	**Count**	**Citations**	**Count**	**Citations**
12 ½	0	—	0	—	1	***UTI* 6 3515** obv. 17' **(+1)**
15	0	—	0	—	2	***BIN* 5 277** v 5, 7, 9 **(+1)**; **Foxvog, *ASJ* 18, 80 13** rev. 5 **(+1)**
18	27	***BPOA* 1 563** rev. 7–8 **(+2)**, lo. ed. 2 **(+1)**; **Steinkeller, *Studies Postgate* 2, 562 E** obv. i 12 (coll.) **(+20)**, rev. i 11' **(+3)**; ***ŠA* 135 (pl. 74)** obv. 3 **(+1)**	1	***UCP* 9/2-1 100** obv. iii 12 **(+1)**	42	**BDTNS 059327** obv. iii 29 **(+1)**, iv 3, 5 **(+1)**, 17 **(+1)**, rev. iii 6 **(+1)**; ***BIN* 5 277** iii 18 **(+1)**, 20 **(+1)**, iv 5 **(+1)**; ***BPOA* 1 563** rev. 5 **(+1)**; ***CUSAS* 39 138** rev. ii 10', 12' **(+1)**, viii 15', 17' **(+1)**; **Foxvog, *ASJ* 18, 80 13** rev. 8 **(+1)**; ***Nebraska* 37** rev. i 4 **(+1)**, 6 **(+1)**, iii 12' **(+1)**, 15'–17' **(+1)**; ***Nisaba* 23 46** obv. ii 28 **(+1)**, 30 **(+1)**, rev. i 30 **(+1)**, ii 1 **(+1)**, 7, 9 **(+1)**; ***Ontario* 2 270** obv. 6 (?) **(+1)**; ***SAT* 3 2141** obv. 2 (?) **(+1)**, 6–7 (?) **(+2)**; ***SNAT* 340** obv. 4–5 **(+2)**, 16–17 **(+2)**, rev. 8–9 **(+2)**; **Snell, *ASJ* 9, 248 25** rev. 4 **(+1)**; **Steinkeller, *Studies Postgate* 2, 562 E** rev. i 6' **(+1)**, 12' **(+1)**; ***ŠA* 135 (pl. 74)** obv. 7' (?) **(+1)**, 5 **(+1)**; ***UCP* 9/2-1 100** obv. iv 25–26 **(+1)**; **Umma 96** rev. 1 **(+1)**; ***UTI* 6 3755** obv. 10 (?) **(+1)**, rev. 1 (?) **(+1)**, 3–4 (?) **(+1)**, 8–9 (?) **(+2)**
21	1	***CUSAS* 39 138** rev. i 18' **(+1)**	0	—	0	—
24	0	—	1	***CUSAS* 39 138** rev. iii 13', 15' **(+1)**	1	***UTI* 6 3516** rev. 14 **(+1)**
27	0	—	0	—	1	***Nisaba* 33 521** rev. ii 7' **(+1)**
36	35	***BPOA* 1 563** rev. 6 **(+1)**; **Foxvog, *ASJ* 18, 80 13** obv. 1 **(+1)**, 5 **(+1)**, 7 **(+1)**, 11 **(+1)**, 13 **(+1)**; ***Nisaba* 23 52** obv. 6–8 **(+3)**, 10–11 **(+2)**, 18–25 **(+8)**; ***OrSP* 47-49 197** obv. 3 **(+1)**; ***SAT* 3 2141** obv. 1 (?) **(+1)**; ***SNAT* 340** obv. 1–3 **(+3)**, 6 **(+1)**, 9–13 **(+5)**, 19 **(+1)**, rev. 5 **(+1)**; **Steinkeller, *Studies Postgate* 2, 562 E** rev. i 9'–10' **(+2)**; ***UTI* 6 3516** rev. 10 (?) **(+1)**[555]	0	—	0	—

555. Concerning this individual, Sharlach (2008, 179 n. 11) writes:
Ikalla dumu lukur énsi *SANTAG* 6 192 (AS8); he also appears in *UTAMI* 6 3516 [*UTI* 6 3516] (ŠS7), in which Ikalla {dumu} lukur received land, šuku énsi, in the Lá-tur area (since Ikalla is a man's

šuku-Land Size (in iku)	Citizens		UN-il$_2$		Uncertain	
	Count	Citations	Count	Citations	Count	Citations
54	14	**Foxvog, *ASJ* 18, 80 13** rev. 1 **(+1)**, 3 **(+1)**; **Steinkeller, *Studies Postgate* 2, 562 E** obv. i 11 (coll.) **(+10)**; ***SAT* 3 2157** obv. 4 **(+1)**; ***SNAT* 340** rev. 3 **(+1)**	0	—	0	—
72	7	***MVN* 16 956** obv. 13–15 **(+1)**; ***Nisaba* 23 52** obv. 1–5 **(+5)**; ***UTI* 6 3755** obv. 7–8 (?) **(+1)**	0	—	0	—
108	3	***MVN* 16 956** obv. 17–19 **(+1)**; ***SNAT* 340** rev. 15 **(+1)**; **Steinkeller, *Studies Postgate* 2, 562 E** rev. i 5' **(+1)**	0	—	0	—

Table A7.2. šuku-Land Sizes (in iku)
for Male Citizens and UN-il$_2$ according to Occupation in Umma

Occupation	šuku-Land Size (in iku)	Citizens		UN-il$_2$		Uncertain	
		Count	Citations	Count	Citations	Count	Citations
aga$_3$-us$_2$	3	0	—	0	—	1	***BIN* 5 277** iv 24 **(+1)**
	5	0	—	0	—	1	***BIN* 5 277** iv 15 **(+1)**
	6	4	**BDTNS 059327** obv. iii 5 **(+1)**; ***BIN* 5 277** iv 19 **(+1)**; ***Nebraska* 37** rev. ii 18 **(+1)**; ***Texts in the Carnegie, Diss.*, 180 *Museum* 65 CMNH 30498-55** obv. iii' 7 **(+1)**	0	—	10	**BDTNS 059327** obv. iii 3 **(+1)**, 7 **(+1)**; ***BIN* 5 277** iv 9 **(+1)**, 17 **(+1)**, 21 **(+1)**; ***Nebraska* 37** rev. ii 10 **(+1)**, 13 **(+1)**, 15 **(+1)**, 20 **(+1)**; ***Texts in the Carnegie, Diss.*, 180 *Museum* 65 CMNH 30498-55** obv. iii' 5 **(+1)**
	18	0	—	0	—	1	**Steinkeller, *Studies Postgate* 2, 562 E** rev. i 6' **(+1)**
ašgab	36	2	**Steinkeller, *Studies Postgate* 2, 562 E** rev. i 9'–10' **(+2)**	0	—	0	—
a-zu	18	3	**Steinkeller, *Studies Postgate* 2, 562 E** rev. i 11' **(+3)**	0	—	0	—

name, it seems clear that the text must have mistakenly left out a dumu here and that we are not dealing with a male lukur named Ikalla).

Occupation	šuku-Land Size (in iku)	Citizens		UN-il$_2$		Uncertain	
		Count	Citations	Count	Citations	Count	Citations
bahar$_3$	3	0	—	0	—	2	**BDTNS 059327** obv. iii 27 **(+1)**; ***BIN* 5 277** iii 26 **(+1)**
	6	0	—	0	—	8	***Nebraska* 37** rev. i 13 **(+1)**; ***SNAT* 340** rev. 13 **(+7)**
dub-sar	4	0	—	0	—	1	***UTI* 6 3515** obv. 7' **(+1)**
	6	0	—	0	—	2	**BDTNS 059327** obv. iv 8 **(+1)**; ***Nebraska* 37** rev. iii 20' **(+1)**
	18	0	—	0	—	5	**BDTNS 059327** obv. iv 3, 5 **(+1)**; ***Nebraska* 37** rev. iii 12' **(+1)**, 15'–17' **(+1)**; ***Nisaba* 23 46** rev. ii 1 **(+1)**, 7, 9 **(+1)**
	36	5	***Nisaba* 23 52** obv. 6–8 **(+3)**; ***SNAT* 340** obv. 6 **(+1)**, rev. 5 **(+1)**	0	—	0	—
	54	1	***SNAT* 340** rev. 3 **(+1)**	0	—	0	—
	72	6	***Nisaba* 23 52** obv. 1–5 **(+5)**; ***UTI* 6 3755** obv. 7–8 (?) **(+1)**	0	—	0	—
dub-sar gu$_4$ 10	54	10	**Steinkeller, *Studies Postgate* 2, 562 E** obv. i 11 (coll.) **(+10)**	0	—	0	—
engar	3	0	—	0	—	1	***BPOA* 6 1179** obv. 6 **(+1)**
	4	2	***BPOA* 2 2562** obv. 6 (?) **(+1)**; ***SAT* 3 1989** obv. 5 **(+1)**	2	***BPOA* 2 2562** obv. 8 (?) **(+1)**; ***SAT* 3 1989** rev. 2 **(+1)**	9	***SAT* 3 1989** obv. 1–2 **(+2)**, 4 **(+1)**, 6 **(+1)**, 8 **(+1)**, 9 (?) **(+1)**, 10 **(+1)**, rev. 1 **(+1)**, 3 **(+1)**
	6	6	***CUSAS* 39 138** obv. i 1' (?) **(+1)**, 10' (?) **(+1)**, 18' **(+1)**, iii 19' **(+1)**, v 24' **(+1)**; ***Organisation administrative, Diss.* 1, 226 10 Talon-Vanderroost 3** obv. 5 **(+1)**	0	—	113	***CHEU* 90** obv. 1 **(+1)**; ***CUSAS* 39 138** obv. ii 7' **(+1)**, 17' **(+1)**, iii 10' **(+1)**, iv 2' (?) **(+1)**, 19', v 7' **(+1)**, 16' **(+1)**; **139** ii' 9'; ***Nisaba* 33 521** rev. i 5'–7' **(+3)**; **528** obv. 4 (?) **(+1)**; ***Organisation administrative, Diss.* 1, 226 10 Talon-Vanderroost 3** obv. 1 **(+1)**; **Steinkeller, *Studies Postgate* 2, 562 E** obv. i 9 **(+100)**; ***ŠA* 135 (pl. 74)** obv. 13' (coll.) **(+1)**
	9	0	—	1	***Nisaba* 33 528** obv. 2 **(+1)**	2	***Nisaba* 33 528** obv. 1 **(+1)**, 6 (?) **(+1)**
	12	0	—	0	—	2	***Nisaba* 33 521** rev. i 4' **(+2)**

Occupation	šuku-Land Size (in iku)	Citizens		UN-il$_2$		Uncertain	
		Count	Citations	Count	Citations	Count	Citations
gab$_2$-ra	3	9	***Nisaba* 6 1** obv. i 6–7 **(+2)**, 18 **(+1)**, ii 15–16 **(+2)**, rev. i 1 **(+1)**, 9–10 **(+1)**, ii 2 **(+1)**, 7 **(+1)**	16	***Nisaba* 6 1** obv. i 5 **(+1)**, 8–17 **(+10)**, ii 7–8 **(+2)**, rev. i 2 **(+1)**, 11 **(+1)**, 18 **(+1)**	0	—
gab$_2$-us$_2$	3	1	***Nisaba* 6 1** rev. ii 7 **(+1)**	2	***BPOA* 6 192** obv. 10–11 (?) **(+2)**	19	***BPOA* 6 192** obv. 1–9 **(+9)**; ***SAT* 3 2141** obv. 3 (?) **(+3)**; ***ŠA* 135 (pl. 74)** rev. 13 **(+1)**; ***UCP* 9/2-1 100** rev. i 5'–6' **(+1)**, 8'–9' **(+1)**, 11'–12' **(+1)**, 14'–15' **(+1)**, 17'–18' **(+1)**, 24'–25' **(+1)**
	6	0	—	0	—	1	***UCP* 9/2-1 100** rev. i 2'–3' **(+1)**
gudu$_4$	4	1	***Nebraska* 37** rev. ii 4 (?) **(+1)**[556]	0	—	0	—
	6	7	**BDTNS 059327** obv. iii 12 **(+1)**; ***BIN* 5 277** iii 10 (?) **(+1)**; ***MVN* 21 342** ob. ii 16 **(+1)**; ***Nebraska* 37** rev. i 1 (coll.) **(+1)**; ***Nik.* 2 236** rev. ii 1 **(+1)**; ***ŠA* 135 (pl. 74)** rev. 7 **(+1)**; ***UCP* 9/2-1 100** rev. ii 19' **(+1)**	0	—	0	—
	9	1	***Nebraska* 37** rev. i 25 **(+1)**	0	—	0	—
	12	1	**BDTNS 059327** obv. iii 17 **(+1)**	0	—	0	—
i$_3$-du$_8$	2	0	—	0	—	1	**BDTNS 059327** rev. i 23 **(+1)**
	3	0	—	0	—	3	***BIN* 5 277** iii 28 **(+1)**; ***Nebraska* 37** rev. i 14 **(+1)**; ***UCP* 9/2-1 100** rev. ii 25' **(+1)**
	6	0	—	0	—	3	**BDTNS 059327** rev. i 19 **(+1)**, 21 **(+1)**; ***CUSAS* 39 138** rev. vi 19' **(+1)**
igi-du$_8$[557]	4	0	—	0	—	1	**Snell, *ASJ* 9, 248 25** rev. 3 (?) **(+1)**
i$_3$-ra$_2$-ra$_2$	3	0	—	0	—	1	***BIN* 5 277** iv 28 **(+1)**
išib	3	1	***TJAMC* IOS 20 pl. 54** obv. 9 (?) **(+1)**	0	—	0	—

556. While rev. ii 4 is uncertain, see *Nik.* 2 236 rev. ii 2; *Nisaba* 23 46 rev. iii 6; *YOS* 4 244 obv. 1. This evidence also applies to *BIN* 5 277 iii 10, which is uncertain.

557. Concerning this term Snell (1987, 223) writes: "igi-du$_8$ '(a profession)' 25:10 Ur-giš-gigir Compare lú-igi-du$_8$-ak-a = *āširu* 'supervisor' and *MVN* 2 23 i 13, where the same person appears with the title in a text from Umma in SS6 vii-xiii."

Occupation	šuku-Land Size (in iku)	Citizens		UN-il$_2$		Uncertain	
		Count	Citations	Count	Citations	Count	Citations
kaš-a gub-ba	9	0	—	0	—	10	***Nisaba* 23 52** rev. 1–10 **(+10)**
kir$_4$-dab$_5$	6	0	—	0	—	4	***UCP* 9/2-1 100** rev. ii 6'–7' **(+1)**, 9'–10' **(+1)**, 12'–13' **(+1)**, 15'–16' **(+1)**
kurušda	9	0	—	0	—	1	***SNAT* 340** rev. 11 **(+1)**
(lu$_2$-)ŠIM	2	0	—	0	—	8	**BDTNS 059327** obv. iv 25 **(+1)**, 27 **(+1)**, rev. i 1 (?) **(+1)**, 3 **(+1)**, 5 **(+1)**, 7 **(+1)**, 9 **(+1)**, 11 **(+1)**
	4	0	—	0	—	1	**BDTNS 059327** obv. iv 23 **(+1)**
	6	0	—	0	—	1	**BDTNS 059327** obv. iv 21 **(+1)**; ***Nisaba* 23 46** obv. iii 9 (?) **(+1)**
	36	13	***Nisaba* 23 52** obv. 18–25 **(+8)**; ***SNAT* 340** obv. 9–13 **(+5)**	0	—	0	—
(lu$_2$-)tir(-ra)	3	3	***CUSAS* 39 138** obv. i 14' **(+1)**; ***Nebraska* 37** rev. ii 30 **(+1)**; ***Nisaba* 23 46** rev. ii 14 **(+1)**	0	—	3	***Nebraska* 37** rev. ii 28 **(+1)**; ***Nisaba* 23 46** rev. ii 16 **(+1)**, 18 **(+1)**
	4	2	***MVN* 21 342** rev. i 1 **(+1)**, 3 **(+1)**	0	—	—	—
	6	1	***Nebraska* 37** rev. ii 25 **(+1)**	0	—	1	***Nisaba* 23 46** rev. ii 12 **(+1)**
lu$_2$-zah$_3$ tukul dab$_5$-ba	6	0	—	0	—	1	***CUSAS* 39 138** rev. viii 8', 10' (CDLI) **(+1)**
ma$_2$-gin$_2$	3	2	***MVN* 21 342** obv. i 1 (?) **(+1)**, 3 **(+1)**	0	—	0	—
muhaldim	9	0	—	0	—	6	**Foxvog, *ASJ* 18, 80 13** obv. 3 **(+1)**; ***MVN* 16 956** rev. 12 **(+5)**
	18	0	—	0	—	2	***SNAT* 340** rev. 8–9 **(+2)**
munu$_4$-mu$_2$	6	0	—	0	—	3	***CUSAS* 39 138** rev. vi 30' **(+1)**;[558] ***Ontario* 2 270** obv. 4 (?) **(+1)**; ***UTI* 6 3515** obv. 9' **(+1)**
	9	0	—	0	—	2	**BDTNS 059327** rev. ii 27 **(+1)**; **Foxvog, *ASJ* 18, 80 13** obv. 16 **(+1)**
	18	0	—	0	—	10	***MVN* 16 956** rev. 11 **(+8)**; ***SNAT* 340** obv. 16–17 **(+2)**

558. Rev. vi 32' is difficult to collate, but it may be restored as I$_7$-de$_3$-GIM munu$_4$-mu$_2$.

Occupation	šuku-Land Size (in iku)	Citizens		UN-il$_2$		Uncertain	
		Count	Citations	Count	Citations	Count	Citations
mu$_6$-sub$_3$	6	0	—	0	—	2	**Snell, *ASJ* 9, 248 25** rev. 1 **(+1)**; ***UCP* 9/2-1 100** rev. ii 3'–4' **(+1)**
muš-lah$_5$	2	0	—	0	—	1	**BDTNS 059327** rev. ii 2 **(+1)**
	3	0	—	0	—	2	***BIN* 5 277** iii 24 **(+1)**; **Nebraska 37** rev. i 10 **(+1)**
na-gada	9	1	***CUSAS* 39 138** rev. v 9', 11' **(+1)**	1	***CUSAS* 39 138** rev. i 10' **(+1)**[559]	1	***ŠA* 135 (pl. 74)** rev. 12 **(+1)**
	10 ½	1	***CUSAS* 39 138** rev. iv 17', 19' **(+1)**	0	—	0	—
	12	1	***CUSAS* 39 138** rev. iii 29' **(+1)**	0	—	0	—
	18	—	—	0	—	1	***CUSAS* 39 138** rev. ii 10', 12' **(+1)**
	21	1	***CUSAS* 39 138** rev. i 18' **(+1)**[560]	0	—	0	—
	24	0	—	1	***CUSAS* 39 138** rev. iii 13', 15' **(+1)**	0	—
nagar	6	1	***CUSAS* 39 138** obv. vii 15' **(+1)**	0	—	1	***CUSAS* 39 138** obv. vii 4', 6' **(+1)**
	15	0	—	0	—	1	**Foxvog, *ASJ* 18, 80 13** rev. 5 **(+1)**
	18	0	—	0	—	1	**Foxvog, *ASJ* 18, 80 13** rev. 8 **(+1)**
nar	6	0	—	0	—	5	***CUSAS* 39 138** rev. vii 8', 10' (?) **(+1)**, 13' **(+1)**, 16' **(+1)**, 19' (coll.), 21' **(+1)**; ***ŠA* 135 (pl. 74)** rev. 8 **(+1)**
nig$_2$-lagar-il$_2$	6	0	—	0	—	2	***CUSAS* 39 138** rev. vi 11' **(+1)**,[561] 14' **(+1)**
ninda du$_8$-du$_8$	6	0	—	0	—	1	***UCP* 9/2-1 100** rev. ii 23' **(+1)**
nu-banda$_3$ gu$_4$	18	23	***BPOA* 1 563** rev. 7–8 **(+2)**; **Steinkeller, *Studies Postgate* 2, 562 E** obv. i 12 (coll.) **(+20)**; ***ŠA* 135 (pl. 74)** obv. 3 **(+1)**	0	—	0	—

559. See rev. i 11' (coll.).

560. See rev. i 20' (coll.).

561. Rev. vi 5', 7' could also be counted as nig$_2$-lagar-il$_2$. However, rev. vi 9' reads: ⌜mu-u$_3$-a⌝ du$_8$ ⌜x⌝, and it may be restored as ⌜muhaldim u$_3$ ninda-du$_8$-du$_8$-me⌝ (see Bauer, *OrNS* 84, 149 obv. 22; *UTI* 3 2283 obv. 17' for similar lines). This restoration is uncertain and not counted.

Occupation	šuku-Land Size (in iku)	Citizens		UN-il$_2$		Uncertain	
		Count	Citations	Count	Citations	Count	Citations
sag-du$_5$	3	1	***Organisation administrative, Diss.* 1, 226 10 Talon-Vanderroost 3** obv. 9 **(+1)**	0	—	0	—
	18	1	***BPOA* 1 563** lo. ed. 2 **(+1)**	0	—	0	—
sagi	3	0	—	0	—	1	***TJAMC* IOS 20 pl. 54** rev. 3 (?) **(+1)**
	18	0	—	0	—	1	***Ontario* 2 270** obv. 6 (?) **(+1)**
sipa	3	1	***CUSAS* 39 138** rev. iv 4' **(+1)**	3	***CUSAS* 39 138** rev. iv 13' **(+1)**, v 14' **(+1)**, 16' **(+1)**	2	***CUSAS* 39 138** rev. iv 22' **(+1)**, v 4' **(+1)**
	6	1	***UCP* 9/2-1 100** rev. i 27'–28' **(+1)**	1	***CUSAS* 39 138** rev. iv 10' **(+1)**	0	—
	9	0	—	0	—	1	***UCP* 9/2-1 100** rev. i 21'–22' **(+1)**
	12	0	—	0	—	1	***Nisaba* 33 521** rev. ii 9' **(+1)**
	18	0	—	0	—	1	**BDTNS 059327** rev. iii 6 **(+1)**
šabra	54	1	***SAT* 3 2157** obv. 4 **(+1)**	0	—	0	—
ša$_3$-gu$_4$	3	0	—	0	—	301	***OrSP* 47-49 481** obv. ii 16 **(+1)**; **Steinkeller, *Studies Postgate* 2, 562 E** obv. i 10 **(+300)**
šar$_2$-ra-ab-du	6	0	—	0	—	1	***CUSAS* 39 138** obv. xii 16' **(+1)**
ša$_3$-sahar	6	0	—	0	—	2	***CUSAS* 39 138** obv. xii 3' **(+1)**, 6' **(+1)**
šu-i	6	0	—	0	—	1	***UTI* 6 3515** obv. 5' **(+1)**
šu-ku$_6$	6	0	—	0	—	1	***CUSAS* 39 138** obv. ix 6' **(+1)**
tug$_2$-du$_8$	6	0	—	0	—	1	***CUSAS* 39 138** obv. vii 9' **(+1)**
ugula	6	0	—	0	—	4	**BDTNS 059327** obv. iv 13 **(+1)**, 15 **(+1)**; ***CUSAS* 39 138** obv. x 10' **(+1)**; ***UTI* 6 3515** obv. 18' **(+1)**
	12	0	—	0	—	2	***CUSAS* 39 138** obv. viii 9' **(+1)**; ***UTI* 6 3515** obv. 16' (?) **(+1)**
	12 ½	0	—	0	—	1	***UTI* 6 3515** obv. 17' **(+1)**
	18	0	—	1	***UCP* 9/2-1 100** obv. iii 12 **(+1)**	1	**BDTNS 059327** obv. iv 17 **(+1)**
	36	4	***Nisaba* 23 52** obv. 10–11 **(+2)**; ***SNAT* 340** obv. 1 **(+1)**, 19 **(+1)**	0	—	0	—

Occupation	šuku-Land Size (in iku)	Citizens		UN-il$_2$		Uncertain	
		Count	Citations	Count	Citations	Count	Citations
u$_2$-il$_2$	4	0	—	0	—	1	***UCP* 9/2-1 100** rev. ii 27' **(+1)**
	6	0	—	0	—	1	***CUSAS* 39 138** rev. vi 27' **(+1)**
unu$_3$	7	0	—	0	—	1	***MVN* 4 3** rev. 1 **(+1)**

Table A7.3. apin-la$_2$-Land Sizes (in iku) for Male Citizens in Umma

apin-la$_2$-Land Size (in iku)	Citizens		Uncertain	
	Count	Citations	Count	Citations
¼	0	—	6	***AAICAB* I/3 Bod. S 307** obv. 6 **(+1)**; ***AnOr* 1 49** obv. i 22 **(+1)**; ***Nisaba* 33 126** obv. 3 (?) **(+1)**; **521** obv. i 5 (coll.) **(+1)**, 13 **(+1)**, 17 **(+1)**
½	0	—	5	***AAICAB* I/3 Bod. S 307** obv. 5 **(+1)**; ***Nisaba* 33 521** obv. i 14 **(+1)**, ii 2 **(+1)**; ***UTI* 3 2124** obv. 3 **(+1)**, 6 **(+1)**
¾	0	—	7	***AAICAB* I/3 Bod. S 307** obv. 4, 8 (?) **(+1)**, 12 **(+1)**; ***Farmer's Instructions* 8.3.2** rev. i 5 (CDLI) **(+1)**; ***Nisaba* 33 521** obv. i 16 **(+1)**; ***SAT* 3 2125** obv. 1 **(+1)**; **Snell, *ASJ* 9, 247 24**[562] obv. 4 **(+1)**; **248 25** obv. 5 **(+1)**
1	3	***Farmer's Instructions* 8.3.2** rev. i 28 **(+1)**; ***Nisaba* 33 521** obv. i 3 **(+1)**, rev. 1 **(+1)**	8	***AnOr* 1 49** obv. ii 15 **(+1)**; ***Farmer's Instructions* 8.3.2** rev. i 3 **(+1)**; ***Nisaba* 32 25** obv. 8 **(+1)**; **33 521** obv. i 4 **(+1)**, 7 **(+1)**, ii 6 **(+1)**; ***OrSP* 47-49 481** rev. i 4 **(+1)**; **Snell, *ASJ* 9, 247 24** obv. 11 **(+1)**
1 ¼	0	—	4	***AAICAB* I/3 Bod. S 307** obv. 7 **(+1)**; ***MVN* 14 212** obv. 1 (?) **(+1)**; ***SNAT* 364** obv. 18 **(+1)**; **Snell, *ASJ* 9, 247 24** rev. 2 **(+1)**
1 ½	1	***Nisaba* 33 126** obv. 4 (?) **(+1)**	7	***AnOr* 1 49** obv. ii 10 **(+1)**, rev. ii 11' **(+1)**; ***Farmer's Instructions* 8.3.2** obv. ii 14 **(+1)**, 16 **(+1)**; ***Nisaba* 33 126** rev. 2 (?) **(+1)**; **Snell, *ASJ* 9, 247 24** rev. 3 **(+1)**; ***UTI* 6 3516** rev. 8 **(+1)**
1 ¾	0	—	3	***AnOr* 1 49** obv. i 18 **(+1)**; ***Farmer's Instructions* 8.3.2** rev. i 9 (CDLI) **(+1)**; ***OrSP* 47-49 481** obv. ii 20 **(+1)**
2	1	***UTI* 4 2887**[563] obv. 6 **(+1)**	9	***AnOr* 1 49** obv. i 20 **(+1)**; ***Farmer's Instructions* 8.3.2** obv. i 9 **(+1)**, rev. ii 2 **(+1)**; ***OrSP* 47-49 481** obv. ii 18 **(+1)**, rev. i 2 **(+1)**; ***SNAT* 508** rev. 3 **(+1)**, 8–9 **(+2)**; **Snell, *ASJ* 9, 247 24** obv. 12 **(+1)**

562. See the CDLI transliteration of rev. 6.

563. This text shares many details with *BCT* 2 55, but both are counted where they do not overlap in content. Although the latter is damaged, it detailed apin-la$_2$ land.

apin-la$_2$-Land Size (in iku)	Citizens		Uncertain	
	Count	Citations	Count	Citations
2 ½	2	***UTI* 5 3381**[564] obv. 1 **(+1)**; **6 3516** rev. 7 (?) **(+1)**	8	***AnOr* 1 49** obv. ii 6 **(+1)**; **CDLI P342088** obv. 1 (?) **(+1)**; ***Farmer's Instructions* 8.3.2** obv. ii 12 **(+1)**; ***MVN* 4 3** obv. 9 (?) **(+1)**; ***OrSP* 47-49 481** obv. i 16 (?) **(+1)**,[565] 18 **(+1)**; ***SAT* 3 2125** obv. 3 **(+1)**; ***SNAT* 508** rev. 1 **(+1)**
2 ¾	0	—	3	***OrSP* 47-49 481** obv. i 20 **(+1)**, 22 **(+1)**; ***UTI* 3 2124** obv. 5 **(+1)**
3	5	***Farmer's Instructions* 8.3.2** obv. ii 17 **(+1)**, rev. i 11 **(+1)**; ***Nisaba* 33 126** rev. 5 (?) **(+1)**; ***UTI* 4 2887** obv. 1 **(+1)**; ***UTI* 6 3516** rev. 6 (?) **(+1)**	13	***AnOr* 1 49** obv. ii 4 **(+1)**, 12 **(+1)**; ***OrSP* 47-49 481** obv. ii 6 **(+1)**, rev. i 8 **(+1)**; ***SNAT* 508** obv. 8 **(+1)**; **Snell, *ASJ* 9, 248 25** obv. 6 (coll.) **(+1)**; ***UTI* 6 3516** obv. 6–7 **(+2)**, 9–11 **(+3)**, 13 **(+1)**, rev. 5 (?) **(+1)**[566]
3 ¼	0	—	1	***AnOr* 1 49** obv. ii 13 **(+1)**
3 ½	0	—	3	***Farmer's Instructions* 8.3.2** rev. i 15 **(+1)**; ***Nisaba* 33 521** rev. ii 12' **(+1)**; ***SNAT* 364** obv. 7–8 **(+1)**
3 ¾	0	—	2	**CDLI P341990** obv. 1 (?) **(+1)**; ***Farmer's Instructions* 8.3.2** obv. i 19 (coll.) **(+1)**[567]
4	2	***Nisaba* 33 521** obv. ii 4 (?) **(+1)**; ***UTI* 6 3516** obv. 14 **(+1)**	8	***Farmer's Instructions* 8.3.2** rev. i 1 **(+1)**, 17 **(+1)**; ***Nisaba* 32 25** obv. 6 **(+1)**; **Snell, *ASJ* 9, 247 24** obv. 9 **(+1)**; ***UTI* 5 3381** rev. 3 **(+1)**; **6 3516** obv. 1 **(+1)**, 3 (?) **(+1)**, 12 **(+1)**
4 ¼	0	—	1	***Farmer's Instructions* 8.3.2** rev. i 13 (CDLI) **(+1)**
4 ½	0	—	3	***AnOr* 1 49** obv. ii 25 **(+1)** ***OrSP* 47-49 481** obv. ii 2 **(+1)**, 10 **(+1)**
5	1	***SNAT* 364** rev. 2 **(+1)**	2	***AnOr* 1 49** rev. ii 8' (?) **(+1)**; ***Farmer's Instructions* 8.3.2** obv. i 15 **(+1)**
5 ½	1	***AnOr* 1 49** obv. i 16 (?) **(+1)**[568]	4	***Farmer's Instructions* 8.3.2** obv. i 5–7 **(+1)**; **Snell, *ASJ* 9, 247 24** rev. 1 **(+1)**; ***UTI* 6 3516** obv. 4 **(+1)**, rev. 12 **(+1)**
5 ¾	0	—	3	***AnOr* 1 49** obv. ii 18 **(+1)**; ***OrSP* 47-49 481** obv. ii 4 **(+1)**; ***SNAT* 508** obv. 20 **(+1)**

564. Some of the barley yields seem to be far too low for their respective apin-la$_2$-land sizes, but this text cannot be visually confirmed. This same issue applies to *MVN* 14 568.The apin-la$_2$-land sizes documented in their transliterations are assumed to be accurate.

565. There appears to be 2 ½ iku here rather than 2 ¼ iku, but this is not certain.

566. It is not certain whether this individual is attested elsewhere in this text.

567. Obv. i 19 reads: Lu$_2$-^{d}Inanna HUL$_2$, but the final sign is uncertain.

568. This Ludingira could be the Ludingira in rev. i 10'. This name is extremely common, however, and the lack of the occupation <ka>-guru$_7$ in rev. i 10' does not support this connection.

apin-la$_2$-Land Size (in iku)	**Citizens**		**Uncertain**	
	Count	**Citations**	**Count**	**Citations**
6	5	***BCT* 2 55** rev. 4 **(+1)**; ***Nisaba* 33 521** obv. i 11 **(+1)**, ii 5 **(+1)**; ***SNAT* 364** obv. 1 **(+1)**; ***UTI* 6 3516** rev. 11 **(+1)**	28	***AAICAB* I/3 Bod. S 307** obv. 1 **(+1)**; ***AnOr* 1 49** obv. ii 17 **(+1)**, 21 (?) **(+1)**, 23 **(+1)**; ***Farmer's Instructions* 8.3.2** obv. i 23 **(+1)**, 25 **(+1)**, ii 1 **(+1)**, rev. i 20 **(+1)**; ***MVN* 4 3** obv. 7 (?) **(+1)**; **4** obv. 1 **(+1)**, 3 **(+1)**, 5 **(+1)**; ***Nisaba* 33 521** obv. i 1 **(+1)**, 12 **(+1)**, ii 1 **(+1)**; ***Ontario* 2 270** obv. 1 (?) **(+1)**; ***OrSP* 47-49 481** obv. i 14 **(+1)**, rev. i 6 **(+1)**; ***SNAT* 364** obv. 11 **(+1)**; **508** obv. 5 **(+1)**, rev. 11 **(+1)**; **Snell, *ASJ* 9, 247 24** obv. 10 **(+1)**, rev. 4 (?) **(+2)**; **248 25** obv. 3 **(+1)**; ***UTI* 3 2124** obv. 1 **(+1)**; **6 3516** obv. 8 **(+1)**, rev. 17 **(+1)**
6 ½	0	—	1	**CDLI P341981** obv. 1 (?) **(+1)**
6 ¾	0	—	2	***Farmer's Instructions* 8.3.2** rev. i 31, ii 9 (CDLI) **(+1)**; ***UTI* 4 2887** obv. 15–17 (?) **(+1)**
7	0	—	4	***AnOr* 1 49** obv. ii 2 (?) **(+1)**; ***Farmer's Instructions* 8.3.2** obv. i 21 **(+1)**; ***OrSP* 47-49 481** obv. i 11 **(+1)**; ***UTI* 6 3516** rev. 9 **(+1)**
7 ½	0	—	3	***Farmer's Instructions* 8.3.2** obv. i 17 **(+1)**, ii 27 **(+1)**, rev. i 22 **(+1)**
7 ¾	0	—	1	***AnOr* 1 49** rev. i 7', 9' (?) **(+1)**
8	2	***Farmer's Instructions* 8.3.2** obv. ii 22 **(+1)**; ***Nisaba* 33 521** obv. ii 3 (?) **(+1)**	2	***UTI* 5 3381** obv. 4 **(+1)**; **6 3516** rev. 15–16 **(+1)**
8 ½	0	—	1	***UTI* 6 3516** rev. 3 **(+1)**
9	0	—	2	***Farmer's Instructions* 8.3.2** obv. ii 7 (?) **(+1)**,[569] 29 **(+1)**
9 ¼	0	—	1	***Farmer's Instructions* 8.3.2** obv. ii 19, 20 (CDLI) **(+1)**
11	0	—	1	***BCT* 2 55** rev. 1–2 **(+1)**
11 ¼	0	—	1	***AnOr* 1 49** obv. i 11, 13 **(+1)**
12	4	***SNAT* 364** obv. 5 **(+1)**; **Snell, *ASJ* 9 247 24** obv. 1 **(+1)**, 5 **(+1)**; ***UTI* 4 2887** obv. 4 **(+1)**	4	***Farmer's Instructions* 8.3.1** obv. 1 **(+1)**, 12 **(+1)**; ***MVN* 4 3** obv. 1 (?) **(+1)**; ***UTI* 5 3381** obv. 3 **(+1)**
12 ½	0	—	1	***MVN* 4 3** rev. 6 (?) **(+1)**
13 ¼	0	—	1	***AnOr* 1 49** obv. ii 8 **(+1)**
13 ½	0	—	1	***AnOr* 1 49** obv. ii 26 **(+1)**
14	1	***SNAT* 508** obv. 1 **(+1)**	1	***Farmer's Instructions* 8.3.1** obv. 9 **(+1)**
15	0	—	1	***MVN* 4 3** rev. 9–10 (?) **(+1)**
16	1	***Farmer's Instructions* 8.3.2** obv. i 12 **(+1)**	2	***Nisaba* 32 25** obv. 1 **(+1)**; ***UTI* 4 2887** rev. 7–8 **(+1)**

569. There appears to be ⌜0.1.3 gan$_2$⌝, but this is difficult to collate.

apin-la$_2$-Land Size (in iku)	Citizens		Uncertain	
	Count	Citations	Count	Citations
18	0	—	19	***AnOr* 1 49** obv. i 31 **(+1)**, rev. ii 6' (?) **(+1)**; ***Farmer's Instructions* 8.3.2** obv. ii 4 **(+1)**, 24 **(+1)**, rev. i 7, 24, 26 **(+1)**, ii 6 **(+1)**, 11 **(+1)**; ***Nisaba* 33 126** obv. 6–7 (?) **(+2)**, rev. 3–4 (?) **(+2)**; **521** obv. i 6 **(+1)**, 8 **(+1)**; ***OrSP* 47-49 481** obv. i 5 **(+1)**; ***Texts in the Carnegie Museum, Diss.*, 180 65 CMNH 30498-55** rev. ii 2', 5' (?) **(+1)**;[570] ***UTI* 5 3381** obv. 6 **(+1)**, rev. 2 **(+1)**; **6 3516** obv. 5 **(+1)**, rev. 5 (?) **(+1)**[571]
19 ¼	0	—	1	***AnOr* 1 49** obv. ii 20 (?) **(+1)**
20	0	—	1	***MVN* 4 3** obv. 4 (?) **(+1)**
24	0	—	7	***Farmer's Instructions* 8.3.2** obv. ii 10 **(+1)**; ***MVN* 4 3** rev. 3 (?) **(+1)**, 12 (?) **(+1)**; ***Nisaba* 33 12** obv. 1 (?) **(+1)**; **521** obv. ii 8 **(+1)**; ***SNAT* 508** obv. 12, 15 **(+1)**, rev. 5 **(+1)**
24 ½	1	***Nisaba* 33 126** obv. 5 (?) **(+1)**	0	—
25	0	—	1	***Farmer's Instructions* 8.3.2** rev. ii 3 **(+1)**
26	0	—	1	***BCT* 2 55** obv. 1' **(+1)**
27	0	—	1	***AnOr* 1 49** obv. i 6, 8 **(+1)**
28	0	—	1	***UTI* 6 3516** rev. 13 **(+1)**
33	0	—	3	***Nisaba* 32 25** obv. 12, 18 **(+1)**; **33 521** obv. i 9 **(+1)**; ***SNAT* 364** rev. 8 **(+1)**
36	0	—	2	***MVN* 14 568** obv. 5 **(+1)**; ***UTI* 5 3381** rev. 1 **(+1)**
38 ½	0	—	1	***AnOr* 1 49** obv. i 1, 3, rev. i 11', ii 9' (?) **(+1)**[572]
39	1	***Farmer's Instructions* 8.3.2** obv. i 1, rev. i 29 **(+1)**	0	—
45	0	—	1	***UTI* 4 2887** obv. 9 **(+1)**
54	0	—	3	***AnOr* 1 49** obv. i 24, 26, rev. ii 13' (?) **(+1)**;[573] ***MVN* 14 568** obv. 1 **(+1)**, 3 **(+1)**
114	1	***AnOr* 1 49** obv. i 29 **(+1)**	0	—

Table A7.4. apin-la$_2$-Land Sizes (in iku)
for Male Citizens according to Occupation in Umma

Occupation	apin-la$_2$ Land Size (in iku)	Citizens		Uncertain	
		Count	Citations	Count	Citations
agar$_4$-nigin$_2$	3	0	—	1	***UTI* 6 3516** obv. 6 (?) **(+1)**
	6	0	—	1	***Farmer's Instructions* 8.3.2** obv. ii 1 **(+1)**
	8	0	—	1	***UTI* 5 3381** obv. 4 **(+1)**
	9	0	—	1	***Farmer's Instructions* 8.3.2** obv. ii 7 (coll.) **(+1)**

570. Lugalnesage may have had more apin-la$_2$ land in the preceding lost text.

571. It is not certain whether this individual is attested elsewhere in this text.

572. One or more of these various apin-la$_2$-land sizes may not have been rented by the same Ur-Enlila.

573. Lugal-[x]-SAR (rev. ii 14') could have been Lu$_2$-^{giš}kiri$_6$ (obv. i 28).

Occupation	apin-la$_2$ Land Size (in iku)	Citizens		Uncertain	
		Count	Citations	Count	Citations
aga$_3$-us$_2$	6	0	—	1	***AAICAB* I/3 Bod. S 307** obv. 1 **(+1)**
a-igi-du$_8$	3	0	—	1	***AnOr* 1 49** obv. ii 12 **(+1)**
azlag$_7$	2 ¾	0	—	1	***UTI* 3 2124** obv. 5 **(+1)**
dub-sar	5 ½	0	—	1	***Farmer's Instructions* 8.3.2** obv. i 5–7 **(+1)**
	6	0	—	2	***SNAT* 364** obv. 11 **(+1)**; **Snell, *ASJ* 9, 248 25** obv. 3 **(+1)**
	9	0	—	1	***Farmer's Instructions* 8.3.2** obv. ii 29 **(+1)**
engar	¼	0	—	2	***AnOr* 1 49** obv. i 22 **(+1)**; ***Nisaba* 33 521** obv. i 13 **(+1)**
	1	1	***Farmer's Instructions* 8.3.2** rev. i 28 **(+1)**	0	—
	2 ½	0	—	1	***MVN* 4 3** obv. 9 (?) **(+1)**
	9 ¼	0	—	1	***Farmer's Instructions* 8.3.2** obv. ii 19–20 **(+1)**
ga-il$_2$	4	0	—	1	***UTI* 6 3516** obv. 12 **(+1)**
gudu$_4$	2 ½	1	***UTI* 5 3381** obv. 1 **(+1)**	0	—
	3	1	***Farmer's Instructions* 8.3.2** obv. ii 17 **(+1)**	0	—
	5	1	***SNAT* 364** rev. 2 **(+1)**	0	—
	12	3	***SNAT* 364** obv. 5 **(+1)**; **Snell, *ASJ* 9 247 24** obv. 1 **(+1)**; ***UTI* 4 2887** obv. 4 **(+1)**	0	—
	39	1	***Farmer's Instructions* 8.3.2** obv. i 1, rev. i 29 **(+1)**	0	—
i$_3$-du$_8$	18	0	—	1	***Farmer's Instructions* 8.3.2** rev. ii 11 **(+1)**
išib	1	2	***Nisaba* 33 126** rev. 1 (?) **(+1); 521** obv. i 3 **(+1)**	0	—
ka-guru$_7$	5 ½	1	***AnOr* 1 49** obv. i 16 (?) **(+1)**	0	—
ku$_3$-gal$_2$	33	0	—	1	***Nisaba* 33 521** obv. i 9 **(+1)**
kurušda	12	0	—	1	***Farmer's Instructions* 8.3.1** obv. 12 **(+1)**
lu$_2$ a gub-ba	24	0	—	1	***SNAT* 508** rev. 5 **(+1)**
	26	0	—	1	***BCT* 2 55** obv. 1' **(+1)**
	33	0	—	1	***SNAT* 364** rev. 8 **(+1)**
(lu$_2$-)ŠIM	3	0	—	1	***UTI* 6 3516** obv. 7 **(+1)**
	6	0	—	3	***MVN* 4 4**[574] obv. 1 **(+1)**, 3 **(+1)**, 5 **(+1)**
	25	0	—	1	***Farmer's Instructions* 8.3.2** rev. ii 3 **(+1)**
muhaldim	¾	0	—	1	**Snell, *ASJ* 9, 247 24** obv. 4 **(+1)**
	6 ½	0	—	1	**CDLI P341981** obv. 1 (?) **(+1)**
mu$_6$-sub$_3$	¾	0	—	1	**Snell, *ASJ* 9, 248 25** obv. 5 **(+1)**
nagar	1 ½	0	—	1	***Farmer's Instructions* 8.3.2** obv. ii 14 **(+1)**
nu-banda$_3$	16	1	***Farmer's Instructions* 8.3.2** obv. i 12 **(+1)**	0	—
	114	1	***AnOr* 1 49** obv. i 29 **(+1)**	0	—

574. bappir$_2$ is read as ŠIM here.

Occupation	apin-la$_2$ Land Size (in iku)	Citizens		Uncertain	
		Count	Citations	Count	Citations
nu-banda$_3$ gu$_4$	3	1	***Farmer's Instructions* 8.3.2** rev. i 11 **(+1)**	0	—
	6	1	***Nisaba* 33 521** obv. i 11 **(+1)**	0	—
	8	1	***Nisaba* 33 521** obv. ii 3 (?) **(+1)**	0	—
ra-gaba	6	0	—	1	***Ontario* 2 270** obv. 1 (?) **(+1)**
sanga	4	1	***Nisaba* 33 521** obv. ii 4 (?) **(+1)**	0	—
sipa	¾	0	—	1	***Farmer's Instructions* 8.3.2** rev. i 5 (CDLI) **(+1)**
	1 ½	1	***Nisaba* 33 126** obv. 4 (?) **(+1)**	0	—
	2 ½	0	—	1	***Farmer's Instructions* 8.3.2** obv. ii 12 **(+1)**
	4	0	—	1	***Farmer's Instructions* 8.3.2** rev. i 17 **(+1)**; ***Nisaba* 32 25** obv. 6 **(+1)**
	6	0	—	1	***MVN* 4 3** obv. 7 (?) **(+1)**
	6 ¾	0	—	1	***Farmer's Instructions* 8.3.2** rev. i 31, ii 9 (CDLI) **(+1)**
šabra	6	2	***BCT* 2 55** rev. 4 **(+1)**; ***SNAT* 364** obv. 1 **(+1)**	0	—
	8	1	***Farmer's Instructions* 8.3.2** obv. ii 22 **(+1)**	0	—
šuš$_3$	4	1	***UTI* 6 3516** obv. 14 **(+1)**	0	—
	6	1	***Nisaba* 33 521** obv. ii 5 **(+1)**	0	—
tir	14	1	***SNAT* 508** obv. 1 **(+1)**[575]	0	—
ugula nam-10	12	0	—	1	***UTI* 5 3381** obv. 3 **(+1)**
unu$_3$	6	1	***UTI* 6 3516** rev. 11 **(+1)**	0	—

Appendix 8. Collations

All cited collations are compiled in Table A8.2 according to the list in Table A8.1. Collated changes to the BDTNS transliterations of these texts are bolded, though the removal of text is not bolded of course. Collations may include comments, though many collations are based on formatting without comments.

Table A8.1. List of Collated Texts with Page Numbers

575. This individual is a dub-sar in *MVN* 21 79 seal 2.

Table A8.2. Collations

Text	Line	Transliteration with Bolded Collated Changes	Comment(s)
AAICAB I/1 Ashm. 1911-228	obv. i 1	⌜**šu**⌝ Gu-na	• see *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 obv. v 44
	obv. i 4	AŠ **'ab'** Ur$_4$-ša$_3$-ki-du$_{10}$	
	rev. ii 4	šu-nigin$_2$ 2(AŠ) dumu nita$_2$ **0.0.2 2**-ta	
Amherst 84	rev. 20	'šu-nigin$_2$ **AŠ$_c$**' guruš a$_2$ ½ 0.1.0 še i$_3$-du$_8$	
	le. ed. i 1	**azlag$_7$** ensi$_2$-ka / ša$_3$' Gir$_2$-su^{ki}	
AnOr 1 85	rev. i 21	½ Lu$_2$-**^{d}Šara$_2$**	
AnOr 7 268	obv. 1	1 ^{d}Nanna-ki-[**ag$_2$**]	• see Table 5.7
AnOr 7 351	obv. 1	**½** Ur-E$_{11}$-/e i$_3$-⌜du$_8$-še$_3$⌝	
BCT 2 288	obv. iii 1	AŠ$_c$ [**gan$_2$ B**]**a-**⌜**an**⌝-sa$_6$	• see *OrSP* 47-49 382 obv. iii 24
	obv. iii 28	**AŠ** 0.0.3 1 **tug$_2$** dumu-gir$_{15}$ ⌜Ur⌝-^{d}Dumu-zi-da dumu Ur-mes	
	obv. iii 31	**DIŠ** L**[**u$_2$-**I]b-g[al]** dumu-[**ni-me**]	• see *OrSP* 47-49 382 rev. ii 1–2
	rev. iii 1	AŠ$_c$ gan$_2$ **L[u$_2$]**-sig$_5$ dumu La-a-mu simug a-igi-du$_8$-⌜ta⌝	• see *Nisaba* 23 56 obv. ii 10, 12
	rev. iii 11	AŠ$_c$ gan$_2$ Ur-^{d}Nin-**zu**	• see *BPOA* 1 810 obv. 2 (coll.); *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 rev. ix 5
	rev. iii 18	**½$_c$** gan$_2$ Lugal-ma$_2$-gur$_8$-re	
	rev. iv 14	**½$_c$** gan$_2$ Lugal-ša$_3$-la$_2$	
BDTNS 196758	obv. i 1	AŠ$_c$ ⌜gan$_2$⌝ Ur-^{giš}gigir nu-banda$_3$ gu$_4$ / dumu Bar-ra-AN	
	obv. i 5	**AŠ** ⌜gan$_2$⌝ UN Ga-ti-e / aga$_3$-us$_2$	
	obv. i 16	**šu** Lugal-e$_2$-mah-e	
BPOA 1 810	obv. 1	**½** ^{d}Šara$_2$-i$_3$-zu	

Text	Line	Transliteration with Bolded Collated Changes	Comment(s)
BPOA 1 810	obv. 2	½ Ur-^{d}Nin-zu	• see *BCT* 2 288 rev. iii 11 (coll.); *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 rev. ix 5
	obv. 4	**1** UN Ku$_3$-^{d}Šara$_2$	
BPOA 7 2457[576]	obv. 11	AŠ$_c$ UN 0.1.1 5 4 Arad$_2$-mu **kinkin$_2$**	
	rev. 12	AŠ$_c$ La-a-a **mu$_6$-sub$_3$**	
CDLI P370981	obv. 1	la$_2$-i$_3$ **1** Engar-zi	
	obv. 2	**1** Eden-ta	
	obv. 3	**1** Ur-zikum-ma	
	obv. 5	**1** E$_2$-lu$_2$-bi-zu	
	obv. 6	**1 Im-ta-e$_3$-a**	• obv. 6 was formerly part of obv. 5
	obv. 7	**1** ^{d}Šara$_2$-kam dumu Da-ti-ti-ni	• obv. 7 was formerly obv. 6
CDLI P429776	obv. i 13	AŠ$_c$ 0.1.0 ⌜tug$_2$⌝ si$_{12}$-<a> Gu-**da**-/⌜da⌝	• see PIN 35
CHEU 55	rev. 5	KUR$_2$ ⌜Lu$_2$-ga⌝-mu **a-ru-a** ^{d}Nanše	• see the CDLI for a-ru-a
CST 880	obv. i 3'	AŠ Lu$_2$-kiri$_3$-zal dumu-[**ni**]	• see *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 rev. vi 16
	obv. ii 4'	[**AŠ$_c$** ga]n$_2$ UN Lu$_2$-^{d}Utu ⌜**engar**⌝ dumu Gu-u$_2$-⌜gu⌝	• see *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 obv. iv 3'
	obv. ii 18'	Ur-Gu$_2$-⌜**de$_3$**-na⌝ i$_3$-⌜dab$_5$⌝	
CT 5 pl. 19 BM 12912	obv. iii 32	42 dumu **Sag-ub$_5$**^{ki} / 0.1.2-ta	
CUSAS 39 126	obv. vii 22	dumu-**gir$_{15}$** šuku nu-dab$_5$-**ba**	
	obv. vii 31	dumu-**gir$_{15}$** šuku nu-dab$_5$-⌜**ba**⌝	
	obv. vii 40–41	dumu-**gir$_{15}$** šuku nu-dab$_5$-**<ba>**$^{?}$ **a$_2$** ba-/ab-**i[l$_2$-m]e**	• obv. vii 40–41 should be read as one line
	rev. i 27	0.0.4 Ur-^{d}Hendur-sag-**ka**	
	rev. iv 19	⌜**Lugal**⌝-ma$_2$-gur$_8$-re	• see *CUSAS* 39 135 rev. vi 11
CUSAS 39 128	obv. ii 37	DIŠ [^{d}]⌜**Šara$_2$**⌝-i$_3$-⌜**zu**⌝ x **x {erased$^{?}$}**	• see *CUSAS* 39 129 obv. iii 4; *Santag* 7 32 obv. ii' 2' (coll.)
	obv. ii 38	[**DIŠ** Lu$_2$]-⌜dingir⌝-ra	• see *CUSAS* 39 129 obv. iii 5; *Santag* 7 32 obv. ii' 3' (coll.)
	obv. iii 33	DIŠ 0.0.⌜**1**⌝ 5 1 ½ Šeš-kal-⌜la⌝	
	rev. i 20	dumu Gu-za-**me**	
	rev. i 34	⌜AŠ$_c$ gan$_2$⌝ UN **Peš$_2$**-am$_3$	• see pp. 113–14
CUSAS 39 129	obv. i 11'	AŠ$_c$ [**gan$_2$**] ⌜Lu$_2$-^{d}⌝Utu [unu$_3$]	• see *CUSAS* 39 128 obv. i 13
	obv. ii 12	⌜**uš$_2$**⌝ Ur-sukkal	
	obv. ii 35	[**AŠ$_c$ gan$_2$**] ⌜Lugal⌝-šu-⌜nir-re⌝	• see *CUSAS* 39 128 obv. ii 24
	obv. iv 39	⌜**AŠ$_c$**⌝ Ur-e$_2$-mah / ⌜**AŠ** ^{d}Šara$_2$⌝-ki-⌜ag$_2$⌝	• see *CUSAS* 39 128 rev. i 3–4 • obv. iv 39 in the BDTNs should perhaps be split into two lines
	obv. v 12	[**šu** U]N Bu$_3$-du	• see *CUSAS* 39 128 rev. i 14
	obv. v 13	[**AŠ$_c$ gan$_2$**] ⌜UN Lu$_2$⌝-/[^{d}]⌜Šara$_2$⌝ dumu-ni	• see *CUSAS* 39 128 rev. i 15
	obv. vii 22'	DIŠ A-kal-la / dumu Ur-^{d}Nin-**zu ba-⌜uš$_2$$^{?}$-me$^{?}$⌝**	

576. I am indebted to Klaus Wagensonner and the YBC for images of this text.

Text	Line	Transliteration with Bolded Collated Changes	Comment(s)
CUSAS 39 129	rev. i 14'	**AŠc** gan$_2$ Lugal-dub-la$_2$	
	rev. ii 13'	--- Ša$_3$-ku$_3$-ge	
	rev. vi 20	**½c** gan$_2$ Nig$_2$-bi	
	rev. vi 23	[**dumu-ni**]-ˈ**me**ˈ	
	rev. vi 25	**½c** [**gan$_2$ Ur-^{d}Dumu**]-ˈzi-daˈ	• see *TCL* 5 6038 rev. i 38
	rev. vi 28	**½c** gan$_2$ Ur-^{d}Nun-/gal	
	rev. vi 31	**½c** gan$_2$ In-**bad$_3$-bad$_3$**	• In-bad$_3$-bad$_3$ is less frequently transliterated as In-u$_9$-u$_9$ in the BDTNS
	rev. vii 3'	**½c** gan$_2$ Nig$_2$-lagar-ˈeˈ dumu / Hu-un-sa$_6$-sa$_6$	
	rev. vii 5'	**½c** gan$_2$ Da-ga	
	rev. vii 6'	**½c gan$_2$** Arad$_2$-mu dumu En-ma-an-gu-ul	
CUSAS 39 130	obv. i 6	ˈ**AŠ**ˈ gan$_2$ Lugal-ezem ˈšešˈ-tab-ba	
	obv. i 18	AŠ **ab{erased}** Ur-^{d}Šul-pa-e$_3$	
	obv. ii 14	AŠc gan$_2$ Lu$_5$-lu$_5$-ˈmu **engar**ˈ	
	rev. i 1	ˈ**Lu$_5$**ˈ**-lu$_5$**-mu [**i$_3$-dab$_5$**]	
	rev. i 4	ˈ**dumu AŠ**ˈ 0.0.2 2 Lugal-^{giš}ˈapinˈ-du$_{10}$	
	rev. i 5	DIŠ 0.0.ˈ**2 2**ˈ ^{d}Šul-gi-ˈhaˈ-ma-ti	
CUSAS 39 131	rev. i 15	AŠc ˈUN **gan$_2$**ˈ A$_2$-zi-/da	• see Table 4.10 for both collations of this text
	rev. i 18	ˈdumuˈ La-al-ˈu$_2$-a-meˈ	
CUSAS 39 132	obv. ii 16	AŠc 0.1.0 4 UN Ur-^{d}Utu	
	rev. ii 11	šu-nigin$_2$ **AŠc** guruš a$_2$ ½c	
	rev. ii 19	šu-nigin$_2$ AŠ UN guruš 0.0.4 1 <**tug$_2$**>	
	rev. ii 20	šu-nigin$_2$ 2(AŠ) dumu 0.0.2 ˈ**2**-taˈ	
	rev. ii 22	[šu-nigin$_2$] 13 šu-gi$_4$ 0.0.4 ˈ**3**-taˈ	
	rev. ii 24	**[UN-i]l$_2$**-me	
CUSAS 39 133	obv. ii 31	**½c** Ša$_3$-ku$_3$-ge dumu **AB**-e-/ki-ag$_2$	• AB-e-ki-ag$_2$ is transliterated a few times as Ab-e-ki-ag$_2$ and more often as Eš$_3$-e-ki-ag$_2$ in the BDTNS
	obv. iii 26	**½c** Ur-nigar$_x^{gar}$ ma$_2$-DU$_3$	
	obv. iv 32	ˈAŠ ab ^{d}ˈUTU-ba-ni	
CUSAS 39 135	obv. i 24	AŠc 0.1.1 ˈ**5 4**ˈ UN Gu-u$_2$-a	
	obv. i 42	½c gan$_2$ Nimgir-an-ne$_2$ / muš-lah$_5$	
	obv. ii 3	½c gan$_2$ UN-[**da**]-ga	• see PIN 123
	obv. ii 5	DIŠ Lu$_2$-^{dˈ}x dumuˈ-ni-**me**	
	obv. ii 9	**AŠc!?**(½c) 0.1.1 **5 4 UN** A-kal-la dumu Lu$_2$-/me-lam$_2$	• see the original publication for ½c and UN • the ½c notation for UN-il$_2$ is extremely unusual and is probably an error (see p. 352)
	obv. ii 10	**DIŠ 0.0.1 5 1** ½ **Engar**-zi dumu-ni	
	obv. ii 23	AŠ **ama** Ur-^{giš}gigir	

Text	Line	Transliteration with Bolded Collated Changes	Comment(s)
CUSAS 39 135	obv. ii 40	⌜**AŠc**⌝ 0.1.1 **5 4** UN Ur$_4$-ša$_3$-ki-/du$_{10}$	
	obv. ii 42	dumu AŠ 0.0.2 **2** Lugal-he$_2$-gal$_2$	
	obv. ii 44	'**AŠc**' 0.1.1 5 **4** UN Lum-ma	• see *AnOr* 7 301 rev. i 12
	obv. iii 4	**agar$_4$-nigin$_2$-ta**	• see PIN 128
	obv. iv 1	AŠc 0.1.1 **5'(4?)** 4 UN ^{giš}Dur$_2$-gar-ni / dumu Da-a-gu-ni	
	obv. iv 19	dumu **AŠ 0.0.2 2** Ur-^{d}Bil$_3$-/ga-mes	
	obv. iv 24	AŠc 0.1.1 5 **4** UN Ku$_3$-ga-ni	• see the original publication for AŠc
	obv. iv 29	dumu AŠ 0.0.2 **2** A-a-ge-na	
	obv. v 17	**DIŠ** 0.**0**.⌜1 5⌝ 1 ½ Ur-<^{d}>Ur$_3$-bar-tab	
	obv. v 18	**DIŠ** 0.**0**.1 ⌜5⌝ **[1]** '**½**' Lu$_2$-^{d}Nin-ur$_4$-/ra	
	obv. v 26	[**AŠc 0.1.1**] 5 4 UN Ab-ba-/ge-na dumu Ur-/^{d}Bil$_4$-<ga>-mes	
	obv. vi 4	'**½c gan$_2$**' A$_2$-zi-⌜da / dumu!?⌝ A⌝-tu	
	obv. vi 40	½c ⌜gan$_2$ Ur⌝-^{d}[**Utu**]	• see PIN 111
	obv. vii 3	'**AŠc**' 0.**1**.1 ⌜5⌝ 4 UN Arad$_2$ [dumu] / Ur-⌜^{giš}gigir⌝	
	obv. vii 11	dumu **AŠ** '**0.0.2 2**' Lugal-ušur$_x$(LAL$_2$.TUG$_2$)	
	obv. vii 12	DIŠ 0.0.⌜2 **2**⌝ Lugal-a$_2$-/zi-da	
	obv. vii 17	⌜**DIŠ 0.0.1**⌝ **5 1** ½ Ur-e$_2$-mah	
	obv. vii 22	½c gan$_2$ Lu$_2$-dingir-ra-**šum$_2$-/ma**	• see PIN 113
	obv. vii 30	AŠc 0.1.1 5 '**4** UN' E$_2$-**geštin**	• see *Nisaba* 23 9 rev. ii 7; *TCL* 5 5674 obv. i 8'
	obv. viii 18'	DIŠ **0.0.1** 5 **1** ½ Igi-⌜^{d}Šara$_2$⌝-[**še$_3$**]	• see *Torino* 2 706 C obv. ii' 1' (coll.)
	obv. viii 19'	½c gan$_2$ 'Nam-**ha**⌝-[**ni dumu**] / 'KA'-**u$_2$**-[**du$_{11}$**]	• see PIN 114
	obv. viii 21'	½c gan$_2$ Ab-ba-[**mu**]	• see PIN 115
	obv. viii 22'	½c **gan$_2$?** Ur-^{giš}[**gigir**]	• see PIN 116
	obv. viii 27'	½c gan$_2$ Ur-^{d}[**Suen**]	• see PIN 117
	obv. viii 29'	½c gan$_2$ Lu$_2$-[**da-ga**]	• see PIN 118
	obv. viii 34'	½c gan$_2$ '**Ma**'-**an**-'**šum$_2$**'	• see PIN 119
	obv. viii 44'	½c gan$_2$ '**Lu$_2$**'-[^{d}**Utu**]	• see PIN 121
	obv. viii 46'	½c **g**[**an$_2$** ...]	• may be Aradam in *TCL* 5 5674 obv. ii 23
	rev. iii 3	**DIŠ** 0.**0**.2 2 UN Šeš-a-ni / dumu Lu$_2$-Ib-gal / ad-KID	
	rev. iii 24	AŠc 0.1.1 5 **4 UN** Lugal-'nesag⌝-[e] / dumu Ama-kal-⌜la⌝	• UN is difficult to see and written between Lugal and dumu
	rev. iii 25	AŠc 0.1.**0 tug$_2$** A-a-lu$_2$-du$_{10}$	
	rev. iii 33	dumu AŠ **0.0.2 2** Lugal-⌜ku$_3$-zu⌝	
	rev. vi 1	[**uš$_2$ Giri$_3$**]-⌜^{d}⌝**Šara$_2$**-i$_3$-dab$_5$	• see *CUSAS* 39 140 obv. ii 24'
CUSAS 39 138	rev. i 11'	**Ṣil$_2$-la**-šu ⌜na⌝-[**gada**]	• see *CUSAS* 39 129 obv. vi 11; 138 rev. i 16' (coll.)
	rev. i 16'	**Ṣil$_2$**-la-šu ⌜**i$_3$**⌝-[**dab$_5$**]	• see *CUSAS* 39 129 obv. vi 11; 138 rev. i 11' (coll.)
	rev. i 20'	Ba-⌜zi⌝-[**ge na-gada**]	• see PIN 163
	rev. iii 7'	⌜Ša$_3$⌝-[**ku$_3$-ge**]	• see PIN 164
	rev. iii 11'	U$_3$-ma-[**ni**]	• see PIN 165

Text	Line	Transliteration with Bolded Collated Changes	Comment(s)
CUSAS 39 138	rev. v 27'	⌜**Nig$_2$**⌝-bi	• see PIN 172
	rev. vii 19'	0.0.**4** gan$_2$ 6.0.0 gur	• 0.0.4 overlaps with the ledger line
CUSAS 39 139	obv. iii' 2'	Lu$_2$-⌜d⌝[**Šara$_2$ (x)**]	• see PIN 205
	obv. iii' 4'	Lugal-[**ezem (x)**]	• see PIN 206
CUSAS 39 140	obv. ii 4'	AŠ 0.0.3 **t[ug$_2$ A$_2$-dingir-ga$_2$]**	• see *CUSAS* 39 129 obv. v 34; 135 rev. vi 19
	obv. ii 25'	**[a-ru-a]** ⌜Lu$_2$⌝-^{d}Šara$_2$	• see *CUSAS* 39 135 rev. vi 2
	rev. i 1	**DIŠ** 0.**0**.1 5 1 ½ Ki-[lu$_5$-la]	• see *CUSAS* 39 129 obv. vi 7
	rev. i 7	**DIŠ** Bu$_3$-bu$_3$	
CUSAS 39 155	rev. v 14'	[**iti 2**]+2-še$_3$	• see Civil, *Studies Sigrist* 36 xi 26; *CUSAS* 39 156 rev. iv 19 (coll.); *TCL* 5 5675 rev. v 20; 5676 rev. vi 13
CUSAS 39 156	rev. iv 19	⌜iti⌝ **[4]**-še$_3$	• see Civil, *Studies Sigrist* 36 xi 26; *CUSAS* 39 155 v 14' (coll.); *TCL* 5 5675 rev. v 20; 5676 rev. vi 13
	rev. iv 20	[**a$_2$-bi u$_4$**] ⌜**480**⌝	• see Civil, *Studies Sigrist* 36 xi 27; *CUSAS* 39 155 v 15' (coll.); *TCL* 5 5675 rev. v 21; 5676 rev. vi 14
	rev. iv 21	[**a$_2$ u$_4$ duh-a dumu**]-**gir$_{15}$**	• see Civil, *Studies Sigrist* 36 xi 28; *CUSAS* 39 155 v 16' (coll.); *TCL* 5 5675 rev. v 21; 5676 rev. vi 15 • the following lost lines detail the days off for UN-il$_2$ over the same time period
CUSAS 40/2 669	obv. 1	442 geme$_2$ sag-d[ub **nu-dab$_5$**]	• see obv. 7, 12, 18, rev. 3, 8, 13
CUSAS 40/2 1572	obv. 1	½ Ur-^{d}Dumu-zi / **ašgab** nu-dab$_5$ im-e taka$_4$-a / dumu Puzur$_4$-Ha-ia$_3$	• see obv. 4
	obv. 3	šu-nigin$_2$ AŠ$_c$ guruš a$_2$ ½ / **ašgab** nu-dab$_5$	• see obv. 4
Farmer's Instructions 8.3.2	obv. i 19	0.0.3 **½** ¼ gan$_2$ 3.0.0 gur	
HLC 2 103 pl. 93	obv. 2	6 guruš a$_2$ ⅔ 0.0.4-ta	
HLC 3 238 pl. 113	obv. iv 10	½$_c$ 0.0.3 3 Nin-lu$_2$-u$_4$-⌜da⌝	
	obv. vii 30	AŠ$_c$ 0.0.3 3 Geme$_2$-**[tul$_2$]**-sag	• see *TUT* 156 rev. i 4
LAOS 1 2	obv. ii 8	1 dumu nita$_2$ 0.**0**.1 5	
	obv. ii 25	AŠ$_c$ UN 0.1.1 5 **zi$_3$-il$_2$**	
	rev. i 12	**AŠ$_c$** gan$_2$ guruš ⌜a$_2$ ½⌝	
	rev. i 18	**AŠ ab-il$_2$**	
Maekawa, *ASJ* 20, 99 2	obv. iii 29	**ša$_3$-gal** eren$_2$ bal[a gub-ba]	
MVN 14 2	obv. 1	uš$_2$ **½** Ur-ama-na	
	obv. 3	uš$_2$ **½** Ur-si-gar	
MVN 15 238	obv. 1	**½** Ur-^{giš}gigir / dumu Lu$_2$-kal-la	
MVN 15 390	obv. i 63	Ur-nigar$_x^{gar}$ **kurušda**	
	obv. i 79	Uš-mu **kurušda**	
	obv. iii 26	Ur-^{d}Ištaran **kurušda**	
	obv. iv 15	Inim-^{d}Šara$_2$ **kurušda**	
	obv. viii 40	Ur-nigar$_x^{gar}$ **kurušda**	
	obv. viii 55	Uš-mu **kurušda**	
	obv. viii 63	Ku-li **ga**-il$_2$	
	obv. x 29	Ur-^{d}Ištaran **kurušda**	
	obv. xi 4	Inim-^{d}Šara$_2$ **kurušda**	

Text	Line	Transliteration with Bolded Collated Changes	Comment(s)
MVN 15 390	rev. iv 45	Ur-[nigar$_x$]$^{\lceil gar \rceil}$ **kurušda**	
	rev. iv 61	Uš-mu **kurušda**	
	rev. iv 73	Ku-$^{\lceil}$li$^{\rceil}$ **g[a**-il$_2$]	
	rev. vi 40	Ur-$^{d\lceil}$Ištaran$^{\rceil}$ / **kurušda**	
	rev. vii 35	Inim-^{d}Šara$_2$ **kurušda**	
MVN 16 985	obv. 1	½ Lugal-mas-su$_2$	
MVN 16 1309	obv. 1	½ A-du-du	
	obv. 3 (obv. 4 in the BDTNS)	½ A-kal-la dumu Nin-ezem	
MVN 16 1318	obv. 1	½ Lugal-ku$_3$-zu	
	obv. 2	½ Lu$_2$-Eridu^{ki}	
MVN 21 201	obv. i 4	**2** geme$_2$ a$_2$ ½	
	rev. ii 11'	**2** geme$_2$ a$_2$ ½	
NATN 25	iii' 17'	$^{\lceil}$**dumu**$^{\rceil}$-**gir$_{15}$**-me	
Nisaba 6 10	obv. i 17	½$_c$ gan$_2$ Lugal-he$_2$-gal$_2$	
	obv. i 19	**DIŠ** 0.**0**.1 5 **1** ½ Lu$_2$-du$_{10}$-ga dumu-/ni	
	obv. i 24	AŠ$_c^{\lceil}$**(½$_c$)** 0.1.0 1 tug$_2$ UN Tur-ra-am-i$_3$-li$_2$	• see p. 352
	obv. i 25	**DIŠ** 0.**0**.1 5 $^{\lceil}$**1**$^{\rceil}$ ½ Ur-^{d}Šara$_2$ dumu-/ni	
	obv. ii 5	**DIŠ** 0.**0**.1 5 1 ½ Nimgir-an-ne$_2$ dumu-ni	
	obv. ii 12	½$_c$ gan$_2$ Lugal-^{giš}gigir-re / dumu Lugal-nig$_2$-lagar-e **šum$_2$-ma**	• see *BPOA* 2 2002 obv. 1–3; *Santag* 6 384 rev. iv 20'
	obv. ii 14	½$_c$ Inim-^{d}Šara$_2$ dumu Ur-**e**-la	• see Archi, *OrAnt* 11, 267 7 obv. iii 5'; *Santag* 6 384 rev. iv 22'
	obv. ii 20	**AŠ$_c$ 0.1.0** tug$_2$ UN **Eden**-ta	• see *Santag* 6 384 rev. iv 28'
	obv. ii 25	½$_c$ gan$_2$ Lu$_2$-dingir-ra dumu / Lugal-e$_2$-mah-e	
	rev. i 2	$^{\lceil}$½$_c^{\rceil}$ gan$_2$ Ur-ama-na	
	rev. i 4	$^{\lceil}$½$_c^{\rceil}$ gan$_2$ Ur-e$_2$-nun-na	
Nisaba 15/2 33	rev. 7	lu$_2$-**mun**-ke$_4$-ne	
Nisaba 15/2 892	rev. i 19	**6**.0.0 gan$_2$ dam Zu-zu dub-sar	• see the section total (rev. i 23)
Nisaba 23 2	rev. iii 8	[**dumu-ni-me**]	• see *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 rev. vi 14
Nisaba 23 9	obv. i 7	**1** U[N-**da-ga**]	• see PIN 123
	obv. i 8	uš$_2$ ^{giš}[**Dur$_2$-gar-ni**]	• see PIN 124
	obv. i 10	**1** Ur-^{d}Šu[l-**pa-e$_3$**]	• see PIN 191
	obv. i 11	**1** Ur-^{d}[**Suen**]	• see PIN 192
	obv. i 12	**1$^{!}$ Gu$_3$-d[e$_2$-a]**	• see PIN 194 • 1$^{!}$ cannot be confirmed
	obv. i 13	**1** Ab-ba-[**sig$_5$**]	• see PIN 195
	obv. ii 1	**1 U**[**nken-ne$_2$**]	• see PIN 199
	obv. ii 2	**1 [L]u$_2$-^{d}N[in-šubur]**	• see PIN 200
	obv. ii 3	[**1$^{?}$ Lu**]**gal-ni$_2$-zu**	• see PIN 201 • 1$^{?}$ cannot be confirmed

Text	Line	Transliteration with Bolded Collated Changes	Comment(s)
Nisaba 23 9	obv. ii 14[577]	**dumu**$^{!?}$**-gir$_{15}$**-me	• there are no images to confirm dumu, but its presence seems necessary • see lo. ed. 2 (coll.)
	lo. ed. 2	šu-nigin$_2$ 26 dumu-**gir$_{15}$**-[**me**$^?$]	• -[me$^?$] is restored based on the final -me in lo. ed. 3, but this is unusual and therefore uncertain
	rev. ii 3	**dumu**$^{!?}$**-gir$_{15}$**-me	• see the comments for obv. ii 14 • see rev. ii 17 (coll.)
	rev. ii 17	šu-nigin$_2$ **20**$^{!?}$ la$_2$-1 dumu-**gir$_{15}$**	• see Koslova 2014, 159 n. 10 (quoted in n. 577) for 20$^{!?}$, but there may be more than nineteen dumu-gir$_{15}$ counted by this line
Nisaba 24 28	obv. vi 33'	**DIŠ** 0.**0**.1 5 ^{d}Šara$_2$-mu-tum$_2$	
	rev. iv 25	šu-nigin$_2$ AŠ$_c$ geme$_2$ **zah$_3$**	• see obv. v 15
Nisaba 26 17	obv. 1	AŠ$_c$ 0.1.1 5 4 UN ^{d}Šara$_2$-a-mu **ugula**	
	obv. 2	**DIŠ** 0.**0**.1 5 **1** ½ Ur-^{d}Šul-pa-e$_3$	
	obv. 3	**DIŠ** 0.**0**.1 1 Arad$_2$-^{d}Šara$_2$	
	obv. 16	½$_c$ gan$_2$ **E$_2$**-lu$_2$-**bi-zu**	• see PIN 162
	rev. 13	[šu-nigin$_2$] AŠ$_c$ UN guruš **ugula**	
Nisaba 33 521	obv. i 5	0.0.0 ¼ gan$_2$ 0.0.3 Lu$_2$-^{d}Šara$_2$	
Organisation administrative, Diss. 1, 202-210 6 Talon-Vanderroost 1	obv. ii 1'	[**AŠ$_c$ gan$_2$** Ur-dingir-ra] engar	• see PIN 175
	obv. ix 38	**DIŠ** 0.**0**.2 2 A-du-du	
	obv. ix 39	**DIŠ** 0.**0**.2 2 A-a-ge-na	
	rev. i 34	^{r}**DIŠ** Giri$_3$^{1}-ni	• see BDTNS 196758 obv. i 11
	rev. iii 16'	AŠ$_c$ [**gan$_2$** Ur-su]kkal dumu / [Ur-^{d}]Bil$_4$-ga-mes	
	rev. iv 33'	[**š**]**u** Lu$_2$-du$_{10}$-ga gudu$_4$ / $^{r d 1}$Nin-hur-sag	
	rev. vi 20	**DIŠ** 0.**0**.2 2 Šeš-a-ni dumu-/ni	
	rev. ix 14	AŠ$_c$ gan$_2$ Ur-^{1}**zikum**^{1}-ma dumu / Nin-gu$_2$-en-e	• see *Nisaba* 23 53 obv. ii 20; 33 1086 rev. ii 16 • see the original publication for Ur- • the extent of the damage, if any, to zikum cannot be confirmed
	rev. ix 41	^{r}AŠ$_c$ gan$_2$ Ur-e$_2$^{1}-diri	• see the original publication for Ur-
	rev. ix 42	[**AŠ gan$_2$** Lu]gal$^{!}$-inim-^{r}ge^{1}-/na šeš-tab-ba	• see *BCT* 2 288 rev. iv 5
Organisation administrative, Diss. 1, 217 7 Talon-Vanderroost 2	rev. ii 1	[**DIŠ**] Lugal-^{giš}gigir-re	• see *Organisation administrative, Diss.* 1, 202-210 6 Talon-Vanderroost 1 rev. i 9

577. The collations in this text concerning dumu-gir$_{15}$ were developed independently, but see also Koslova 2014, 159 n. 10:

In rev. ii 3 I would definitely read [**dumu**]-**gi$_7$-me** 'They are persons with **dumu-gi$_7$** status' instead of **azlag$_2$-me** (so in the publication) 'They are fullers'; in rev. ii 17 I propose to read **šu-niĝin$_2$** 20$^{!}$ **la$_2$**-1 **dumu-gi$_7$** 'Total: 19 persons with **dumu-gi$_7$** status' instead of **šu-niĝin$_2$** 10 **la$_2$**-1 **dumu azlag$_2$** (so in the publication) 'Total: 9 sons of fullers.' The sign in question is in both lines obviously ŠE$_3$ (= **gi$_7$**) and not TUG$_2$ (= **azlag$_2$**). Such interpretation is confirmed by the fact that almost all workers referred to in rev. ii 3 and 17 are qualified as **dumu-gi$_7$** also in the balanced account TCL 5, 5674.

Text	Line	Transliteration with Bolded Collated Changes	Comment(s)
OrSP 47-49 382	rev. ii 18	uš$_2$ ama **ki**-kur$_2$ Ur-nigar$_x$[gar]	• the meaning of ki-kur$_2$ is uncertain (see n. 181)
Peat, *JCS* 28, 219 37	obv. 2	dumu ˈLugalˈ-^{giš}**gigir**-re / bahar$_3$	
Princeton 1 388	obv. 1	½ Lu$_2$-^{d}Utu	
	obv. 2	½ Da-ga	
	obv. 3	½ Lugal-nesag-e	
	obv. 4	½ Ur-gi$_6$-par$_4$	
	obv. 6	½ Ur-^{d}Iškur	
	rev. 1	½ Ur-^{d}A-šar$_2$	
	rev. 3	agar$_4$-nigin$_2$-ˈ**ta**ˈ gur-ˈ**ra**ˈ	• see PIN 128
RTC 399	obv. iv 18	0.0.1 1 Lu$_2$-^{d}Na-du$_3$-a / dumu-ni-**<me>**	• see obv. v 14
Santag 6 384	obv. ii 4'	[**---**] ^{d}Amar-^{d}Suen-/uru-mu	
	rev. iv 1'	AŠ$_c$ ˈ**0.1.1 5**ˈ [**4 UN A-ba-sa$_6$**]	• see *Nisaba* 6 10 obv. i 18
	rev. v 41'	ˈ**AŠ$_c$**ˈ 0.1.0 4 UN Lu$_2$-du$_{10}$-ga / bahar$_3$ e$_2$-kas$_4$-ta	
	rev. v 42'	[**AŠ$_c$**] 0.ˈ1ˈ.0 4 UN ^{d}Šara$_2$-ba-/zi-ge	
	rev. vi 1'	[**AŠ$_c$** 0.1.1] ˈ5ˈ 4 UN ^{d}Šara$_2$-/ˈaˈ-mu ugula	• see *Nisaba* 26 17 obv. 1 (coll.)
	rev. vi 2'	[**DIŠ** 0.0.1 5] 1 ½ Ur-^{d}Šul-pa-/e$_3$	• see *Nisaba* 26 17 obv. 2 (coll.)
	rev. vi 3'	[**DIŠ** 0.0.1] 1 Arad$_2$-^{d}Šara$_2$	• see *Nisaba* 26 17 obv. 3 (coll.)
	rev. vi 24'	[**AŠ$_c$** 0.1.1] 5 4 UN Lugal-/ur$_2$-ra-ni	• see *Nisaba* 26 17 rev. 4
Santag 7 32	obv. ii' 2'	**AŠ$_c$** ^{d}Šara$_2$-[**i$_3$-zu**]	• see *CUSAS* 39 128 obv. ii 37 [coll.]; 129 obv. iii 4
	obv. ii' 3'	DIŠ Lu$_2$-**dingir**-[**ra**]	• see *CUSAS* 39 128 obv. ii 38 [coll.]; 129 obv. iii 5
	obv. ii' 11'	DIŠ Ur-^{d}**Suen**ˈ	• see *CUSAS* 39 128 obv. iii 6; 129 obv. iii 19
SAT 2 77[578]	rev. i 16	**½$_c$** UN A-lu$_5$	• see p. 352
	rev. ii 12	šu-nigin$_2$ 2(**AŠ**) šeš-tab-ba	
	rev. ii 14	šu-nigin$_2$ 2(**AŠ**) šeš-tab-ba	
	rev. ii 16	šu-nigin$_2$ **AŠ** šeš-tab-ba	
	rev. ii 18	šu-nigin$_2$ 8(AŠ$_c$) UN **guruš**	
SAT 2 749	obv. 1	**200** guruš u$_4$ 1-še$_3$	• see Table 5.20 for both collations of this text
	obv. 2	a$_2$ Ur-**mes**	
Sigrist, *RA* 73, 115-120	obv. i 8	**[š]u** Ba-ba-a	
	obv. i 23	[**AŠ**] gan$_2$ Lu$_2$-^{d}Šara$_2$ šeš-tab-ba	
	obv. ii 17	**AŠ** 0.0.3 tug$_2$ Lu$_2$-^{d}Šara$_2$	
	le. ed. i 3	ˈšu-nigin$_2$ˈ 3 dumu nita$_2$ 0.**0**.1 1-ˈtaˈ	
Snell, *ASJ* 9, 248 25	obv. 6	0.0.3 gan$_2$ 1.2.3 diri šuku Lugal-**ku$_3$-zu**	• see rev. 4
Snell, *ASJ* 11, 182	obv. v 9	AŠ$_c$ UN gan$_2$ guruš **munu$_4$-mu$_2$**	
Steinkeller, *Studies Postgate* 2, 562 E	obv. i 11	10 dub-sar gu$_4$ **10** 3.0.0 gan$_2$-/ta	
	obv. i 12	20 nu-banda$_3$ gu$_4$ 1.0.0 gan$_2$-ta	

578. I am indebted to Klaus Wagensonner and the YBC for images of this text.

Text	Line	Transliteration with Bolded Collated Changes	Comment(s)
Steinkeller, *Studies Postgate* 2, 562 E	obv. ii 8'	2.0.0 gan$_2$ šuku muhaldim [lugal-**ka**]	• see Gomi, *Orient* 21, 1 BM 105334 rev. i 13
StOr 9/1 31 pl. 12	obv. 3	šu Ur-^{d}**Sue[n](EN.Z[U])**	• see Table 5.15 for all collations of this text • see the original publication for Suen
	obv. 4	AŠ$_c$ Lu$_2$-sa$_6$-**i$_3$-zu**	• see the original publication for -zu
	obv. 9	AŠ$_c$ Gu$_4$-**KU**	• see the original publication for KU (read as DIB$_2$)
	obv. 13	AŠ$_c$ Ur-**zikum**-ma	• see the original publication for zikum (read as ID$_3$)
	rev. 10	AŠ$_c$ Ku$_3$-**sig$_5$** dumu Puzur$_4$-^{d}Šara$_2$	• see the original publication for sig$_5$
ŠA 135 (pl. 74)	obv. 13'	0.1.0 gan$_2$ 6.0.0 gur Engar-zi **'engar'**	
TCL 5 5674	obv. i 18'	½ Lu$_2$-dingir-ra-**šum$_2$** gu$_4$ **diri ki** ⌜Ba⌝-sa$_6$-ga-ta	• see PIN 113
	rev. v 14	½ Lu$_2$-^{d}**[Ut]u**	• see PIN 121
TCL 5 6038	rev. ii 24	1 ⌜giš⌝**Dur$_2$-gar-ni**⌝	• see Table 4.1
Torino 2 704	obv. i 1	AŠ 0.0.⌜3⌝ 3 ⌜**Ur-e$_2$-mah**⌝ {erased}	• see Table 3.3 for obv. i 1, 8–9, ii 2
	obv. i 5	dumu AŠ 0.0.2 2 Lu$_2$-**dingir-**⌜**ra**⌝	• see *OrSP* 47-49 483 obv. ii 12
	obv. i 8	AŠ$_c$ 0.1.1 '5' 4 **Igi-**'**peš$_2$**'	
	obv. i 9	[DIŠ 0.0.1 5 1] ½ Lu$_2$-^{d}**[Suen]** dumu-ni	
	obv. ii 2	AŠ$_c$ 0.1.1 5 4 Ur-^{d}'**Šara$_2$**'	
Torino 2 705	rev. iii 5	**[dumu** Ur]-giš**gigir-me**	• see *Nisaba* 24 28 obv. vi 38'; Sigrist, *RA* 73, 115-120 rev. ii 5 • note that the final -me transliterated in the preceding line belongs here
Torino 2 706	A obv. iii' 12'	½$_c$ gan$_2$ Ur-^{d}/Lugal-banda$_3$^{da}	
	A obv. iii' 13'	⌜½$_c$ gan$_2$ Lu$_2$-^{d}⌝/[**Šara$_2$ šeš-a-ni**]	• see PIN 135 and the CDLI
	A obv. iv' 2'	½$_c$ ga[n$_2$ ...]	
	A obv. iv' 3'	**AŠ** 'A'**-ka**[**l-la**]	• see *Torino* 2 703 rev. i 19
	C obv. ii' 1'	**[DIŠ]** '0.0.1 **5 1 ½ Igi-**/^{d}Šara$_2$-**še$_3$**' **dumu-ni**	• see *CUSAS* 39 135 obv. viii 18' (coll.)
	C obv. ii' 2'	½$_c$ gan$_2$ Nam-ha-/ni dumu KA-u$_2$-/du$_{11}$	
	B rev. ii' 12'	⌜½$_c$ gan$_2$ **x x**' [...]	
	B rev. iii' 2'	'½$_c$' gan$_2$ Lu$_2$-^{d}'Nin'-/šubur	
	B rev. iii' 5'	AŠ$_c$ 0.1.0 4 UN **Lugal**-/amar-ku$_3$ dumu Lu$_2$-/gi$_6$-par$_4$ **bahar$_3$**	
	B rev. iii' 7'	⌜½$_c$⌝ gan$_2$ Ad-da-da	
	A rev. i' 2'	½$_c$ gan$_2$ Šeš-kal-l[a]	
	A rev. ii' 1'	½$_c$ gan$_2$ ⌜Lu$_2$⌝-**g[u]-**/'**la**'	• see PIN 193
	A rev. ii' 4'	½$_c$ gan$_2$ An-na-hi-/li-bi	
	A rev. ii' 7'	⌜½$_c$ gan$_2$ Lu$_2$-^{d}/[...]⌝	

Text	Line	Transliteration with Bolded Collated Changes	Comment(s)
TUT 156	rev. i 2	3 Geme$_2$-ˈuš-barˈ	• see Table 4.3
TUT 162	rev. v 1	[šu-nigin$_2$] 7(AŠ$_c$) geme$_2$ 0.0.ˈ4ˈ / [še lug]al 3 ma-na	• note that the total barley and wool amounts add up with the currently documented individuals and their various rates, meaning that +114(AŠ$_c$) in the following line can be 114(AŠ$_c$)
YOS 4 211[579]	obv. i 6	4(AŠ$_c$) guruš **0.1.0** še **4**-ta	
	obv. i 22	4(AŠ$_c$) guruš **0.1.0** še **4**-ta	
	obv. ii 4	2(AŠ$_c$) guruš **0.1.0** še **4**-ta	
	obv. ii 23	2(AŠ$_c$) guruš **0.1.0** še **4**-ta	
	rev. i 8	AŠ$_c$ gan$_2$ guruš **ugula**	
	rev. i 13	2(AŠ$_c$) guruš **0.1.0** še **4**-ta	
	rev. i 17	1 guruš **ugula**	
	rev. ii 1	3(AŠ$_c$) **guruš**ˈ {written after 4} **0.1.0** še **4**-ta	
	rev. ii 7	**AŠ** gan$_2$ guruš šeš-tab-ba	
YOS 4 232	rev. ii 12	DIŠ Ur-^{d}A-šar$_2$ dumu-ni-**me**	
	rev. ii 27	šu-nigin$_2$ **AŠ$_c$** gan$_2$ guruš **ugula**	

579. I am indebted to Klaus Wagensonner and the YBC for images of this text and *YOS* 4 232 just below.

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