



More Than the Sum of Our Parts: Identity, Bioethics, and Plastination in China

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More Than the Sum of Our Parts: Identity, Bioethics, and Plastination in China

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A Thesis in the Field of Anthropology & Archaeology
for the Degree of Master of Liberal Arts in Extension Studies

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Abstract

Plastination, a unique tissue preservation method, has been the subject of misunderstandings and controversies related to claims of negligent sourcing of human bodies and body parts in the People's Republic of China (PRC), an authoritarian state. The International Society for Plastination (ISP) has maintained an informal consensus on rigorous ethical standards, yet they do not have an established ethical framework for their globally dispersed members. This thesis asserts the ISP must create a codified ethical framework that aligns with internationally agreed upon standards while also ensuring culturally sensitive protocols inclusive of identity acknowledgement and continuity. Policy implications for the ISP were determined through examination of the complex history and current state of plastination in the PRC, the function of identity and how it translates to plastinated bodies and body parts, the use of anonymity, authoritarianism's role in shaping historical and current methods of body procurement in the PRC, and how medical practitioners in the PRC are working within their communities to rebuild trust in body and organ donation processes. Qualitative research involved ethnographic methods, including unstructured interviews with six individuals in the plastination community; the ethnographic interviews were complemented by analysis of secondary source materials. Formulation of a codified ethical framework for the ISP is essential to both solidify and strengthen the current standards plastinators adhere to. Further, clarification of history, current practices, and pathways forward dispels the misconceptions about plastination so that fictional claims do not prevail or further impede progress.

Frontispiece



Above is a silicone sheet plastinate of sheep brain slices that I made during the 9th Plastination Workshop in June, 2024 at the University of Toledo, Ohio.

Dedication

For Gary, Courtney, & Nicole.

For Ama & Pop.

For my amazing, inspiring, and resilient Mom.

I love you all more than words can convey.

Thank you for everything always ♥.

Acknowledgments

This thesis is the culmination of years of passion, dedication, and an ardent search for truth amidst chaos. To those who read this, thank you for walking down this path with me. I am grateful to have had the opportunity to tell this story, dispel misconceptions, and contribute toward a more holistic understanding of plastination.

I extend the deepest gratitude to everyone who has made a difference in my life throughout my time pursuing this degree. Thank you to my Thesis Advisor Dr. Richard Martin for all his patience, wisdom, and uncanny ability to always keep me level. Thank you to my Thesis Director Dr. Nicolas Prevelakis for his endless encouragement, enthusiasm, and invaluable knowledge. Special thanks to all my interlocutors in the plastination community as well as to the interview participants in my study. Their insights taught me more than I could have imagined, and allowed me to understand my topic from new, different, and exciting angles. Every encounter has been a unique and invaluable interaction that I will never forget.

Tremendous thanks also to my three closest friends, Gary, Courtney, and Nicole who have stood by me no matter what, and who have always supported and loved me throughout much of my life. Lastly, I would never have been able to accomplish this or any other endeavor in my life without the infinite love, support, and encouragement from my Mom and my grandparents. They have all overcome their own obstacles with grace, wisdom, and strength. I love you all endlessly. Saying thank you will never suffice for all you have done for me.

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Chapter I.

Introduction

The body is not merely a thing but a phenomenon, that is, something that appears to our perception and consciousness. We can treat it and even experience it as an object, and it can become objectified by others, but it is at the same time the most intimate source of our identity and our social connection with others.

—Csordas 2024, 2

Hiding in a hammock midday in the beautiful forested mountains of Pennsylvania, the sounds of a waterfall and the beginning drips of misting rain surrounded my cocoon. There I lay in this pristine environment with a book entitled *The Red Market: On the Trail of the World's Organ Brokers, Bone Thieves, Blood Farmers, and Child Traffickers* by Scott Carney. I was 24 at the time, and this book was one of many I dove into after finishing my undergrad and feeling entirely lost. Carney's words threw my mind into a setting far flung of the one I was physically existing in. I was engrossed, and yet I had no idea how this book would alter my life and direct me on the path that led me to this thesis.

Carney's work contained a small section consisting of a couple of pages on organ harvesting in China that set my mind ablaze. I questioned everything about those pages, and I endeavored to learn all I could about these wild claims. This initial encounter with body commodification in authoritarian regimes is what led me to the misunderstood world of plastination, a method of anatomical preservation, and its implementation in the

People's Republic of China (PRC). Rife with fallacies, misinformation, unsettling instances, and intrigue, I was astonished that there was very little research on the history and current state of plastination in the PRC. Compiling this work has since felt like a mission, and I have been captivated from that moment in the hammock.

This investigation seeks to explore a variety of questions including: what is the history and current state of plastination in the PRC? How does identity translate to plastinated bodies and body parts, and how does anonymity factor in? What is the function of authoritarianism in shaping historical and current methods of body procurement in the PRC? How are medical practitioners in the PRC grappling with historical ethical failings? And what are the policy implications for the International Society for Plastination (ISP)?

The overall aim of this analysis is to discuss what evidence needs to be acknowledged and what parameters would be critical for the development of a potential overarching ethical framework for the ISP founded in 1986 (Ottone 2023). An established framework would ensure all ISP affiliated practitioners globally are employing consistent and equitable procedures for body and organ sourcing regardless of location. Currently there are no specific, globally applicable, and all-encompassing codified guidelines created by and for ISP members to advise on ethical and culturally inclusive sourcing strategies.

Because of the differentiation in global legislation pertaining to body and organ sourcing, and because of the lack of a specific, codified, ethical framework for plastinators, the plastination community has suffered repercussions and misunderstandings due to questionable provenance of human bodies and body parts,

particularly those originating from the PRC. Plastination practitioners are expected to adhere to the laws and regulations in place within the country they are situated, as well as to guidelines from the International Federation of Associations of Anatomists (IFAA) in their “Recommendations of good practice for the donation and study of human bodies and tissues for anatomical examination” (IFAA 2012, Ottone 2023, 261-263) (see Appendix 1). Laws pertaining to body and organ sourcing worldwide vary greatly with some countries still authorizing the use of unclaimed bodies for medical education despite the discouragement of the IFAA and other notable parties over the years (Jones & Whitaker 2009, 2012, Habicht, Keissling, & Winkelmann 2018, Champney et al. 2019, Charmode et al 2024). Moreover, because all who plastinate are not mandated to join the ISP, both affiliates and non-affiliates have been subjected to skewed views of their ethical processes. An ethical framework specifically for the ISP would elevate and distinguish their agreed upon standards and protocols from non-ISP members, thus forging greater trust and deference for the ISP.

To understand the diversity of beliefs about acquisition of bodies and treatment of deceased persons it is critical to discuss and establish an understanding of identity’s relation to the body and its parts after death. Identity in anthropology remains an oft debated, ambiguous, and fluid concept, and it requires both clarification and specificity for this project. Reliance will first be placed on *The International Encyclopedia of Anthropology* which informs, “identity is not only about individual understandings but equally about social positions, statuses, and roles, which in turn tell people about the norms and mutual expectations for interaction,” (Jenkins 1996 in Finke & Sökefeld 2018,

3). This definition blends notions of individualism with socially constructed factors influencing the self.

Identity is further contextualized by Laura Appell-Warren in her 2014 book *Personhood* in which she has a chapter where she attempts to negotiate between the muddled concepts of personhood, person, self, and identity throughout anthropological literature. In her discussion on identity in relation to personhood, she cites the work of Alfred Leonard Epstein who clarifies identity as, “a concept of synthesis. It represents the process by which the person seeks to integrate [their] various statuses and roles, as well as [their] diverse experiences, into a coherent image of the self,” (Epstein 1978, 101 in Appell Warren 2014, 142). This would suggest that individual experiences and life histories collide with socio-cultural norms inherent to a cultural group or system forming a unique identity for an individual embedded within a particular cultural context.

This research will also lean into and expand upon existing definitions of identity and deceased bodies as discussed by Jones and Whitaker (2009) who outline three central components of identity and bodies. First, what is done to a body after death has relevance for those who knew the person when alive. Second is the deceased body’s representation of built-in memories that cannot be separated from it, and third is the role that the deceased plays in the grieving process (Jones & Whitaker 2009, 22). Although these points focus on the whole body, it is also useful to extend this definition to include parts of the body separated from living or deceased persons, like an organ or tissue sample. Thus, the notion of identity and its relation to the body or its parts cannot be fully conceived as separate after the person is deceased or after a part of that person is removed (Jones & Whitaker 2009, 22). By applying this line of thinking to plastinated bodies and

body parts, acknowledgement of humanity can be amplified as well as reflect the importance that the body and its parts hold in diverse cultural contexts no matter what method of preservation or processing occurs after death.

Identity must also be understood in terms of treatment of deceased persons. De La Cova (2020) explains, “Whether it be rituals tied to warfare or beliefs about the afterlife, the postmortem treatment of individuals is often related to, or symbolic of, their social positions within their respective cultures during their lives,” (212). Elaborating further on postmortem processing, she goes on to state poignantly that it,

can also serve as a tool to reconstruct, or even erase, the identity and memory of a particular individual or group of persons whose beliefs or perceived behaviors are not in agreement with societal norms...the physical body is transformed into a social tool that can be manipulated to transform, reestablish, or reinforce the relationships that exist between the living and the deceased as well as cement social stratification and power. (De La Cova 2020, 212)

Thus, human beings’ treatment of the dead throughout space and time is evocative of how the deceased’s identity was perceived in life, how remembrance should be actualized, and how identity might be concealed via modes such as anonymity.

Regarding the treatment of identity and deceased bodies or parts of bodies in medicine and anatomy, the literature is not as robust. One example comes from Rebecca Skloot’s landmark book *The Immortal Life of Henrietta Lacks* (2010) which discusses the relation between an individual’s identity and their body. The investigation examines the degradation of identity from the whole body down to the constituents of the body such as one’s cells. Skloot recounts the previously little-known story of Henrietta Lacks, a poor black woman living in 1950’s rural Maryland, her battle with cervical cancer, and the subsequent iterations of mistreatment of her body over the course of her illness and after she succumbed to it.

Lacks' cells, referred to today as HeLa cells, have changed science because of their unique ability to replicate themselves infinitely. Lacks received treatment at Johns Hopkins which at the time had established wards for patients who did not have financial means. These wards were occupied mostly by people of color and acted as a ready source of medical materials for doctors looking to do research. The exchange in parts of one's body for medical treatment acted as an unspoken, macabre, and obligatory part of the experiences of patients who relied on the wards. Henrietta fell victim to this medical abuse when her cancer cells were stolen and subsequently cultured from her both while she was alive and after she died an excruciating death (Skloot 2010).

At the time Henrietta was receiving treatment, there was no law or code of ethics requiring doctors to ask for permission from living patients to take tissue samples, though there was clear legislation dictating that permission was required for an autopsy and subsequent removal of organs or tissues (Skloot 2010). However, toxic, pervasive social factors, including gross levels of racism, made it possible to manipulate the system. When Lacks' husband was asked to permit an autopsy on his wife, he was coerced into thinking that the autopsy was meant to assist members of his family who may come to suffer from the same cancer Henrietta had. This lie made it possible for white male doctors to take resources they wanted for their own advancement. In the years following Henrietta's death, her cells were used around the world for countless research endeavors, and neither Henrietta nor her family were given proper recognition for all that had come from her stolen cells (Skloot 2010). Lacks' family's struggle to get any recognition for or clarity on the use of their matriarch's cells exemplifies Jones and Whitaker's (2009) theorization that what is removed from the body both in life and after death has relevance

for those who knew the person, and is a representation of built-in memories that cannot be separated from the person.

While a surface understanding of identity in anatomical sciences has been broached, there is a great deal left to be learned. It is crucial to add data on identity in relation to plastinates of whole human bodies and plastinates of parts of the body which are topics that have remained absent from the literature. An assessment of post-mortem identity in relation to bodies used by the medical community in China will allow for a more holistic perspective inclusive of non-Western views, thus providing a better means of approaching the cultivation of an ethical framework for globally dispersed ISP members.

The concept of negligent sourcing will be extremely significant throughout this research. I employ the term ‘negligent sourcing’ to refer to the acquisition of human bodies and body parts without informed consent, often through structurally and physically violent means, resulting in the erasure of identity, and ultimately profit from the sale of unethically acquired bodies and body parts. Use of unclaimed bodies is central to this categorization, as this is an avenue that globally has been used to skirt informed consent to still acquire bodies for medical use. Today, body commodification and negligent sourcing are routinely condemned by the anatomical community and medical practitioners globally (Jones & Whitaker 2009, 2012, IFAA 2012, Kilgour-Gutmann-Matas [KGM] Report 2016, Champney et al 2019, Robertson 2020). However, the early days of body and organ sourcing in the PRC were fueled by negligent sourcing strategies targeting prisoner populations, relying on unclaimed bodies, and forgoing informed consent (Matas & Kilgour 2009, Matas & Trey 2012, Gutmann 2014, KGM Report 2016,

Robertson 2020, Wu 2020). A discussion of negligent sourcing in relation to plastination will offer context for why an ethical framework is needed for the ISP.

The history of body procurement for medical sciences throughout the world has often constituted taking advantage of out-groups whose social vulnerability leaves them open targets for unethical treatment of their bodies through commodification processes both while alive and after death, subsequently leading to erasure of identity. Henrietta Lacks' story is a prime example. Another notable historical example comes from the UK during the 17th-19th centuries when bodies of executed prisoners were authorized as a source for dissection (Richardson 2006). It is noted that,

Dissection served a complex role in retributive justice...[it] promised the exposure of nakedness, dismemberment, and the deliberate destruction of the corpse...[it] represented a gross assault on the integrity and the identity of the body. (Richardson 2006, 154)

Not only did the use of prisoner bodies equate dissection to punishment and destruction of the body, it also led to a surge in bodysnatching because of insufficient supply of prisoner bodies to meet the needs of the medical community (Richardson 2006, Jones & Whitaker 2009). Bodysnatchers, “were paid by anatomists for fresh bodies, presenting the first well-documented commercialization of the dead for medical education,” (Champney et al. 2019, 318). A combination of public outrage over bodysnatching and insufficient supply of bodies from prisoner populations resulted in the UK's 1832 Anatomy Act which, “effectively decreed that the destitute were to be dissected in the name of scientific progress,” (Richardson 2006, 161). The combination of legislation and the elevated role of science erased the identities of individuals who were considered lesser and thus disposable both in life and after death.

Likely the most infamous instance of negligent sourcing of bodies for anatomical purposes comes from the era of the Nazi Regime where egregious medical experiments were done on living and executed concentration camp prisoners and unclaimed bodies (Hildebrandt 2008, 2016, 2023, Jones & Whitaker 2009, 2012). This history is still critical to both understand and cultivate anatomical ethics as patterns emerge which, “shed light on current practices and controversies in the anatomical sciences, including anthropology, and they concern the past and present,” (Hildebrandt 2023 p 208). Without acknowledgement of and efforts towards understanding the more disturbing parts of history, there cannot be adequate progress made in ethical modalities.

A great deal of data has been compiled on negligent sourcing of bodies and organs in the PRC (Matas & Kilgour 2009, Matas & Trey 2012, Gutmann 2014, Robertson 2020, Wu 2020). Some of the most prominent research has come from authors Kilgour, Matas, and Gutmann who collaborated to bring together decades of research in and on China substantiating negligent body and organ procurement from prisoner populations, specifically prisoners of conscience which include Falun Gong practitioners (KGM Report 2016). Their prodigious evidence was ultimately presented to the China Tribunal which was formed to discuss accusations of organ harvesting and other human rights abuses meted out by the CCP against Falun Gong practitioners and Uyghur Muslims. The verdict in 2020 stated, “Commission of Crimes Against Humanity against the Falun Gong and Uyghurs has been proved beyond reasonable doubt,” (China Tribunal Final Judgement, 2020). My research would not be possible without the immense contributions from Kilgour, Matas, and Gutmann.

Data presented in the KGM Report about Falun Gong practitioners suggests that this specific out-group has been repeatedly subjected to tactics that strip away identity. My research will expand upon this groundwork, asserting that the only marker of identity that is maintained in life and after death for Falun Gong practitioners situated in the PRC is their status as Falun Gong. This status has historically acted simultaneously as a marker of demonization and a marker of value in Chinese society dependent on if the individual is alive or if they are deceased. Examining the PRC presents an opportunity to understand how out-group identity markers, like those associated with Falun Gong practitioners, have historically been manipulated to suppress and subjugate communities, and then twisted to achieve profitability through body commodification via the normative use of anonymity.

Anonymity has functioned as the standard of practice in body, organ, and tissue donation as a means of protecting donors and donors' families' identities (Sharp 2007, Jones & King 2017). Historically, medical students would typically have very little information about the deceased individual they are dissecting in the classroom, nor would organ recipients have much access to knowledge about their donor (Sharp 2007, Carney 2011, Jones & Whitaker 2012). Plastinated human bodies too have been subjected to the norm of anonymity. This standard has been and continues to be implemented globally throughout organ and body donation processes, but it leaves little room for integration of cultural norms that attach identity to deceased bodies and parts of the body.

Recent debates have arisen amongst medical practitioners and social scientists as to the efficacy of the long-standing policy of anonymity. On one side are those that advocate for increased transparency throughout the donation process and more up-front

recognition of the donor's identity (Carney 2011, Pieris 2023). Others maintain anonymity's value in protecting donors and donors' families' identities (Pronk, et al. 2017, Jones & King 2017). There is seemingly an understanding on both ends of the oppositions' reasoning for siding one way or another, however there is little available on the potential to combine strategies that employ both anonymity and identity acknowledgement.

Despite the divisions in discourse on the topic of anonymity, what is undoubtedly agreed upon is the importance of informed consent throughout body and organ donation and acquisition processes (Sharp 2006, Jones and Whitaker 2009, Wacquant and Scheper-Hughes 2012, IFAA 2012, Jones 2016, Champney et al. 2018, Wu et al. 2018, Champney et al. 2019, Li et al. 2020). Informed consent dictates that prospective donors are provided full knowledge of what will be done to and with their bodies and body parts once deceased. Yet even though this standard is strongly encouraged and generally adhered to, it is not mandated and implemented in all cultural contexts. The historical use of unclaimed bodies in the PRC is an example of the disregard of informed consent as well as the use of anonymity in a harmful capacity meant to conceal the lack of informed consent.

A problematic component of the data accessible to wider audiences on body and organ procurement in the PRC is that it has been presented and interpreted through Westernized etic perspectives which have placed a strong focus on past unethical conduct. However, members of the medical community throughout China, particularly in major cities, have made significant efforts in the past decade resulting in the development of modern body donation programs that present a means by which recognition of prior

unethical practices can be acknowledged while forging new pathways toward more rigorous and culturally sensitive sourcing strategies. Doctors and medical staff members in China have worked hard to establish donor programs that integrate identity, amplify transparency, incorporate essential cultural knowledge, and educate the public on all steps in body and organ donation processes. This has slowly helped to cultivate more positive attitudes toward body donation in parts of the PRC (Li et al. 2020). Some of the most significant increases in whole-body donation have occurred in highly developed areas with populations who have greater access to higher education (Jiayi Jiang et al. 2020, Jingwen Jiang et al. 2020). Other researchers have shown modest increases in willingness to donate because of the implementation of memorial services (Jingwen Jiang et al. 2020, Li et al. 2020). Strategies applied by China's medical practitioners within their donor systems can help inspire potential constituents of an ethical model for the ISP to ensure broader and more culturally sensitive protocols.

Another consequence of interpreting data on body and organ procurement in authoritarian regimes predominantly through Westernized etic perspectives is that the voices of those embedded in these contexts and ingratiated in the medical structures built into the wider system are unacknowledged. It is essential to critically evaluate and unify scholarship from researchers globally to obtain a holistic view of both the historical and current state of body sourcing in the PRC as well as modes of identity preservation for deceased persons implemented in non-Western contexts. This inquiry will seek to include diverse, multicultural sources drawn from a variety of interdisciplinary perspectives. Research from Chinese scholars, particularly from the past decade, will be enormously important to ensuring an accurate and holistic investigation.

In considering certain events in the PRC related to human rights abuses and the entanglement of these events with plastination and body procurement ethics, recent discussions have arisen regarding plastination's role in the anatomical sciences and in relation to ethical procurement protocols (Jones & Whitaker 2009, Champney et al. 2018, Champney et al. 2019). However, these inquiries are in their infancy. Plastination lacks social scientific analysis, so an inquiry such as this is essential to bring the discipline into broader conversations within history, bioethics, and anthropology.

An accurate history of plastination as well as procurement strategies implemented by plastinators globally has also been relatively understudied. It was only recently in 2023 that Dr. Nicolás E. Ottone, a major contributor to the entire plastination discipline, sought to clarify the history of plastination in his landmark book *Advances in Plastination Techniques* which is without a doubt a tremendous and exemplary work. While it is an invaluable assessment, the historical components of the text speak more to the evolution of the science and method of plastination techniques as well as the growth and progression of the ISP. What is still lacking is a social scientific perspective, and particularly an anthropological view. Additional data on global, historical procurement strategies would also help to provide a more accurate and holistic view of the discipline, as well as show the true nature of ethical progress the community has engaged in. Skewed views insisting on perpetual ethical failures are false. It is critical to finally dispel those misconceptions and untruths.

Limitations in this research stem from the fact that authoritarianism does not lend itself to freedom of information. Despite some data access restrictions due to my residence in the United States, my inability to travel to China for the project, and my

limited understanding of Mandarin or other languages spoken in China, there still exists a wealth of literature to inform all research questions posed. I feel confident engaging in this inquiry with the resources currently available through Hollis, the ISP member-accessible database, China Tribunal documents, news articles from Sixth Tone, books and articles translated into English that were written by Chinese authors, and other creative means of attaining access to the materials necessary.

Another limitation stems from grappling with any source materials that originate from China. There have been numerous instances of human manipulation of data released by the CCP through public, global channels including claims of an apparent rise in willing organ donation in China since 2015 showing a rate of increase that coincidentally happens to match the curvature of the Quadratic Equation (Robertson 2020) (see Appendix 5). I have also been told by fellow academics that Chinese scholars will edit themselves to avoid potential scrutiny of their work or potential danger to themselves or their families because of their research.

While it is critical to maintain both objectivity and an acknowledgement of the intensity and pervasiveness of the CCP in Chinese citizens' lives as I engage with sources written by individuals situated in the PRC, one of the primary objectives of this research is to integrate the voices of Chinese scholars with Western scholarship. Etic perspectives should not solely dominate. There are valuable insights that have previously been ignored or omitted that need to be acknowledged in global discourse on body and organ procurement strategies. Integration of non-Western voices will allow for continued expansion and revision of existing global ethical standards.

I endeavor to assess historical ethical failings in the PRC, inform on progress made by medical practitioners situated in the PRC toward more ethical treatment of bodies, and suggest the consideration of identity integration and acknowledgement as part of donation processes for plastination. My ultimate intention is to inspire the ISP to consider formulating a codified ethical framework for their globally dispersed members. It is critical to forge a path towards new, synthesized standards of practice that align with modern standards while also maintaining cultural sensitivity. Although the ISP upholds an informal consensus on rigorous ethical protocols, an established framework would both solidify this consensus and show the public the ethical austerity the discipline adheres to. It is dually critical to determine an accurate history and assessment of the current state of plastination in the PRC so as not to allow fictional claims to cloud logical, data driven, and scientific evidence.

Methods

This inquiry relies on qualitative analysis through ethnographic methods incorporating both primary and secondary sources. Primary data was gleaned through unstructured interviews with plastination practitioners which provided context for most of the research questions. Interviews were conducted via any modality convenient to the participant. This included Zoom video calls or phone calls. Although the interviews were unstructured in nature, a core set of questions was used to guide the conversations. These core questions as well as the informed consent form for verbal consent can be found in Appendices 2 and 3.

A total of six participants from the plastination community took part in individual, unstructured interviews lasting no longer than 60 minutes. Saturation of themes for

qualitative analysis can be achieved at twelve interviews total, however the basic elements of research themes are present in as few as six interviews total (Hennink, Kaiser, & Marconi 2017). Therefore, the number of participants for my project provides sufficient data for themes to emerge.

To assess the history and current state of plastination as well as policy implications for the ISP, active members of the plastination community were consulted. These individuals had ample context to draw from to assess historical developments as well as future directives for the discipline. As a student member in the ISP, I had greater access to interface with actively plastinating individuals. I also already had contact with prominent members of the plastination community in the United States, as well the ability to use the society's online forum to engage other members in discussions. I posted to this forum on May 6th, 2024 in an effort to recruit interview participants (see Appendix 4).

Regarding procedures, when a potential participant confirmed their interest in taking part in the study, I scheduled a meeting via Zoom or phone call. Participants were asked to make sure they were in a quiet place that would not be interrupted for the duration of the interaction. At the scheduled meeting time, I read the verbal consent form, and, once the participant confirmed their understanding of this information and provided their consent with a verbalized yes, I set a timer for 60 minutes. If the first sixty minutes did not provide adequate time, a secondary interview was made as an option for participants, however the second interview was not a required component. Nothing was recorded, and all notes taken during interviews were hand-written and stored in a secure location. No identifying factors were noted.

The evidence obtained from interviews was subjected to narrative analysis which is the engagement with narrative discourses which illustrate, “cultural meaning and interpretations that guide perception, thought, interaction, and action,” and thus provide, “excellent contexts for examining social histories that influence identity and development,” (Daiute & Lightfoot 2004, x-xii). More specifically, this analysis looks at the production of counternarratives or “narratives of conflict,” which illustrate how, “personal narratives are a source for understanding human development and conscious action in variable and multiple social, cultural, historical, and political contexts,” (Solis in Daiute & Lightfoot 2004, 183). This methodological approach brings to light the ways in which, “individuals’ self-understanding emerges in and through conflicting cultural narratives that reveal developmental diversity and variability,” (Solis in Daiute & Lightfoot 2004, 185). By assessing narratives of conflict in the data it is possible to see the juxtaposition of ethically rigorous approaches versus ethical conflicts in historical contexts. This is especially relevant since plastination is a young discipline relative to other medical sciences, and many individuals in the plastination community were actively plastinating or of adult working age as ethical issues either transpired or came to light.

To protect all informants, participant anonymity was implemented to the highest degree to ensure protection from any potential repercussions. Author Liao Yiwu (2008), who has extensive experience interviewing members of marginalized communities throughout China, provides a model for discussing sensitive topics with persons who may be subjected to repercussions for discussing such topics. Yiwu employs a pseudonym, gender identity, and rough estimation of age or generation of the individual he is interviewing. Using his model, I intend to go further by ensuring participants go

unnamed, and instead refer to interlocutors only by a number. I also opted to refer to participants by the gender-neutral pronoun “they” to further anonymize participants. I employ Yiwu’s model because of the sensitive nature of the conversations had which were inclusive of discussions on negligent sourcing in China for plastination. While there was an extremely low level of risk in this project, it is of the utmost importance to diligently protect all participants throughout the research process, especially when discussing sensitive topics like body sourcing and commodification in China.

While primary sources contributed invaluable context, secondary sources provided ample support to the entire analysis. Secondary sources were relied on most heavily to determine how identity translates to plastinated bodies and body parts, the function of anonymity, how medical practitioners in the PRC are grappling with historical ethical failings, and how authoritarianism has shaped historical and current methods of body procurement. Sources include scholarly articles, books, historical accounts, documents from the China Tribunal, and a multiplicity of other documentation.

To supplement ethnographic methodologies, ethnological approaches were employed as several cultural contexts including China and the United States are discussed throughout the piece. This ensures comparative and contrastive modes can be effectively employed, especially when attempting to identify policy implications for the ISP. Most importantly, both etic and emic perspectives are acknowledged to ensure a holistic approach to the subject matter. There has been a lack of integration of the work of Chinese scholars within the broader conversation. While their work must be scrutinized, referencing studies by Chinese scholars is extremely valuable to ensure evidence from all perspectives is included and discussed.

When engaging with the data, I am deeply conscious of the personal force an anthropologist has on their research. Mindfulness can be amplified via an interpretive reflexive approach as discussed by Dr. Paul Lichterman who communicates that,

interpretive reflexivity enhances our reflections on social position and makes them more useful. It produces a richer if always uncertain account of how and where which position might matter to the researcher and the researched. It also reveals everyday cultural patterns and puzzles that ethnographic practice must accommodate, and that often will be part of what we consider our findings themselves. (Lichterman 2015, 6)

This approach goes beyond consideration of social position in relation to the culture group who embodies the subject of the research. Instead, this method forces the researcher to consider all forms of positionality, no matter how awkward. In this way, the ethnographic material can become more nuanced and “real” rather than strictly academic and two dimensional.

I have complied with all applicable Institutional Review Board (IRB) requirements prior to engaging with any human subjects for the purposes of this research. I completed the necessary training prescribed by the Collaborative Institutional Training Initiative (CITI). Once completed, I provided a detailed research protocol to the IRB to obtain their essential approval to proceed accordingly so that I could guarantee adherence to a rigorous, trustworthy, and ethical path throughout the research process.

Chapter II.

Understanding Plastination

When I share with others that I study plastination, I am usually met with a perplexed look. “What is that?” they ask, to which I always reply, “I am sure you know what it is.” I then follow up asking if they have ever heard of the *Body Worlds* exhibit which features anatomical human models that are all real human beings. This is typically the spark needed. Sometimes though, if this does not cause any light bulbs to go off, I quickly Google a few images which then re-familiarizes individuals with the practice. They exclaim “Oh! That!” or some other interjection because they did in fact know what plastination was all along. However, to date, I have not yet crossed paths with a person outside of the plastination or anatomy community who has familiarity with anything else to do with plastination such as how the technique is implemented, how long the practice has been around, or how it is used in educational settings.

In my interview with Participant 3, they expressed similar experiences, yet their anecdotes were not only limited to explanations to laypersons, but also to individuals embedded in medicine and academia. Participant 3 tended to also refer persons to the *Body Worlds* exhibits conceived of by Dr. von Hagens. The global presence of these exhibitions has formed the face of plastination, but progress towards interest in, knowledge of, and true understanding of the discipline has been slow to come. There are many misconceptions about the discipline, so I resolve to clarify these misguided notions.

Purpose of Plastination

Plastination is a revolutionary tissue preservation method developed in 1977 by German anatomist Dr. Gunther von Hagens. Applied to humans, animals, and plants, plastination involves the extraction of all bodily fluids and soluble fat which are then replaced by plastic polymers including silicone, epoxy, or polyester (Ottone 2023). The body or body part that has been treated then hardens through this process creating an anatomical piece that is dry, highly detailed, odor-free, easily transported, and unlikely to degrade while also maintaining color, texture, and even microscopic properties (Jones & Whitaker 2009, von Hagens Plastination 2022, Ottone 2023). Plastination is an invaluable technique that has been easily integrated into educational and research settings. It is a novel supplement to dissection and computerized models.

In my interview with Participant 3 they discussed their experiences with plastinates as teaching aids. They relayed that plastinates of certain portions of the body can be used for units taught on those specific sections such as organs, limbs, or body systems. Participant 3 informed that plastinates can be taken out during different units encompassed within an anatomy course involving dissection. The plastinates will have pins in them that identify different parts (i.e. specific muscles shown in a limb). They offer students a way to compare their dissections to a simultaneously pristine and real example so they can identify specific, difficult to see, or delicate components more effectively. Participant 3 then noted that once the unit is completed, and the students have finished their exams, the plastinates are removed and stored out of sight. Participant 3 stated that this action prevents the plastinates from deviating from their intended educational use and becoming objects of curiosity.

In my interview with Participant 1 they pointed out the immense benefit of seeing intricate details in plastinates which would otherwise be challenging to see even during a dissection. These details can be made even more accessible to students via the application of dyes. Participant 1 stated that the technique “preserves the architecture” which I found to be an apt description having seen many examples of plastinates. Participant 3 touted the detail of plastinates as well, informing that students can see different pathologies, signs of age, and even causes of death. These details can help students tie in a clinical element to their anatomy courses that dissection does offer, but cannot always exemplify as much range as plastinates might be able to.

Participant 4’s initial interest in plastination stemmed from the discipline’s educational benefits. Despite many years of experience within the human anatomy community, this person’s first encounter with plastination was like many others: through von Hagens’ *Body Worlds* exhibits. However, they did not agree with the outright display of plastinates, and instead sought to find a way to utilize the method in an alternative, respectful, and educationally beneficial capacity. Their overall aim was to engage in collaborative efforts to facilitate student learning. Plastination has the potential to bring together individuals from an array of disciplines and backgrounds because of its range of applicability and ability to aid student learning in multitudinous ways.

Another advantage of using plastinates in educational settings is their unequivocal ability to last almost in perpetuity, especially when compared to wet specimens.

Participant 1 praised the longevity of plastinates for education stating that they could feasibly be used for decades. Participant 4 expressed interest in plastination to find teaching methods that would benefit students now and throughout future generations.

Participant 5, who is responsible for a collection of plastinates used for medical education, also discussed the lasting potential of plastinates noting that the collection (while subject to possible wear and tear from consistent handling by students which would merit replacement, or the potential to add plastinates with unique anatomical variation and pathologies) will likely reach a point of leveling out or full storage capacity due to longevity.

Most poignantly, Participant 1 conveyed that to them, plastinates act as a form of altruism for students that can last generations. This participant felt that they owed their students the altruism that they had received from their teachers during their formative years, so plastinates aided in the ability for Participant 1 to pass this love of learning and teaching forward, and to share with others a passion for anatomy. All participants I interviewed, and all the plastinators I have had the pleasure of speaking with over the years, share a tremendous passion and deep respect for plastination's use as a teaching aid.

Entering the Body World

The heart of plastination is the International Society for Plastination (ISP) established in 1986 during the Third International Conference on Plastination held in San Antonio, Texas (Ottone 2023). The *Journal of the International Society for Plastination*, which today is called simply *The Journal of Plastination*, was established a year later in 1987 (Ottone 2023). The ISP has always welcomed individuals from all disciplines. I joined the ISP in 2022 as a student member and have since garnered a tremendous amount of knowledge as well as had the privilege of meeting others who share a passion

for plastination. I have been particularly struck by the range of members who are globally dispersed and from a variety of interdisciplinary fields and diverse cultural contexts.

My foray into the plastination community happened by chance when I reached out via email to a highly respected and senior member of the ISP with some general questions I was struggling to answer through traditional library and internet sources. My inquiries were greeted with kindness and enthusiasm. As I continued to stay in contact with this individual, I was more and more intrigued by the discipline. Eventually, I applied for ISP membership. I have since had many incredible opportunities to engage with individuals from all walks of life.

In 2022 I attended the 20th International Conference on Plastination. From July 18th – 22nd the conference was held via Zoom and was hosted by Dr. Nicholas Ottone from Universidad de la Frontera in Temuco, Chile. Dr. Ottone was President of the Conference for that year. It was an absolute privilege to be a part of such an amazing event with over 200 individuals who were interested in and passionate about plastination. The presentations ranged from an overview of plastination techniques, to discussions on body donation programs and ethics, to the immense accomplishment of plastinating a whole sperm whale.

In June, 2024 I attended the 9th Annual Plastination Workshop at the University of Toledo in Ohio presented by the esteemed Dr. Carlos Baptista who was incredibly gracious and generous with his knowledge and laboratory. It was a life-changing experience. Although I was the only social scientist, I felt extremely welcomed by teachers and participants alike. Over four days, our group of 14 participants learned the basics of plastination. We had the opportunity to engage with the three core techniques

which include silicone, epoxy, and polyester. What stood out most ardently was the passion our teachers had for plastination. Their excitement was infectious, and everyone became incredibly engrossed in the workshop. This experience exemplified the energy I had witnessed from plastinators I had interacted with since first joining the ISP in 2022, and it is this energy that has amplified my own excitement not only for my personal discipline and research, but for the immense value plastination has for future generations.

Process of Plastination¹

Plastination can best be understood through its five basic principles: fixation, dissection, dehydration, impregnation, and curing. The process starts with fixation which is a, “physico-chemical process through which the composition of proteins is altered...preventing the decomposition of biological tissues,” (Ottone 2023, 63). An example of fixation is the use of formalin, a formaldehyde solution, for preservation of the deceased. Fixation does not need to occur for all plastinates or all the forms of plastination. However, if one chooses to fix, this process can be achieved via perfusion (the passage of fluid through blood vessels or the lymphatic system) or submersion using solutions like formalin to kill bacteria and prevent decomposition. After fixation, thorough cleaning must occur before any subsequent steps in the plastination process. Cleaning is achieved using running water over a period of hours or days depending on size of the body or body part and chemical components used during fixation. If thorough cleaning does not occur, the polymers necessary for plastination cannot work effectively.

¹ My knowledge of the plastination process was gleaned from my time at the 9th Annual Plastination Workshop held from June 23rd-27th, 2024 as well as from Dr. Nicolas E. Ottone’s 2023 book *Advances in Plastination Techniques*.

Next is dissection which is a process during which skin and fat are removed from the body or body part. This is an exacting process which can take anywhere from a few hours to many weeks depending on size, structure, and level of detail. A masterful dissection is required to ensure a beautiful result after plastination is completed. The quality of the dissection ultimately determines the quality of the finished plastinate. The finished dissection must also be positioned properly prior to continuing the process. This might involve pinning or even dilating structures such as in the heart or intestines.

The third phase is dehydration which is a process that removes water and all other tissue fluid. Dehydration typically occurs in an acetone bath since, “acetone is an excellent dehydrating agent in plastination due to its low boiling point and high vapor pressure, which allows for substitution by various polymer types,” (Ottone 2023, 54). Acetone must be the final solution prior to introducing any polymers. Acetone baths may need to be repeated several times until the correct purity is achieved. One must test each acetone bath at about one-week intervals with an acetonometer which measures acetone levels. Measurements must be done until 99.5-100% acetone purity is reached. Typically, baths are repeated 3-4 times. It is critical that acetone immersion or exposure does not last for too long as this may cause brittleness, yet it is also crucial to make sure dehydration is properly achieved. If not, the remaining steps in the plastination process cannot happen effectively.

The fourth step is impregnation which is when the specimen is immersed in the polymer that will ultimately replace the acetone, and is then subjected to the pressures induced through a vacuum system. The polymers that can be used include silicone, epoxy, or polyester. The vacuum system creates pressure that removes the acetone and

allows the polymer to enter. Pressure levels are closely monitored and manipulated over time until all the acetone is replaced with the chosen polymer. Aside from the initial dissection process, impregnation is considered one of the most important steps in the plastination process

Once impregnation is complete, the last stage of plastination is called curing. Curing is the process of drying and hardening using gas, light, or heat. The method varies depending on the plastination technique employed. The cumulative process of plastination is extremely variable dependent on size, weight, shape, technical form, species, and other factors. Plastination can be employed immediately upon death, after embalming, or hundreds of years after death, such as with mummies. There is a popular misconception disseminated through news outlets and even in the data from the China Tribunal that insinuates plastination must occur immediately upon death; this is NOT the case. Understanding the process and realizing that plastination can be done after various states of preservation can hopefully quell this false information from being perpetuated further.

Plastination and the Public

Although plastination has proven to be a remarkable teaching aid and is successfully integrated in educational settings that benefit from its supplementary implementation, the technique is best known in public spheres through provocative traveling exhibits, particularly the various iterations of the *Body Worlds* exhibit conceived of by Dr. von Hagens. The first Body Worlds exhibit, which featured the first public display of human plastinates, debuted in 1995 in Tokyo, Japan's National Science Center (Jones & Witaker 2009). Since then, over 55 million people worldwide have

experienced von Hagens' anatomical creations (Body Donation for Plastination 2024).

Other traveling exhibits inspired by, but not affiliated with, von Hagens' work have been viewed by countless millions more. In the 47 years since the advent of plastination though, human plastinates have been subjected to the most controversy.

Questionable Provenance

Body procurement practices for plastination vary according to the country in which the discipline is being employed (Ottone 2023). To pioneer his groundbreaking preservation technique, von Hagens established the Institute for Plastination (IfP) in 1993 to ensure ethical donation for plastination (Body Donation for Plastination 2024). Despite the establishment of this program, von Hagens has been accused on multiple occasions of negligent sourcing. In 2003, the *BMJ* featured an article informing that since 1995, von Hagens,

carried out plastination...in a private institute in Bishkek, Kyrgyzstan's capital. After about 200 bodies of unexplained origin were recently found in his institute a Kyrgyz member of parliament, Abakon Tashtanbekow, accused Professor von Hagens of having illegally abducted several hundred bodies from former Soviet prisons, hospitals, and psychiatric asylums. Mr Tashtanbekow claims that in most cases obligatory autopsies of the bodies were not carried out and relatives were not informed that the bodies were being sent to Professor von Hagens's institute...von Hagens was questioned by a parliamentary committee in Kyrgyzstan and denied using the bodies illegally. He said that rather than hundreds only nine bodies were available from Kyrgyzstan, none of them for show in his exhibitions. However, he admitted that he did not know whether the families were informed about the death of their relative. (Tuffs 2003 p 1068)

This controversy in Kyrgyzstan preceded more disturbing accusations that have perpetuated for years implying von Hagens utilized negligently sourced bodies while he was operating in China (Chapter V discusses in detail the history of plastination in the

PRC and von Hagens' operations there). In fact, much of the controversy on human plastinate provenance has stemmed from plastinates originating from the PRC.

Many countries, including the United States, have acted as hosts to plastination exhibitions created by PRC plastination facilities. These displays have been routinely criticized for issues of provenance. For example, *BODIES...The Exhibition* was an exhibit featured throughout different parts of the United States. The bodies for the plastinates were from PRC plastination facilities who used police sourcing as their main method of procurement (Jones & Whittaker, 2009). According to China's Ministry of Health, to be categorized as "unclaimed" or "without record" in the PRC an individual who has passed away and whose body was not claimed after 30 days is subject to approval by a competent authority or the police department before being declared unclaimed and available for use by the medical community (KGM Report 2016, 381, China Organ Harvest Research Center 2018, 149). More recently,

...the "Regulations on Funeral and Interment," issued by the State Council on 21 July 1997, and revised and reissued on 1 January 2013...contains detailed limitations to earth burials, but only two brief provisions regarding the corpse: the body has to be handled in a way that ensures public and environmental safety, and a death certificate must be issued by a public security bureau or by a medical institution before cremation can take place. The document does not specify which of the two should sign the death certificate under which circumstances. It also does not provide any guidelines for dealing with abandoned or disputed bodies.... [Later] in December 2013, the Ministry of Health, the Public Security Bureau, and the State Council together issued a new document: "Announcement of Further Standardization of Medical Certificate of Population Death and Information Registration and Management". This document stipulates that as of 1 January 2014, a standard medical death certificate should be used. It places responsibility for dispensing death certificates on medical institutions, but remains mute on the issue of disputed and unidentified corpses. (Shao 2018)

A lack of adequate legislation surrounding unclaimed bodies has created an environment that has easy potential to be taken advantage of.

BODIES...The Exhibition was presented by the entertainment firm Premier Exhibitions, and the plastinates on display generated immense controversy in the U.S. due to their unclaimed status and procurement through police sourcing which caused concern over questionable provenance and negligent procurement methods (Jones & Whitaker 2009). Dalian Hoffen Bio-Technique Co., Ltd. is credited with the creation of the plastinates used in this exhibition. They are a plastination facility in association with Dalian Medical University in Dalian, China². After being displayed in New York State, the lack of evidence for ethical procurement for *BODIES...The Exhibition* caused officials to mandate that,

Premier must now provide documentation of the source of the body, cause of death, and the decedent's consent to display any new bodies or parts in New York State. To display previously obtained bodies they must clearly advertise that the bodies may be those of Chinese prisoners who may have been victims of torture or execution. (Jones & Whitaker 2009, 103)

This legislation along with other initiatives such as the IFAA guidelines (2012) show an elevated level of awareness of the importance of ethical procurement protocols and the need for informed consent (Jones & Whitaker 2009). Yet this controversy occurred almost 20 years ago, and to this day plastination exhibitions created by PRC facilities still cite the use of unclaimed bodies.

Use of unclaimed bodies for human plastinates from the PRC also includes the *Real Bodies* exhibition facilitated by Imagine Exhibitions³ which has produced, “over 56 unique exhibitions that have traveled to 354 locations in 193 cities and over 55 countries,” (Imagine Exhibitions 2024). One iteration of the *Real Bodies* exhibit currently resides at the Horseshoe in Las Vegas, Nevada. FAQs on the exhibit cite the use of

² Neither Dalian Hoffen nor Premier Exhibitions are affiliated with von Hagens.

³ Imagine Exhibitions is also not affiliated with von Hagens.

unclaimed bodies procured through police sourcing (Figure 1). Like *BODIES...the Exhibition*, the *Real Bodies* exhibit also credits Dalian Hoffen Bio-Technique Co., Ltd. with the creation of the plastinates featured. While the FAQs from the various websites who have presented *Real Bodies* state that the bodies, “were never prisoners of any kind, showed no signs of trauma or injury, were free of infectious disease, and died of natural causes,” this does not negate the fact that the bodies are unclaimed, and that informed consent was not given for a process that would preserve the body or body parts in perpetuity while also garnering profits for companies like Imagine Exhibitions.

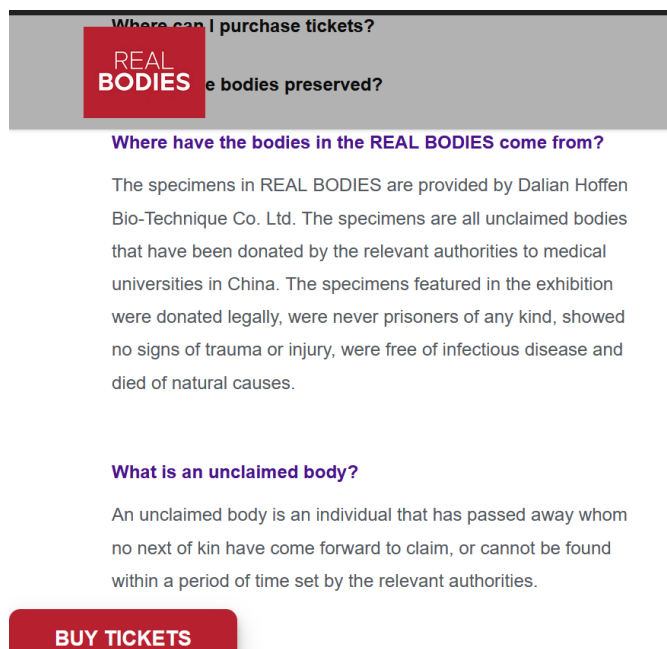


Figure 1. *Real Bodies* Exhibit FAQs

This exhibit, currently at the Horseshoe in Las Vegas, Nevada, states explicitly that the bodies used are unclaimed and made by Dalian Hoffen Bio-Technique Co., Ltd., a Chinese plastination facility. See <https://www.realbodiesvegas.com/faqs/>.

China's criteria allowing for the use of unclaimed bodies has been easily taken advantage of. One prominent avenue used to source unclaimed bodies in China has been from prison populations, a procurement method historically backed by CCP legislation (discussed further in Chapter IV) (KGM Report 2016, Robertson 2020, Wu 2020). Use of unclaimed bodies for medical and anatomical sciences in modern settings is widely rejected (Jones & Whitaker 2009, 2012, Champney et al. 2019). Therefore, police sourcing of unclaimed bodies in the PRC for purposes such as plastination is not an appropriate method in line with modern bioethical standards.

Despite rampant controversy over human plastinate provenance, it is important to note that as the inventor and face of the discipline, von Hagens has made efforts to cultivate an ethical donation process for plastination within his facilities in Germany through his Institute for Plastination (IfP). For over 30 years the IfP has been responsible for ensuring informed consent and respectful protocols for all plastination donors and their families. Their website provides prospective donors access to a great deal of information including samples of their informed consent form. IfP processes have the potential to inspire formats for other body donation programs to adapt and expand upon when looking to include plastination as an option for donors. Appendix 6 shows the IfP's introductory brochure provided to donors interested in plastination.

It is also pertinent to acknowledge the respect the plastination community has for the inventor of the discipline, and the confidence the community has in his ethical conduct. In my interview with Participant 1 they made certain to note that von Hagens is pro-human rights and pro-protection of humans. Heightened respect was also on display at the 20th International Conference on Plastination where Dr. von Hagens was presented

an award which, “recognized his outstanding career and his invaluable and notable contributions to the field of anatomy and morphological sciences,” (Ottone 2023, vii). Other interviewees echoed the respect Participant 1 expressed, but Participant 4 spoke frankly stating that von Hagens should have been more thorough in his early days of sourcing bodies for plastination, and that thoroughness could have been easily achieved through a meticulous paper trail associated with all bodies and body parts.

Negative and skewed perceptions of plastination have, in my opinion, seemed to hinder the discipline’s growth. In my interview with Participant 2, they expressed concern for the continuity of the discipline stating that growth has slowed. This individual has been a part of the plastination community for a substantial period and cited less and less participation in the discipline over the years. They did however remain hopeful for an upswing. All participants in their interviews noted how little-known plastination is overall, even within academic circles and despite plastination’s increased integration into medical educational settings. There is a fair amount of work to be done to amplify the discipline, however with an established ethical framework and increased awareness, there are enormous benefits to be had for educators and students.

Chapter III.

Identity and the Body

One of the critical questions posed in this thesis asks how identity translates to plastinated bodies and body parts, and how anonymity factors in. To reiterate, the definition of identity in this research is first reliant on *The International Encyclopedia of Anthropology* which informs, “identity is not only about individual understandings but equally about social positions, statuses, and roles, which in turn tell people about the norms and mutual expectations for interaction,” (Jenkins 1996 in Finke & Sökefeld 2018, 3). Identity is also deeply intertwined with body processing, as De La Cova (2020) suggests. Third, Jones and Whitaker’s (2009, 22) outline of the three central components of identity and deceased persons – what is done to a body after death has relevance for those who knew the person when alive, the body’s representation of built-in memories that cannot be separated from it, and the role that the deceased plays in the grieving process – will also inform a baseline of understanding and subsequent expansion. From here, a more nuanced history of identity and the body in medical and anatomical contexts like plastination can be explored.

A discussion of the body and intersections with identity cannot begin without reference to renowned anthropologists Dr. Nancy Scheper-Hughes and Dr. Lesley Sharp who have paved the way for today’s medical anthropologists and bioethicists. They have each conducted formative and groundbreaking research throughout their careers on diverse topics including body commodification through organ donation and organ

harvesting, medical ethics and biotechnologies, the function of structural inequality and violence inherent in the acquisition of human bodies and parts, and the ethics of anonymity⁴. Without their work, my inquiry on identity and plastinated bodies would be completely unapproachable.

Scheper-Hughes' and Sharp's research endeavors constructed the basis for author Scott Carney who expanded upon the existing scholarship in his book *The Red Market: On the Trail of the World's Organ Brokers, Bone Thieves, Blood Farmers, and Child Traffickers* (2011). Here, Carney differentiates the commodification of bodies and their parts from the whole of the black market through his exploration of the various global contexts under which body commodification occurs. Throughout the text, a persistent theme he discusses is the harmfulness of anonymity in donation processes. He informs that anonymity can obscure supply chains making it easier for criminals to conceal nefarious procurement strategies. He cautions that anonymity increases the extent to which bodies can be commodified, and that transparency is one of the first steps that can be taken to lessen the view of the modern human body as a "product" (Carney 2011).

Anonymity vs. Transparency

Anonymity has been a normative conceptual component of body and organ donation and procurement processes throughout much of anatomy and medicine's extensive history (Sharp 2007, Hildebrandt 2008, Jones & King 2017). Recently, anatomists and medical practitioners have discussed the efficacy of anonymity citing arguments both for and against the practice (Jones & King 2017). On one hand, there are

⁴ For further reading see Sharp 2000, 2006, 2007, Scheper-Hughes 2001, 2003, and Wacquant & Scheper-Hughes 2012.

researchers that advocate for increased transparency throughout body and organ donation processes, as well as more up-front recognition of the donor's identity (Sharp 2006, Carney 2011, Pieris 2023). Alternatively, some doctors and researchers who advocate for anonymity throughout donation processes cite its importance as a means of protecting the identities of donors and their families (Pronk et al. 2017, Jones & King 2017). The IFAA guidelines stipulates, "The normal practice is to retain donor anonymity. Any exceptions to this should be formally agreed to beforehand by the bequestee and, if appropriate, the family," (2012). This information is meant to guide and be reflective of anatomists' and medical practitioners' beliefs on rights of the donor. However, since these guidelines were established, cultural awareness and the need for sensitivity for donors of diverse backgrounds and identities has necessitated further discussion on how individuals would like their identity to be retained, acknowledged, amplified or respectfully honored.

While debates on the anonymity model continue, what is consistently agreed upon throughout diverse scholarship is the need for informed consent for prospective donors and families (Sharp 2006, Jones and Whitaker 2009, Wacquant & Scheper-Hughes 2012, IFAA 2012, Jones 2016, Wu et al. 2018, Champney et al. 2018, Champney et al. 2019, Li et al. 2020). Implementing informed consent processes ensures prospective donors have full knowledge of what will be done to and with their bodies and body parts once deceased. The IFAA affirms that informed consent for living donors embodies the highest ethical standard for modern anatomists and medical practitioners (IFAA 2012, Jones 2016, Champney et al. 2018). This includes informing donors on all iterations of how their bodies will be used once deceased including final disposition.

While informed consent is a robust model of ethical modalities, it still has room for increased identity integration, acknowledgement, and continuity for donors. The anonymity model too has tremendous benefits for body and organ donors as well as the families of donors, but the standard has unfortunately been implemented negligently throughout various cultural contexts within medical and anatomical sciences. Examples such as Henrietta Lacks point to a historically flagrant disregard for such processes. In authoritarian systems like the PRC as well as during the Nazi era in Germany, regimes have historically constructed permissive environments to implement anonymity in nefarious ways that forgo informed consent, culminating in the erasure of identity altogether. Greater emphasis is thus placed on the value of the human body as a “product” as opposed to the intrinsic value of the person (Carney 2011). While bioethical standards have greatly improved there are still glaring instances of a lack of informed consent and transparency as well as inappropriate use of anonymity.

Informed Consent and Views on Best Practice Amongst Plastinators

The ISP acknowledges IFAA guidelines and informed consent (Ottone 2023), yet discussions with plastinators pointed to a disjuncture in how to effectively employ informed consent models at various institutions. During the plastination workshop I attended in June, 2024, some practitioners felt that stating “medical use” broadly in the consent form was sufficient to allow for plastination to occur. However, this was not the dominant belief of members of the plastination community who were interviewed for this project.

In my interview with Participant 5 we discussed how ethical standards have dramatically evolved for body donors. In that discussion they wisely mused that as

conversations on bioethics have developed further, it has become more and more salient that ethics are contextual. Political, religious, cultural, economic, and legal systems contribute to the widening lens of bioethical protocols necessitating different methodologies and the encapsulation of new points of view. For example, Participant 5 noted that their institution's old consent form contained generalized verbiage for body donors informing that the donation was for education and research in healthcare. When Participant 5 came into their position they aided in overhauling the old consent to be inclusive of more specificity and empowerment of the donor to make an informed decision.

In my interview with Participant 6 they found themselves in similar circumstances, as they had previously been involved with an institution actively engaged in plastination. They currently work for a different institution where efforts to get involved with plastination are in early stages. As someone who already had experience under their belt, they felt they could draw from their existing knowledge base to cultivate and enhance protocols at their current institution as efforts continue toward building a more robust plastination program. Both Participants 5 and 6 suggested equating care of human plastinate collections to caring for human osteological collections, or legacy collections, because of the potential for plastinates to last in perpetuity.

Standards for handling legacy collections were recently discussed by the American Association for Anatomy (AAA) who established a Legacy Anatomical Collections Task Force to determine best practice based on current ethical standards (Cornwall et al. 2024). Recommendations included institutional oversight, investigation of provenance, acknowledgement of stakeholders and communities of care, and further

guidance and discussion on inventory, use and storage, and final disposition (Cornwall et al. 2024). The recommendations take inspiration from guiding principles including adherence to context-specific local and national laws, observance of ethical principles such as the four pillars of bioethics (autonomy, beneficence, justice, and nonmaleficence), cultural awareness, and transparency (Cornwall et al. 2024, 2790-2791). The plastination community would greatly benefit from consideration of these thorough guidelines and recommendations when establishing future protocols surrounding treatment of plastinate collections.

Other plastinators like Participant 3 offered numerous specific and rigorous suggestions regarding informed consent including formalized statements from institutions who have plastination labs or who partner with plastination labs that this preservation method may be a means by which a donor body is used for medical education. Participant 3 also strongly suggested the ability for a prospective donor to opt in or out of the use of their body in this capacity as it may be a violation of their moral standards, religious beliefs, or other personal feelings. Conversely, those who opt into donation for plastination should have even more specific options such as if they would consent to whole body plastination or just plastination of organs and parts of the body that do not have identifying factors.

Participant 4 echoed the sentiments of Participant 3. In their interview, Participant 4 suggested increased rigor and accountability needed for plastinators. They also emphasized a need for increased cultural sensitivity toward donors of varying ethnic groups. Further, like Participant 3, Participant 4 felt it was important to make plastination an option that the donor can opt in or out of. The sentiments from both Participants 3 and

4 reflect the IFAA guidelines (2012), particularly section 9B which states, “clear communication should include...the range of uses of donated bodies at that institution.” By clarifying the range of use, institutions can ensure transparency and informed consent are effectively employed as opposed to relying on a general “medical use” statement for prospective donors.

I was deeply impacted by Participant 4 who was by far the most passionate about accountability, transparency, respect, and empowering donors and their families in their decisions. Throughout their interview they continually used the term “loved one” as opposed to words like “body” or “donor.” This individual made clear the amplification of identity of donor bodies and acknowledging that they had lived lives and had people who cared about them was a core value necessary to be involved in the medical and anatomical sciences. At one point in the interview, they pronounced, “if you don’t respect the person on the table, you don’t respect me.” Participant 4 felt strongly about making sure that the same love, respect, and dignity they would give to one of their family members was given to the donors they worked with, and this extended to their work in plastination.

Discussions with Participant 1, who has been involved in plastination for many years and places a high level of importance on informed consent processes, relayed a tidbit that I found particularly jarring. When plastination practitioners do not exert care, respect, and dignity for donors, egregious practices are bound to occur. They relayed that they had been present in a plastination lab where they witnessed human body parts being processed for plastination in the same container as animal parts. They did not specify when this instance transpired. The IFAA is clear in their view of human and non-human

anatomical pieces. They state, “Specimens must be treated with respect at all times. This includes, but is not limited to, storing and displaying human and non-human animal parts separately,” (2012). Of all my interviews, this information about mixed processing left me both speechless and contemplative. Did that donor know they would be plastinated? Why would this laboratory make such a grievous error? Is this practice still occurring at this lab? While this is likely not normative for modern plastinators, it is still something to be mindful of and requires immediate correction and attention.

My interviews and general interactions with plastinators over the years suggest that despite the lack of a codified ethical framework specific to plastinators, and despite differing levels of ethical applications, the community overall strongly agrees informed consent is a critical tenet to adhere to. All my interlocutors were adamant about ethics and advocated for informed consent. Participants were also emphatic about documentation and paper trails associated with donor bodies and parts. The issue thus seems to lie in cohesion in implementing these essential protocols. A codified framework has the potential to guide plastinators towards increased rigor and specificity in employing informed consent, levels of anonymity, and increasing transparency from institutions.

Commercialization of Plastinates

The 2012 IFAA guidelines inform,

There should be no commercialization in relation to bequests of human remains for anatomical education and research. This applies to the bequest process itself, where the decision to donate should be free from financial considerations, and also to the uses to which the remains are put following bequest. If bodies, body parts, or plastinated specimens are to be supplied to other institutions for educational or research purposes this may not yield commercial gain. However charging for real costs incurred, including the

cost of maintaining a body donation program and preparation and transport costs, is considered appropriate. Payment for human material *per se* is not acceptable. (2012)

It is clear in this statement that plastinates and other biological materials should not be part of any for-profit system. Yet while these guidelines have been in place for over a decade, economic gains are still made through the manufacture, sale, and viewing of human plastinates (Champney et al. 2019, Cornwall et al. 2024). We have only to look at the examples of traveling exhibitions like Premier Exhibitions' *Bodies...the Exhibition* and Imagine Exhibitions' *Real Bodies* exhibits. Even von Hagens' institutions in Germany which include the IfP and Gubener Plastinate GmbH function in a for-profit capacity (von Hagens 2018 in Champney et al. 2019). In fact, all traveling plastination exhibitions known to date are run by for-profit companies who charge high entry fees (Champney et al. 2018). Even if an individual provides explicit consent to have their body plastinated and subsequently put on display in an exhibition style environment, this under no circumstances permits institutions to profit from donor bodies which, per IFAA guidelines, is undeniably unethical.

The continued use of the body in for-profit initiatives by the plastination community is deeply problematic. It undermines the efforts and strides made by plastination community members towards more rigorous ethical protocols, and it dually undermines the IFAA guidelines that the community claims adherence to. Plastinates, whether of whole bodies or of parts of the body, are created from real human beings with real lived experiences, and continue to be part of the donor (Champney et al. 2018). It is critical to bear in mind and reflect upon Jones & Whitaker's (2009) tenets of the deceased body in relation plastinates because what is done to a body after death has relevance for those who knew the person when alive, and the deceased's body is representative of

built-in memories that cannot be separated from it. Thus, “Disrespect is shown to a person-now-dead when that person’s body is used in the absence of any consent on the person’s part, and/or in the absence of any close friends or relatives to argue the case for the deceased,” (Jones & Whitaker 2009 *in* Champney et al. 2019, 321). When a body is commodified in any capacity, this is an egregious disregard of both the individual’s identity and humanity.

It is also pertinent to note that ethical legitimacy for donations is achieved by ensuring informed consent by which the individual approves of the purpose to which their body will serve and fully understands all facets and iterations of what this use entails (Champney et al. 2019). A common motivation to donate one’s body is aiding one’s community. Therefore,

donated bodies have been donated for a specified purpose in a specified place, both of which were disclosed to the individual making the donation...the definitions of ‘purpose’ and ‘place’ are flexible, although they would probably not allow bodies to be moved from one country to another, nor passed from one cultural group to another, in a manner totally unknown to the one making the bequest. (Champney et al. 2019, 321)

This can ultimately lead to hesitancy and distrust from community members towards body donation (Champney et al. 2019). Additionally, “at present, there is no evidence supporting the notion that donors are comfortable with being transferred internationally,” (Cornwall et al. 2024, 909). When traveling commercial anatomy exhibits use plastinates for economic gain and macabre fascination throughout the world, and when companies sell human bodies and body parts in a for-profit capacity to international institutions, this erodes trust from potential donors as well as impairs progress by the plastination community in sustaining dignity and respect throughout the discipline.

In the case of unclaimed bodies, especially from authoritarian contexts, informed consent is already missing and identity is often unacknowledged. In such instances not only have these individuals been preserved in a way that they did not consent to, but this misconduct is compounded by for-profit tactics. Further complications arise if the plastinate created from an unclaimed individual's body is a constituent of the body like an organ or sheet plastinate as identity tends to move further away from parts of the body separated from the whole. These circumstances make it easier for commercial groups to turn the body or body part into a commodifiable product.

Despite the continued commodification of plastinates, there has been some progress is turning the tides away from these practices toward increased respect and adherence to contemporary ethical standards. In 2024 the IFAA Executive Committee made the landmark decision to deny for-profit international companies the permission to exhibit plastinates at any future IFAA conferences (Cornwall et al. 2024). The publication of this decision concluded,

While the operations of international companies who trade in human tissues may not necessarily contravene any specific laws...this does not necessarily mean such operations are ethical or should be immune from ethical scrutiny. It is essential for all anatomists and anatomy associations to ensure that persons operating within the profession are held to account around ethical standards and practice, including those who participate at anatomy conferences and events. Only in doing so can the anatomy profession ensure that ethical standards are promoted, developed, and maintained. (Cornwall et al. 2024, 1514)

Also encouraging is the overwhelming, impassioned response from my participants asserting plastinates should only be used for medico-educational purposes, and that detailed informed consent protocols be implemented for future plastination donations. Moving forward, it is vital to ensure informed consent and respect for both anonymity

and, if a donor so chooses, increased identity acknowledgement, but there should no longer be capitalist, economic gains made from the display or sale of plastinates.

Chapter IV.

Body Procurement in the PRC

In authoritarian contexts, power is ascertained through manipulation of the public consciousness. One of the most pervasive modes of manipulation is the targeting of out-groups who, for one reason or another, are demonized as a threat to the general population and thus a threat to state power. Intensive propaganda, massive arrests, crackdowns, and disappearances all function to marginalize the group that the ruling party has determined to be “other.” This perceived threat instills fear, hatred, and vulnerability throughout the regime’s population. The marginalization and subsequent eradication of out-groups at the hands of a ruling party functions as one of the most brutal and effective means of manipulation and control.

The Chinese Communist Party (CCP), ruling party of the PRC, has in their time identified numerous out-groups as threats to the state. This has translated into the PRC’s global notoriety for human rights abuses. The CCP has labeled out-group populations as “The Five Poisons” which consists of Uyghur Muslims, Falun Gong practitioners, Tibetans, democracy and human rights activists, and pro-independence activists in Taiwan (Faligot & Lehrer 2019). Out-groups have also been referenced by the CCP as “The Three Evils” defined as Muslim terrorists, separatists, and religious fundamentalists (Zhang 2019). These groups have been subjected to mass imprisonment, mass executions, organ harvesting, sterilization, labor camps, medical experimentation, and myriad other forms of inhumane treatment (KGM Report 2016, Robertson 2020). Through propaganda and other manipulation tactics, the CCP has effectively “normalized” disdain and apathy towards these out-groups by the general populace. Individuals identified with an out-

group become lifelong victims of authoritarian suppression and commodification which extends even after death as a mode of control, secrecy, and benefit to the state. One of the most outspoken groups victimized by the CCP has been Falun Gong practitioners.

Falun Gong in China

Established in 1992 by Li Hongzhi, Falun Gong, also called Falun Dafa, is a *qigong*-based movement incorporating teachings from Buddhism and Taoism. *Qigong* is typically,

taught by a charismatic leader via a master/student lineage...[it] is a holistic health-enhancing technique that combines controlled breathing, meditation, and physical movement. Qi refers to the vital energy of the body, whereas gong denotes power or practice. (Li 2014, 181)

Falun Gong, “is a self-cultivation practice, which upholds the principles of truthfulness, compassion, and tolerance,” (Cheung et al. 2018, 39). Authors Matas and Kilgour, who have worked extensively within the community, elaborate further informing that Falun Gong,

teaches methods of meditation through exercises intended to improve physical and spiritual health and fitness...its followers seek to promote truth, tolerance and compassion across racial, national and cultural boundaries. Violence is anathema. (2009, 20)

The teachings emphasize cultivation of the mind without adherence to religious formalities. Although the practice began in the PRC, it has since drawn individuals from all walks of life causing today’s Falun Gong practitioners to be numerous, diverse, and globally dispersed⁵.

⁵ Some authors and media outlets have discussed forms of radicalism embedded in Falun Gong. It is worth noting that there is the capacity to interpret many spiritual and religious practices through a radical lens, such as within Christianity, Judaism, or Islam. That said, some of the negative critiques include the God-like image Li Hongzhi has cultivated for himself over time (including claims of reading minds), racism, gender discrimination, and homophobia. While these are troubling claims, they are not applicable to all

Falun Gong began as a non-spiritual movement. It was even registered by the government as an approved qigong practice in 1993 (Li 2014). However, after Li Hongzhi published *Zhuan Falun*, a text that acted as a set of “scriptures” for adherents to follow, promotion of more spiritual aspects permeated the previously health-only focus of the practice (Li 2014). The religious connotations were not in line with the CCP’s anti-religious sanctions. The tremendous following the practice garnered throughout the mid-late 90’s coupled with its lean toward the spiritual caused it to become a threat to the authoritarian regime. The practice was officially banned in 1999 (Li 2014).

Beginning in the late 90’s and throughout the early 2000’s there was a massive crackdown by the CCP on Falun Gong during which countless practitioners were imprisoned or disappeared (Yiwu 2008, KGM Report 2016, Cheung et al. 2018). Suppressive strategies were facilitated by the 610 Office, a government-run cohort whose original task was orchestrating tactics to eliminate Falun Gong, but later took on suppression of other out-groups (KGM Report 2016, Cheung et al. 2018, Faligot & Lehrer 2019). During the CCP crackdown, researchers reported that,

In the intensified eradication campaign, torture and deaths resulting from torture became the norm. Falun Gong practitioners have been exposed to a wide range of torture methods, including brainwashing, forced labor, sleep deprivation, sexual violence, psychiatric and other medical experimentation, and forced organ harvesting. Torture deaths have occurred after beating, force-feeding, electric baton application, suffocation, and other methods. (Cheung et al. 2018, 42)

practitioners nor are they a means of justifying the abuses aimed at practitioners. It was Falun Gong’s rapid growth and pervasive appeal within China in the late 1990s that initially made it a threat to the CCP. There were no early political affiliations amongst practitioners. It was only after the CCP began a campaign against Falun Gong practitioners that different subsets took on a more politicized stance against the CCP and/or began to support conservative initiatives (Cheung et al. 2018, Campbell & Cohen 2020).

For their beliefs, Falun Gong practitioners were labeled as a threat which ultimately put violating individuals at risk of judicial execution. The number of executions that occur in China has been challenging to accurately determine as the CCP ensures they remain a state secret (KGM Report 2016, Amnesty International 2024).

Of the many abuses Falun Gong have been subjected to, the most unusual and disturbing is the commodification of their bodies via organ harvesting and negligent procurement of their bodies. Accounts from formally imprisoned Falun Gong indicate not only extreme mistreatment, neglect, and torture, but also forced, unnecessary medical tests including blood tests, x-rays, ultrasounds, and physical examinations that did not aid in the health of the individual (KGM Report 2016, Robertson 2020). These unusual medical tests were a means of determining matches to prospective organ recipients, as judicially executed prisoners have historically acted as the primary population from which bodies for medical education and organs for transplant were obtained (KGM Report 2016, Robertson 2020, Wu 2020). Numerous survivor accounts have come to light since investigations into their plight began.

Witness Accounts

Renowned author Liao Yiwu is lauded for his unprecedented interviews with marginalized individuals throughout China. In his book *The Corpse Walker: Real-Life Stories, China from the Bottom Up* (2008) he had the opportunity to speak with a woman who practiced Falun Gong. Falun Gong are so heavily persecuted that even possessing media about the practice, let alone meeting with an actual practitioner, puts the individual in grave danger. Yiwu was on the run for four months after meeting with this practitioner to whom he gave the pseudonym “Chen.”

Chen had begun practicing Falun Gong as a method of pain management. She devoted herself to the practice after feeling dramatic improvements. When the persecution began, she experienced brutal harassment at the hands of both the police and members of her community. She was detained several times for her support of Falun Gong, but in 2002 she was sent to a mental institution at the behest of local police and township government officials. It was her town's Party Secretary who stated, "The decision of the Communist Party serves as the most authentic diagnosis," (2008, 237). During her time in the institution, she experienced being tied up and bound to a metal bed, starvation, injections with unknown IV drips, and force-feeding of pills which left her incapacitated. After spending 110 days in this hell, she was transferred to a reeducation-through-labor camp. Chen escaped the camp one year and ten months after arriving. She was still on the run at the time of her interview with Yiwu in 2004 (Yiwu 2008, 230-241).

Additional accounts come from witnesses who testified at the China Tribunal. Xuezhen Bao, a former engineer, began practicing Falun Gong in 1995, but during the crackdown she lost her job and was subsequently imprisoned for refusing to give up the practice. While imprisoned, she and other practitioners were singled out for excessive medical testing. Xuezhen recounts the many checks done,

...from height, weight, eye check, blood test, urine analysis, gynecology check, ultrasound diagnosis, check on internal organs [like] heart, liver, kidney, etc. The syringes they were using to take blood were much larger than normal blood test ones. When I got to [the] ultrasound diagnosis, the doctor looked very surprised; he called for other doctors and wardens and checked with them. I heard a few sentences: "this one is useless" "it is a mess, full of stones, everywhere, she is useless". Then they asked if I feel any pain...I told them it felt alright, then they became quiet. (Submissions - China Tribunal Xuezhen Bao 2020)

She continued to experience horrific circumstances while imprisoned including overcrowded, dirty cells, rotting food, prevention from seeing her family or legal counsel, extreme physical labor, prevention from cleaning herself or using the bathroom, torture from other non-Falun Gong inmates, and unimaginable torture meted out by the prison guards. She also relays how fellow imprisoned practitioners who did not reveal their names and who were assigned only a number as their identifier frequently disappeared (Submissions - China Tribunal Xuezheng Bao 2020).

Another China Tribunal witness, Jintao Liu, was an engineer with a Master's degree in Chemical Technology. His initial bout with the police came about after a raid in which Falun Gong materials were found on his computer. He was subjected to two years enduring "brainwashing classes" and detention at reeducation-through-labor camps (also called Laogai). At no point was he given any official paperwork pertaining to his arrest and detention, nor was he sent through any court processes. During his imprisonment he was subjected to beatings by other inmates who were ordered to do so by prison guards. He was also subjected to routine, unnecessary medical testing including x-rays and blood tests. He suffered through starvation for periods of time as well as bouts of forced-feeding through tubes. Other horrendous abuses included sleep deprivation, standing for long periods of time until his feet and legs swelled, being denied the ability to go to the bathroom, watching propaganda videos, and continuous hard labor. He spent those two years still holding strong to his commitment to Falun Gong, yet he was forced to write statements denouncing his beliefs to be released (Submissions - China Tribunal Jintao Liu 2020).

Legislation

Negligent organ and body sourcing became normative and state supported beginning in 1984 through the CCP enacted legislation entitled the “Provisional Regulation on the Use of Dead Bodies or Organs from Condemned Criminals” which officially permitted organ sourcing and indiscriminate use of the bodies of death-row prisoners (Wu et al. 2018, Wu 2020, Charmode et al. 2024). While verbal or written consent was also technically required as per this mandate, there is abundant evidence to indicate this was rarely adhered to. Compliance can be coerced through methods routinely employed in PRC prison systems (KGM Report 2016, Wu 2020). Strong evidence also suggests the frequent occurrence of live harvests of organs from prisoner populations facilitated by doctors, medical staff members, and prison workers (KGM Report 2016, Robertson 2020). Despite the 1984 regulation, The CCP had systematically denied claims of negligent body sourcing and organ harvesting from prisoner populations for decades both to the world and amongst their own population.

In 2005 the CCP admitted that judicially sentenced death-row prisoners were in fact being sourced for organ transplants (KGM Report 2016). In July 2006, “the Interim Provisions on the Administration of Clinical Application of Human Transplant Techniques came into effect, which was...the first time the Chinese government set up a special committee to regulate organ transplants,” (Wu 2020, 238). In May 2007, the Regulation on Human Organ Transplantation was enacted in an effort to standardize organ transplantation in the PRC (Wu et al. 2018, Wu 2020, Charmode et al. 2024). While this legislation was more all-encompassing of the population, it did not differentiate between the rights of prisoners versus the general public, but it did bolster

the need for written consent from prospective donors (Wu et al. 2018, Wu 2020, Charmode et al. 2024). In 2010 the Criminal Law Amendment was added making organ trafficking a more formalized crime (Wu et al. 2018, Wu 2020, Charmode et al. 2024). An additional measure was enacted in 2013 called the “Provisions on Human Organ Procurement and Allocation” which stipulated that all donated organs must be entered into the China Organ Transplant Response System (COTRS) to ensure equitable distribution and to maintain a formal record (Wu et al. 2018, Wu 2020, Charmode et al. 2024). In 2015 the CCP formally stated that all bodies used for organ transplants were to come from willing donors, however they did not clarify their strategies for the procurement of bodies for other purposes (KGM Report 2016, Wu et al. 2018, Wu 2020, Charmode et al. 2024). Although historical instability in legislation has lent itself to unethical body procurement strategies, the most recent proclamation has pushed medical and anatomical community members in the PRC to increase efforts to ensure ethical donation protocols (discussed further in Chapter VI).

Identity, Bodies, and Falun Gong

In the PRC, Falun Gong practitioners have been repeatedly subjected to tactics that strip away the self. Combined with these tactics is the especially unique attribute of Falun Gong practitioners to collectively use silence to maintain solidarity with one another. Imprisoned Falun Gong would routinely withhold their names even under torture (Yiwu 2008, KGM Report 2016). Those who remained nameless in prison retained that namelessness after execution or death in prison.

Because their identities are unknown, Falun Gong who died nameless in prison could be categorized as unclaimed. Legislation regarding unclaimed bodies in the PRC is

generally absent (Shao 2018). The lack of clear, cohesive policy for final disposition of unclaimed persons creates an environment that has the potential to be taken advantage of. Unclaimed bodies are still a means of sourcing for medical and anatomical use within the PRC (Habicht, Kiessling & Winkelmann 2018). Thus, the CCP's system of suppression alongside permissive legislation and policy compounded by Falun Gong practitioners' cultivation of solidarity through silence culminates in the perfect storm for the negligent procurement of Falun Gong bodies for the medical community.

The only marker of self that is maintained for unnamed practitioners who are executed or who have died in PRC prisons is their status as Falun Gong. This status within the PRC is both a marker of demonization *and* a marker of value. Dr. Leslie Sharp enlightens, "categories of persons...may be viewed within their respective societies as possessing more power than others in particular contexts, and thus their body parts may be highly prized," (2000, 294). Falun Gong bodies and parts have historically been specifically sought by those involved in the medical community as well as by potential organ recipients both domestically and internationally (KGM Report 2016). The purported "value" lies in the health practices implemented by practitioners. PRC doctors and medical staff members have been cited as touting the health qualities of an organ to be received if it was to come from a Falun Gong practitioner, and patients would dually inquire if the organ was to come from a practitioner (KGM Report 2016). Quality is therefore directly related to the supposed lifestyle of the donor.

Falun Gong has always included an emphasis on a healthy, balanced lifestyle, so their organs were perceived as superior compared to other potential sources. This notion of superiority does not factor in the varying degrees to which a practitioner adheres to a

specific lifestyle, nor does it consider the effects of imprisonment in a PRC prison, work camp, or reeducation center. Although an organ recipient may think they are aware of the lifestyle of the person and the “quality” of the organ they are to receive, they are completely ignorant to the person’s real, lived experiences and identity.

By removing the identity of an individual and only seeing them as part of a collective that is engaged in a specific practice, the body as commodity is further exaggerated. The label of Falun Gong becomes both a marker of identity and anonymity. The post-mortem treatment of their bodies is evocative of their social position, and functions as, “a social tool that can be manipulated to transform, reestablish, or reinforce the relationships that exist between the living and the deceased as well as cement social stratification and power,” (De La Cova 2020, 212). Ultimately, it is the organ or body part that becomes a “product” of the person who lived a perceived way and is given the utmost value which reflects the complex role Falun Gong play in Chinese society. With their identities removed, collectivized, rebranded, and then commodified, the self is stripped away leaving only the attribute which caused the Falun Gong individual to be subjected to persecution which both bolsters value and makes it challenging to reclaim humanity. It is here that we find a strange juxtaposition between the initiatives of the CCP aimed at suppressing Falun Gong versus the retention of the identity marker that aids in the value of their bodies as a commodity to the state.

International Response

The international anatomical and medical community has routinely condemned both the use of unclaimed bodies and the use of prisoner bodies for anatomy and medical education (Jones & Whitaker 2012, IFAA 2012, Champney et al. 2019). Other

responses to negligent sourcing and subsequent commodification of bodies and parts include The Declaration of Istanbul on Organ Trafficking and Transplant Tourism. Formulated in 2008 by the International Transplantation Society and the International Society of Nephrology, “[this] Declaration provides definitions and principles to guide organ transplantation and prevent organ trade,” (Naumovich 2020, 422). Of equal import was,

The Council of Europe Convention against Trafficking in Human Organs [which] was the first international criminal law that addressed organ trafficking...[and] indicated that parties should establish as a criminal offense under their domestic laws the removal of organs from a donor without the free, informed, and specific consent of the donor and where the donor or another third party has been offered or received financial gain in exchange for the removal of organs should be established as a criminal offense under their domestic laws. (Naumovich, 2020, 424)

Despite notable international responses, “many countries have still not added organ trafficking into their human trafficking laws,” (Naumovich 2020, 425). This laxity in establishing legislation based off internationally agreed upon standards is akin to the lack of legislation surrounding unclaimed bodies despite international agreements like the IFAA guidelines stating that bodies for anatomy and teaching should only come from willed donations.

There is also very little data and international agreement on the transportation of bodies and body parts between borders or intercontinentally. The 2012 IFAA guidelines assert that, “there needs to be an urgent move towards the establishment of guidelines regulating the transport of human bodies, or body parts, within and between countries,” however this is a topic that even twelve years later is still in need of extensive discussion and clarification. International transportation of donor bodies and body parts is still considered an ethical grey area that, “need[s] to be debated within the profession to

ensure a position is reached that aligns with donor expectations, communities of care, and stakeholders,” (Cornwall et al. 2024, 910). This year, crucial discussions on the international transfer of bodies have been more thoroughly undertaken with scholars noting that, “at present, there is no evidence supporting the notion that donors are comfortable with being transferred internationally” (Cornwall et al. 2024, 909) yet bodies have been transported throughout the world with a fair amount of consistency over the years for education, research, and in commercial for-profit enterprises (Cornwall et al. 2024). Overall, these areas merit a great deal more discourse.

Undoubtedly the most notable response to negligent body and organ sourcing specifically in the PRC was the China Tribunal. This was an international assemblage tasked with investigating forced organ harvesting from Falun Gong practitioners and Uyghur Muslims. Decades of research and data collection from diverse, global scholars coalesced to present extensive evidence to substantiate the egregious ethical violations that have occurred against these out-groups. The tribunal’s verdict in 2020 stated, “Commission of Crimes Against Humanity against the Falun Gong and Uyghurs has been proved beyond reasonable doubt,” (China Tribunal Final Judgement, 2020). This decision sparked new discourse and awareness throughout the world of out-group persecution and human rights violations that have taken place in the PRC.

Falun Gong and Plastination

Throughout my research, various reports and claims have come up associating Falun Gong with negligent sourcing specifically for plastination. My aim has always been to employ objectivity and to ensure an analysis that is driven by accurate source materials. Although the previous sections substantiate that Falun Gong bodies were

historically used by the medical community in the PRC, as were death-row prisoner bodies and unclaimed bodies, *there is currently no direct evidence to support the use of Falun Gong bodies specifically for plastination* (emphasis is mine). Authors have asserted the problematic nature of continually linking Falun Gong directly with plastination (Heinrich 2018). Also of note is that renowned Chinese human rights activist, Harry Wu, who has protested against plastination exhibits' use of the bodies of executed prisoners, has dismissed the accounts of Falun Gong bodies being specifically sought for use in plastination (Heinrich 2018). While this does not mean it is not possible that bodies of Falun Gong practitioners were used in any forms of plastination, there is no current, direct, and substantiated evidence to support these claims.

Additionally, trusted and thoroughly researched documents such as the KGM Report used during the China Tribunal – on which I have relied heavily throughout this thesis – have further problematized issues surrounding plastinates from the PRC. The information disseminated in the KGM Report about plastination is not entirely correct. Out of the over 600 pages within this document, there are only six pages (378-383) that discuss plastination. Statements like, “Other than the plastination technology itself, the bottleneck in creating specimens is the availability of fresh human corpses. According to forensic medicine, the “fresh period” for a human body is two days,” (2016, 379) are especially problematic because this implies that only newly deceased individuals are viable for plastination; this is patently false. Discussed in Chapter II, plastination can be employed immediately upon death, after embalming, or hundreds of years after death, such as with mummies. Further, when looking at the source materials used for this section of the KGM Report, no plastination practitioners were directly consulted on how

the practice is implemented. The researchers would have greatly benefitted from consultation with diverse members of the ISP before writing this portion of the report.

The inclusion of discussions about Falun Gong in my analysis is in no way meant to be accusatory, but rather a means of generating much needed discourse on identity erasure, historically negligent sourcing strategies employed in the PRC, and the deeply problematic use of unclaimed bodies, especially from the PRC, in relation to plastination. When a body is unclaimed and comes from an authoritarian context, huge questions of provenance arise. This questionable provenance in conjunction with historical mass imprisonment and abuses (particularly organ harvesting) meted out to out-groups like Falun Gong practitioners creates a storm of easy accusations. The function of identity erasure as it pertains to Falun Gong exaggerates issues further. It thus becomes easier to make a wide array of assumptions about who these plastinated bodies of unclaimed individuals were. Establishing provenance becomes next to impossible. The clash of historical issues and questionable provenance bolsters the need to ensure identity continuity in association with plastinates of whole bodies and their parts.

Persistent questions of provenance harm the discipline and its growth. It must be acknowledged that while there have been ethical failures within plastination, and for much of the history of medicine and anatomy for that matter, that does not mean that progress has not been made and cannot continue to be forged. Discussing Falun Gong practitioners in relation to plastination functions to show the need to not only acknowledge past unethical practices, but further clarify misconceptions, and emphasize current practices. Acknowledgement of ethical failures like the use of unclaimed bodies from the PRC will help to inform the public that plastination is not necessarily directly

connected to Falun Gong but is rather culpable for the use of unclaimed bodies generally, and especially unclaimed bodies from the PRC. Acknowledgment can also help reassure modern standards are being actively implemented today, and communities can begin to renew trust in the actions and initiatives of medical practitioners and anatomists knowing that they are adhering to rigorous ethical protocols.

Chapter V.

Plastination in the PRC

An elusive component that this thesis aims to address is the history and current state of plastination in the PRC. Plastination was first implemented in the PRC in 1996 when it was introduced by Dr. Zheng Tian Zhong who had traveled to Iceland and Hong Kong to learn the method (Zhong et al. 2000). He was able to modify certain steps in the original plastination process developed by von Hagens so that it could be adapted to facilities that did not have access to the standard equipment which at the time could be both expensive and challenging to obtain in China. This alternative method was so successful that Dr. Zheng was able to collaborate with other researchers to open the Nanjing Plastination Factory – also referred to in the literature as the Su Yi Plastination Factory – in Jiangsu Province (Zhong et al. 2000). From its opening in 1997 the factory was able to produce “a few thousand of specimens since its inception,” of both animal and human origin for use at medical institutions throughout China (Zhong et al. 2000, 25). Plastination’s initial foray into China was to provide a supplementary educational resource.

In the same year plastination was introduced to China, von Hagens accepted a visiting professorship at Dalian Medical University (KGM Report, 2016). Plastination gained traction in the PRC when von Hagens moved his entire operation from Heidelberg, Germany to Dalian, China in 1998/1999 (Zhong et al. 2000, Hildebrandt 2008). In Dalian, von Hagens partnered with Dr. Sui Hongjin. Dr. Sui is an accomplished

anatomist who has spent most of his career with Dalian Medical University, and is the current Director of the Department of Anatomy for the university (Hoffen n.d.). It is difficult to pin down exactly when and why the two scientists parted ways, and sources are divided over who ended the relationship with whom. Regardless of the reason for severance, Dr. Sui founded his own plastination facility in 2004 which still operates today as the Dalian Hoffen Bio-Technique Co., Ltd. (Hoffen n.d.), and von Hagens continued to work separately in Dalian years afterwards.

Dr. von Hagens' operations in China have been heavily scrutinized and subject to controversy. The center of discussion has been around the provenance of bodies used during his time there for plastination. As a caveat, I must assert that this portion of the analysis is intended only to present data from reputable, objective sources regarding the timeline and nature of plastination in Dalian while von Hagens was present. It has been challenging to build this timeline, as many sources present heavy bias or skewed views. I do not find these sources to be credible, and have instead chosen to rely on source materials written as neutrally as possible to ensure an objective position.

In the previous chapter, the crackdown on Falun Gong practitioners in the late 90s and early 2000s was discussed. There is irrefutable evidence that the bodies of out-groups like the Falun Gong and other prisoners of conscience were used by the medical community in the PRC for organ transplantation and other anatomical purposes. The CCP legislation outlined in the previous chapter shows that body procurement from death-row prisoner populations was permitted and acted as the primary source of bodies and organs for the medical and anatomical community prior to 2015. Scholars also note historically low rates of willed body and organ donation from the public prior to 2015 (Zhang et al.

2014). Notable too is the lack of specificity in legislation surrounding unclaimed bodies and their final disposition (Shao 2018). Further, von Hagens has openly stated that he adheres to the procurement protocols in place within the country he is operating (Hildebrandt 2008). This is a line of bioethical and legal thought still employed today as plastination practitioners are expected to adhere to the laws and regulations in place within the country they are situated (Ottone 2023). Body and organ procurement laws throughout the world vary widely, and while most anatomists and medical practitioners agree on informed consent protocols, there are still places in which it is normative to use unclaimed bodies (Habicht, Kiessling, & Winkelmann 2018). These factors culminate in the potential for highly questionable provenance of human plastinates created in the PRC prior to 2015.

Pulitzer Prize winner David Barboza wrote an article for the *New York Times* in 2006 after he had the opportunity to visit and tour von Hagens' plastination facilities in Dalian. The article is accompanied by a video of the facilities to substantiate the evidence presented. Barboza (2006) states that von Hagens claimed to him that *most* (emphasis is mine) of the bodies in the facility were those of European donors acquired through his established donor program. This would mean that donor bodies were transported intercontinentally from Europe to China.

Bearing in mind the ethical grey areas surrounding the international transfer of bodies, as well as the new research noting that most individuals would not want their bodies transported in this way (Cornwall et al. 2024), we can look back to before Barboza's interview with von Hagens when,

an audit of [von Hagen's] Dalian Institute in 2003 revealed the presence of only one documented Chinese body donor, whereas the storage area

contained 647 intact bodies, 3,909 body parts, and 182 fetuses, embryos, and neonates. Seven bodies showed injuries compatible with an execution. (Peuker and Schultz 2004 *in* Hildebrandt 2008, 10)

After this audit's claims of negligent procurement, all bodies within the facility were cremated (Hildebrandt 2008). It was after this incident that Dr. Sui founded Dalian Hoffen Bio-Technique Co., Ltd. in 2004 (Hoffen n.d.) As far as von Hagens' operations, a 2012 interview reports Rurik von Hagens responding to a question asking if his father's facilities in China were still active to which he stated,

No. It exists still. But only on paper. In 2006, there was a decree from Beijing that plastinates could no longer be imported or exported for commercial purposes. So since 2006, we have not prepared any human bodies. For around three years, up until around last year, we still worked with the bodies of animals. We had, for example, an elephant in our exhibition that was from Dalian ... but now there are no longer any production facilities there. (Welle 2012)

The series of events points to multiple issues, proven and implied, throughout the time von Hagens was plastinating in China.

Active Facilities

Throughout my time researching this topic, another challenging aspect has been determining the status of operative plastination facilities in China both past and present. This data has been extremely difficult to come by, and is at times convoluted. It is worth noting that it is incredibly challenging to determine a definitive number of plastination facilities in general, regardless of locale. Participant 2 informed that plastination labs globally often come and go due to lack of funding and clout. Without both ample funds and an association with a senior researcher, labs cannot prosper. The result is a persistent turnover. The absence of information on operative facilities and the general history of plastination in the PRC creates substantive challenges when trying to collect accurate

data on plastination and body procurement. Lack of access to data in totalitarian regimes dually contributes to the dearth of information on active plastination facilities in China.

That said, what I have found is that as of the writing of this piece there are *at least* two actively operative facilities: Dalian Hoffen Bio-Technique Co., Ltd and Zhengzhou Meiwo Technology Co., Ltd. Both institutions feature museums with hundreds of plastinates of both human and animal origin. Both also offer ways to facilitate the purchase of an extensive variety of plastinates through their websites and other online platforms. For example, Meiwo offers active product listings for animal plastinates through their websites <https://www.meiwo-science.com/> and <https://www.plastinationspecimen.com/>.

I first encountered Meiwo when I wrote a research paper for a 2021 Summer course at Harvard Extension School called *The Human Market: The Global Traffic in Human Beings*. The paper was entitled “An Analysis of Plastination in China” where I informed,

Human plastinates from Meiwo include[d] limbs, organs, whole bodies, and sheet plastinates. Of the hundreds of product listings on their personal site, ‘Hot Products’ include[d] whole human brain plastinates, human whole viscera, and human skulls. (Wheelan 2021, 6)

At the time, Meiwo’s active product listings for the purchase of human plastinates were made readily available for sale both domestically and internationally to medical practitioners and educational centers via their personal websites as well as through made-in-china.com, a website that connects global businesses with suppliers in China. In conducting research for this project, I was relieved to see that Meiwo’s listings for human plastinates had been removed on all platforms.

As of the writing of this thesis, Dalian Hoffen still offers active product listings for human plastinates on their website <http://en.hoffen.com.cn/> as well as on made-in-china.com where there are 20 total listings, 10 of which are human plastinates. Recalling Chapter II, it was noted that both *BODIES...the Exhibition* from Premier Exhibitions and the *Real Bodies* exhibit by Imagine Exhibitions featured plastinates created by Dalian Hoffen, and both exhibits cited unclaimed bodies as the main source of the bodies and body parts on display. It is clear based on IFAA guidelines and copious other sources throughout this thesis that the sale of human bodies and body parts is unethical. Additionally, international transport of bodies and parts is ethically dubious, and is likely not something donors would consent to in the first place (Champney et al. 2019, Cornwall et al. 2024). So, while some companies like Meiwo are making strides towards changing their practices and working towards adherence to globally agreed upon ethical standards, there are still facilities that have continued to use plastinates in for-profit capacities.

Meiwo and Dalian Hoffen both boast claims of a robust global distribution of their products. Meiwo states that they have,

established a wide cooperative relationship with many well-known universities, museums, and science & technology halls from more than 40 countries and regions around the world, such as [the] Philippines, Malaysia, Middle East country, Germany, Brazil, USA, etc. (Meiwo Science 2015)

Dalian Hoffen illustrates their extensive global plastination distribution on their website with a map indicating locations they have had affiliations with. Yet despite both companies' diverse, multitudinous offerings and global distribution, neither Meiwo nor Dalian Hoffen offer much in terms of ethical statements or guidelines. Meiwo's link to ethics led to a 404 page, and Dalian Hoffen has no specific statement on ethics.



Figure 2. Dalian Hoffen Map

Global distribution of products from Dalian Hoffen. The map can be found on <http://en.hoffen.com.cn/>

Plastination Community Response

A question that I felt was pertinent to discuss during all my interviews with participants was what their current feelings were on plastination in China. I wanted to determine how individuals involved in plastination today view China's role in the discipline. Reactions were mixed. Participants 3 and 6 had no specific feelings about plastination in China. They both said that they did not have enough information to personally comment. Other participants offered interesting insights or expressed stronger feelings.

Participant 1 shared some of their knowledge on what they had heard about plastination in China through the years. They stated that at one point there was “bad blood between von Hagens and Sui.” They also shared with me that von Hagens had

accused Dr. Sui on American television of negligently sourcing bodies. Further, this participant informed that a lawsuit had been initiated by Sui against von Hagens after the accusations were made, however the dispute was ultimately settled out of court. The incident this participant is referring to is a 2008 ABC *20/20* documentary looking at Premier Exhibitions' plastination exhibits and the source of the bodies and body parts featured. The claims made on the documentary sparked a legal dispute between the two plastinators. Participant 1 went on to say that there was never any real confirmation of where the bodies in question had come from, thus provenance is still highly questionable. In Participant 1's words, they believe that the bodies were obtained through "sketchy means."

When Participant 2 was asked their thoughts about plastination in China, they stated broadly to me that human life is not valued as much or in the same ways everywhere. They coined the early issues of negligent sourcing and provenance in the PRC as the "China Event" which, they said, has since opened the eyes of people involved in the plastination community. Participant 2 went on to say that greater awareness helps to solve problems, and that both public access to records and maintaining fastidious details about donor bodies creates more diligence and accountability.

Participant 4 expressed consternation over events in the PRC, particularly the lack of a paper trail. Participant 4 went on to discuss the difficulties surrounding unclaimed bodies. They shared with me the emotional challenges they personally face concerning unclaimed bodies, as these are individuals who have no one to call them, check in, or to stop by and therefore deserve the utmost respect from individuals involved in anatomy and medicine. Additionally, Participant 4 continued to emphasize the need for a paper

trail associated with all bodies and body parts in donor programs. The donation program they are involved with has incredibly stringent protocols compared to other donation systems I have encountered. Their system employs an extremely comprehensive informed consent form, constant transparency in all their processes, ongoing thankfulness to donors and their families, meticulous paper trails with all bodies and body parts, and a critical focus on education that imparts respect as an indisputable tenet. This participant stated that earlier in their career they had even turned down lucrative opportunities because the ethical protocols of the institution looking to hire them did not align with their standards of care.

Participant 4 also commented on von Hagens. They felt that the controversy was brought on by von Hagens himself, and that his work in China showed a lack of accountability. Participant 4 clarified that the first question when it comes to any bodies or body parts should always be, “where is the paperwork?” They felt that the historically permissive atmosphere surrounding body procurement processes in China was taken advantage of. For the people involved in the early days of plastination in the PRC, Participant 4 asked, “can these people sleep well at night?” As mentioned earlier, this participant was the most passionate about ethics and respect for all “loved ones” which I found to be extremely admirable and emotionally moving. They ended our interview with a plea to impart more rigor, policy, acknowledgement of ethical failures, identification of areas in need of improvement, and exploration of potential avenues for progress.

Participant 5’s response to plastination in China was a desire for greater understanding and accuracy of events that transpired. They wanted to identify what exactly the concerns over China were, why we are concerned, and why are these issues

problematic? Might it be because of concerns about consent? Financial gain? Context? Or is it a mix of concerns? They also questioned, “how do we close the loop” and “how do we bring cross-cultural groups into the conversation?” They felt it was important to offer resources to communities as well as provide alternatives to existing methods that may be controversial. The conversation with Participant 5 was cerebral and thought-provoking. We knew in our discussion that we did not currently have all the information needed to answer these questions. Yet, I was so appreciative to have the opportunity to speak with this participant and engage in these conversations which will hopefully continue to be had within medical, anatomical, and bioethical communities.

Although none of my participants were from China, some data exists on how the discipline is perceived there and how progress is being made. There have been efforts to reclaim plastination in the PRC as a critical and ethically employed discipline. For example,

...public-health-minded discussions [in China] of the plastinated cadaver exhibits aim to correct misconceptions and calm fears, encourage organ donation, and address rumors of forced harvesting head-on, emphasizing, for instance, the careful production of individual specimens and the extreme unlikelihood of recognizing anyone individually. An interview from a Dalian radio station addresses controversy related to an incident in which a Liaoning hospital sold body parts to a plastination company and the sale was subsequently declared illegal. The interviewee, a law expert, contends that although people might have heard urban legends about the bodies of relatives being stolen and later discovered without vital organs, they should not be discouraged from donating their bodies to science. To dispel any fears that listeners may have, the legal expert tries to shed light on police procedure when encountering an unclaimed [body]: rather than handing it directly over to hospitals or plastination factories, he explains, officers first try to identify the body and the cause of death; an unclaimed body would never be “donated” immediately. The expert urges listeners not to fear that a relative’s body will be declared unidentified and sold. China’s laws are constantly being perfected, he explains, and new regulations regarding donation and dissection of cadavers are springing up all over the country. (Heinrich 2018, 128)

This rhetoric leads into the next chapter where discussions of advancements in body donation programs in the PRC are analyzed.

Today, the ISP boasts members from throughout the world, including the PRC. There are also globally dispersed non-ISP affiliated plastination practitioners. Thoughts and opinions on plastination in the PRC differ widely, but there needs to be a push to get everyone on the same page with a forward-thinking and progress-oriented mindset. Although the IFAA guidelines are the current ethical standards plastinators are meant to adhere to (Ottone 2023), the implementation of an ethical framework that is specific to the ISP would hold all members accountable to adherence to a higher standard of ethical protocols, as well as provide the means of addressing ethical concerns that are only seen within the context of plastination. Non-affiliates could also consult the guidelines, and there may even be more participation in the ISP as a means of distinguishing oneself and one's standards of care. Essentially, we must acknowledge, address, and improve so that no matter where someone is plastinating, institutions and educators can rest-assured that ethical protocols are in place and that the plastination community can be trusted.

Chapter VI.

A Decade of Progress

Important to this thesis is a discussion of how medical practitioners in the PRC are grappling with historical ethical failings. Medical practitioners and researchers throughout China are actively working with their respective communities to destigmatize body and organ donation. Their efforts have magnified the conflicting viewpoints and muddled ethics surrounding body sourcing in the PRC. Although subjected to the authoritarian structure in which they are entrenched, members of the medical community still have positive intentions and seek to practice ethically, with ethical advancements becoming especially prominent in the last decade.

The 2015 proclamation dictating all organs for transplant were to be obtained from willing donors has seemed to intensify efforts to cultivate ethical protocols for body donation programs. Copious scholarship from Chinese researchers has emerged discussing modern methods of body procurement that employ more rigorously ethical and culturally sensitive protocols that ensure informed consent via integration of identity acknowledgement, amplified transparency, consciousness of cultural norms, and increased public education to promote awareness of and accurate information on all steps in body donation processes. (Zhang et al. 2014, Jones & Nie 2018, Wu et al. 2018, Jiayi Jiang et al. 2020, Jingwen Jiang et al. 2020, Li et al. 2020, Zhang et al. 2020, Jing and Xiaoying 2021). Some of the most significant increases in whole-body donation have occurred in highly developed areas boasting populations with greater ease of access to

higher education (Jiayi Jiang et al. 2020, Jingwen Jiang et al. 2020). Chinese universities especially have been at the forefront in establishing critical ethical standards. In places like Nanjing, medical practitioners have worked with citizens by encouraging medical colleges to act as advocates and coordinators within their respective communities to facilitate willed body donation (Zhang et al. 2014). As recently as March, 2021, medical officials and affiliates in Nanjing signed an agreement that ensures services for body donors and their families including,

transportation of the remains of human tissue donors; on-site farewell etiquette services and funeral home-related refrigeration and cremation services; providing human tissue donors with specific life essence funeral commemorative placement areas. (Jing & Xiaoying 2021)

Agreements like these can serve as a model for other medical and research institutes throughout China who are looking for a means of increasing trust in medical practitioners as well as cultivating more interest and acceptance of body and organ donation programs.

Another example of progress is the increase in commemorative placements and memorial services for donors and their families (Jones & Nie 2018). This is an initiative that aligns with the IFAA guidelines which state,

Institutions should be encouraged to hold Services of Thanksgiving or Commemoration for those who have donated their bodies for medical education and research, to which can be invited relatives of the deceased along with staff and students. (2012)

Further, “One of the most important outward signs of the change in attitude [toward dissection] are the memorial services...which have become a regular feature of dissection courses around the world,” (Hildebrandt 2016, 310). Memorial gardens, halls, cemeteries, and websites have been established throughout major cities in China (Zhang et al. 2014, Nie & Jones 2018, Li et al. 2020, Jingwen Jiang et al. 2020). Memorials are diverse, but they all function to commemorate the donors’ lives through the display of photos or

paintings, texts outlining individual donors' experiences, expertise, and achievements, or even simply acknowledging the full names of the donors on plaques or monuments (Zhang et al. 2014, Nie & Jones 2018, Jingwen Jiang et al. 2020). Memorials have acted as a strategic method that integrates donor identity and honors the whole person.

Memorial services in particular which include donor families, loved ones, and members of the medical community have become far more commonplace. These services are typically held on or around Tomb-Sweeping Day which is an important holiday in China where families visit the resting places of their ancestors to clean the grave, pray to their ancestor, and present offerings (Zhang et al. 2014, Yani 2017). Figures 3 and 4 show images of memorials services held in Beijing and Nanjing respectively. The Nanjing Red Cross has played a particularly important role in the paving the way for body donation programs throughout China. They have facilitated the creation of commemorative placements for donors by partnering with cemeteries in the area to allocate space for deceased donors' final resting places (Jing & Xiaoying 2021). Efforts by the Nanjing Red Cross have helped to destigmatize body donation, and over the past 25 years they have, "achieved 2402 body donations and 329 human organ donations," (Jing & Xiaoying 2021). While these statistics are low compared to other cities in the United States or Europe, the results are still admirable, and show a genuine effort toward the cultivation of and adherence to ethical body and organ procurement strategies.



Figure 3. Honoring Body and Organ Donors in Beijing

Picture taken by Li Hao at Changqing Memorial Park during The Red Cross Society of China Beijing Branch's 18th "Tribute to Life" memorial service for body and organ donors. This image was retrieved from <https://www.globaltimes.cn/galleries/5196.html>

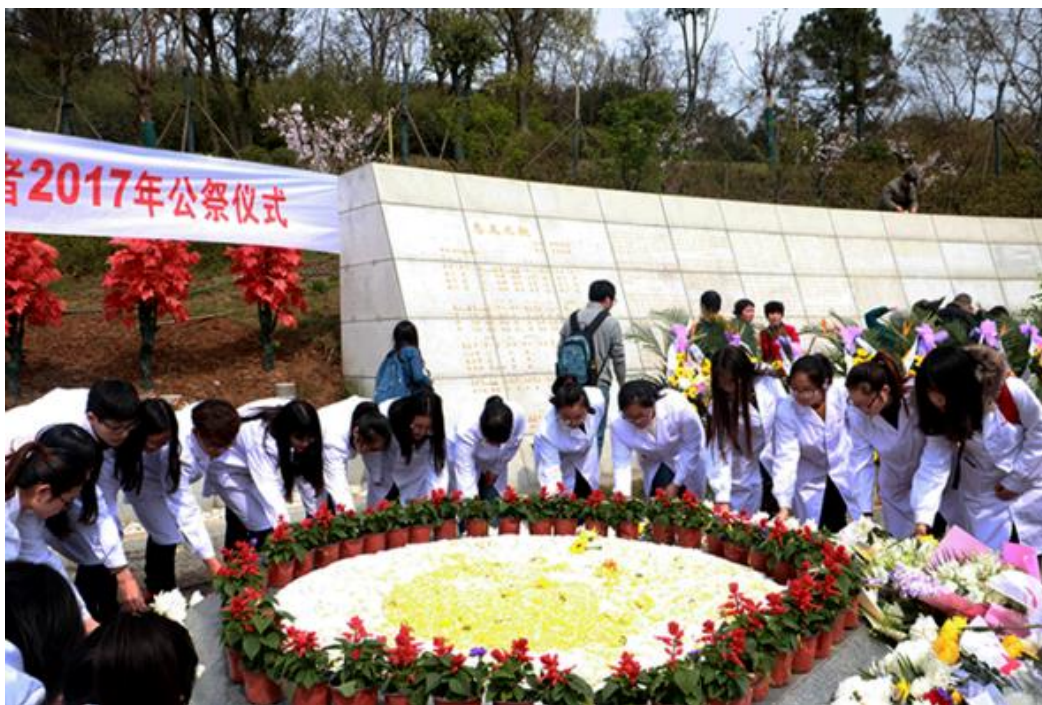


Figure 4. Honoring Body and Organ Donors in Nanjing

Family, friends, medical students, and medical staff members gather at the Memorial Garden of Nanjing in Xitian Temple during Nanjing's annual memorial service for organ and body donors (Jingwen Jiang et al. 2020, 222).

Dalian Medical University too has paved the way toward more rigorous ethical standards that include elements of identity integration. They built a memorial hall, “specifically to honor body and organ donors’ lives and achievements,” (Yani 2017). Two of the most compelling donors honored are, “former Chinese leader Deng Xiaoping, who donated his corneas, [and his] wife, Zhuo Lin, [who] donated her entire body when she passed away in 2009,” (Yani 2017). Body and organ donations from prominent figures may help to further garner support for willed donation from the community.

Forgoing anonymity and embracing transparency in a way that is culturally respectful shows a sincere effort to improve ethical standards. The implementation of

memorials and services as way of paying homage to deceased donors considers fully that what is done to a body after death has relevance for those who knew the person when alive, the deceased's representation of built-in memories that cannot be separated from them, and the role of the deceased's body in the grieving process (Jones & Whittaker 2009). Donors are acknowledged for their extraordinary contribution, and friends and families of donors have a way to honor their deceased loved one. Donor identities thus become transcendent. The cultural essentialism built into these processes can help to inform ethical models with global applicability.

Barriers

The progress is promising, but there is still a great deal of work needed to ensure completely ethical donation systems throughout China. Significant barriers still exist for the dedicated medical practitioners looking to implement more rigorous ethical standards. A comprehensive study looking at the whole of China found that,

After years of continuous reformation, the willingness toward posthumous organ donation has [had] a significant improvement among Chinese general public since 2015, however, the favorable attitudes and willingness toward organ donation [overall] still remained at a relatively low level. (Li et al. 2020, 7-8)

The authors inform that what is contributing to the lack of community support stems from, “relatively less access to organ donation activities in China and [skepticism] of the recognition and prevalence of donation. Mistrust of the medical profession was the greatest impediment for Chinese citizens willing to donate organs postmortem,” (Li et al. 2020). Doctors are equated with CCP officials in the level of mistrust the public has, and that medical mistrust comes not only from historically unethical practices, but the overarching rampant corruption plaguing medical systems which prioritize profit and

competition (Fun & Yao 2018). The expectation from the state is for, “doctors and healthcare institutions to be both socialist and capitalist,” leaving healthcare practitioners, “Caught in the machine...feel[ing] compelled to maneuver the contradictions of the system and see such exploitation as a lifeline to survive their roles,” (Fun & Yao 2018, 22). The structure has created a caustic dynamic between doctors and patients which has remained challenging to overcome.

Positive efforts towards garnering support for willed body donation have been stifled further by the PRC’s inability to provide accurate data to substantiate the claim that willed body donation is the only source relied upon for anatomists and medical practitioners. For instance, an article about body donation at Dalian Medical University stated,

Official nationwide estimates for the number of people who have chosen to donate their bodies to science do not exist. Given the country’s strong cultural taboo and judging from the mere 47 bodies that Dalian — a city of more than 7 million — received last year, the number of body donors in China is likely much lower than that of the U.S. (Yani 2017)

As of 2020, “only a few large cities or coastal cities in China receive more than 100 bodies annually. In most other cities, the number of donated bodies per year is substantially lower,” (Jiayi Jiang et al. 2020, 2). Compounding the low rates of donation is China’s status as the only country to have closed databases surrounding organ and body donation processes meaning documentation can only be viewed by state sanctioned individuals (KGM Report, 2016). These barriers add to the CCP’s secrecy and public insecurity over body sourcing protocols.

Barriers also include deeply rooted and widely held traditional beliefs that dictate the decedent’s body remain whole and intact (Zhang et al. 2014, Yani 2017, Wu et al. 2018). These beliefs are entangled with Confucianism which is, “highly relevant because

it constitutes the defining moral, political, and spiritual tradition,” (Nie & Jones 2019). Further, A study of body donation in Changsha found Confucianism to be one amongst several other factors affecting willingness to donate one’s body. The study determined,

Attitude towards body donations is associated with various factors, including that of age, education, Confucianism funeral belief, knowledge of body donation, and understanding its significance. For the future promotion of body donation in China, greater effort needs to be made in promoting body donor programs to increase the public’s awareness of its benefits to society. Re-assessing and re-interpreting the Confucianism beliefs regarding body donation also needs to be considered for future promotion of body donation. (Zhang et al. 2020, 6)

These factors have been echoed in studies done in other parts of China as well, but by identifying the things holding the public back from donation the medical community can make positive changes to work alongside respective communities and within culturally normative standards.

Despite dramatic ethical improvements in the past decade, there is still a long road ahead to ensure medical practitioners in the PRC are adhering to modern and globally acceptable ethical standards such as those outlined by the IFAA. Plastination especially has been scrutinized as an extension of normalization of animus, and has been equated to organ harvesting and other human rights abuses aimed at aiding the CCP’s maintenance of control. It is clear though that great efforts have been made to cultivate ethical and responsible donation programs which have slowly helped to create trust between communities and medical practitioners who are passionate about working together to ensure ethical progress for future generations.

Chapter VII.

ISP Policy Implications

“The reputation of anatomy as a discipline and of plastination as a preservation technique depends on respect for the dignity of the deceased and their body,”

— Champney et al. 2018, 2

In my interview with Participant 2, they expressed that we need to dwell on change rather than the past. This was a deeply resonating comment, as this individual had been plastinating many years and witnessed the evolution of the discipline over a substantive period. This comment did not come from a disagreement with acknowledging past unethical behavior, but rather from a space of wanting progress instead of stagnation, or, worse, regression. Other participants throughout the study too pointed out the need for an alteration in ethical modalities. There was an overwhelming consensus on the need for the plastination community to have its own specific set of ethical standards.

Participant Suggestions for Components of an Ethical Framework for the ISP

One of the more significant questions I posed to interviewees asked what they would suggest might be beneficial to include in an ethical framework for the ISP. Answers presented both elements of consistency and variety. The most consistent suggestion was increased transparency throughout plastination processes, especially in informed consent protocols for donors. Participants felt it was important to let donors know if plastination

was a potentiality for their body or body parts. There was a strong emphasis on allowing for an “opt out” process if plastination was not what the donor wanted or if it did not fall in line with the donor’s beliefs. Overall, there were strong sentiments on empowering donors to choose and making clear that if plastination is an option at an institution the donor is thoroughly informed to ensure proper consent.

Participants also insisted on the importance of maintaining detailed records in association with plastinates to document from whom they originated, where the plastinate is located, and who handles the plastinate at any given time. Participant 5 equated this system to a library where students and teachers can learn from a plastinate for a period of time and then return it for safe-keeping. All changes-of-hand would be on record. Records associated with identity were dually given high priority amongst participants. A plastinate should not have an unknown origin or be completely divorced from the donor’s identity, even if all identifying information is kept in a secure database. There should always be a record.

Respect for donors was another critical tenet plastinators felt should be part of an ethical code. All my participants have deep respect for donors and their local communities. Participants expressed a strong desire to ensure that plastinates are treated in a dignified manner. Along with respect goes informed consent. Donors come from all walks of life and should be empowered to make decisions that fit with their beliefs. Those involved in plastination are accountable for ensuring donor programs that extend respect to everyone regardless of ethnicity, religion, socioeconomic status, cultural context, or any other number of factors.

While there was a fair amount of consistency in suggestions given, some were unique to each interviewee. Participant 1 placed a high level of importance on keeping human and animal specimens separate throughout plastination processes and subsequent storage processes. While this is already an important component of the IFAA recommendations, Participant 1 still felt it needed to be reiterated for a plastination specific framework due to their own experiences of what they have witnessed occurring. Participant 2's extensive experience in the discipline made clear that record keeping is an absolute must. Participant 3 was emphatic about the use of plastination for education only and not for display. Participant 4 was passionate about cultural sensitivity and palpable gratitude extended to donors and their families. Participant 5 wanted clarity on final disposition for plastinates as well as a move toward treating plastinate collections like legacy collections or in the same sense as skeletal remains. They also mentioned replacing plastinate collections that have questionable origins with plastinates procured from fully consenting donors. Lastly, Participant 6 urged consistency throughout plastination labs regarding their setup and protocols.

Study-Based Suggestions for an Ethical Framework for the ISP

Plastination practitioners must maintain adherence to the IFAA standards, but the ISP should amplify their ethical standards by implementing a framework inclusive of additional protections and information for donors. The overarching message of an ethical code for the ISP might look something like "respect, transparency, and accountability" which reflects the collective voices of the individuals in the plastination community with whom I've had the privilege of speaking with throughout the course of this study. Within

this message, more specific suggestions form. Possible tenets for a potential framework for the ISP based on this overall analysis might include:

1. A ban the use of unclaimed bodies for plastination.
2. Transparency from institutions who have plastination labs or send donor bodies and parts out for plastination.
3. Option for donors to opt in or opt out of plastination if it is an option an institution has access to either through its own lab or outsourcing to another lab.
4. Ensure plastinates are used for education only.
5. Ensure plastinates are never used in any for-profit capacity.
6. If a donor consents to plastination, provide an option or criteria allowing for the donor to choose how much of their body is used for plastination (i.e. certain organs, limbs, whole body, head, etc.).
7. Explicit language stating to the donor that plastinates can maintain their integrity indefinitely. There is not enough data on how long a plastinate will last.
8. Option to allow for the donor's remains to be returned to the family of the donor after a period of time OR allow the donor the option for the institution to make the decision for when and how final disposition transpires.
9. Clarify how final disposition is accomplished.
10. Inform donors on where and how donor remains are honored after final disposition, and discuss or make options for what identifying factors, if any, will be made available in association with the donor's remains (i.e. inclusion in a memorial garden where the donor's name and contribution could be noted on a plaque).

11. Explanation of how a donor's information will be retained to ensure their identity will not be separated from their body or any part of their body after plastination occurs even if all information is kept secure and private in a database to ensure anonymity.

These are just a few suggestions that may be useful for the plastination community to consider. It is merely a start toward more intense and nuanced conversations about the ethics of plastination and what the future of the discipline holds.

Some suggestions are more easily implemented than others. These potential ethical protocols can be taken on more effectively by envisioning short and long-term goals. For instance, the first suggestion asks for a ban on the use of unclaimed bodies for plastination, and the eleventh suggestion expresses a need to implement an explanation in informed consent forms of how a donor's information will be retained. Both are achievable short-term goals. Longer-term goals might pertain to the suggestions necessitating complete overhauls of existing informed consent protocols to ensure inclusion of information on plastination and ways for donors to exert more autonomy in their decisions. The longest-term goals would likely be the fourth and fifth suggestions which advocates for plastinates being used for education only, and which appeals to the plastination community to cease for-profit initiatives that commodify and deeply disrespect the deceased. While all of the suggestions have a wide range of timing for implementation, they should all be achievable with persistence, dedication, and cooperation.

Participant 5 summed up uncertainly for the future of plastination best when they asked if the ISP wanted to be a resource for those involved in plastination, what they

would want to provide to the community, how to effectively disseminate ethical info, what the value of and desire for change is, and how change can be facilitated without imposing it upon people or framing it as punitive. These questions matter in the larger conversation, and it will take time to cultivate a framework that is truly representative of the global plastination community.

Accountability

Participant 1 mused on the concept of introspection when thinking about body donation. They asked, “what would you do with your body” when you pass? Similarly, Participant 4 asked, “how would I want my loved one to be treated” when they pass? Answers to these questions differ depending on a variety of factors discussed throughout this thesis like cultural context, beliefs, experiences, access to knowledge, and innumerable other elements. That said, Participant 4 urged medical and anatomical community members to be mindful of their actions and decisions from an ethical perspective, as this can have a tremendous impact on public perceptions of death and dying. It ultimately comes down to respect for all persons. By beginning with respect, respect is returned in kind. It is important to instill trust in the communities in which medical and anatomical practices are being done in a consistent manner that considers differing views stemming from diverse contexts.

One way to begin reestablishing trust is through acknowledgement. The American Society of Human Genetics (ASHG) issued an apology recently for their part in the, “use of human genetics to feed racism, eugenics, and other systemic forms of discrimination,” (ASHG News 2023). They acknowledged the role that some of their early leadership played in eugenics through a lengthy report. The same report also emphasized the

progress that has been made and how the ASHG will continue to move forward employing the highest ethical standards. This action is a critical step in advancing towards building ethical protocols as well as diversity, equity, and inclusion in the ASHG (ASHG News 2023). This apology can serve as a model for the plastination community on how to move forward from past ethical failures while showing the public the ethical austerity the discipline currently adheres to and will continue to develop.

Another means of reestablishing trust in ethical practices and holding accountability is to form initiatives to address the bodies, body parts, and information acquired about unclaimed and executed individuals which includes, “a focus on the need to identify the victims, to restore their biographies, and to memorialize them,” (Hildebrandt 2023, 208). Individuals whose bodies were negligently sourced deserve the restoration of their humanity along with identity acknowledgment in as effective and respectful a way as possible. Strategies to accomplish this task would take a great deal of consideration and discussion, however it is worth working towards so that plastination can heal from ethical tragedies and build toward becoming a discipline that has the capacity to pave the way toward ethically rigorous protocols that are culturally sensitive, respectful, and go beyond current global standards.

Reflection

There was a point in my research where I was posed an interesting query by a prominent bioethicist regarding the humanity of plastinates. They asked if I was giving ethical consideration because there still exists human tissue in a plastinate, and, if so, where do the ethics associated with plastinates begin and end? I was unsure of how to answer this effectively, but I was reassured that there was not yet a cohesive answer

because this was a topic in active discussion amongst bioethicists. That said, even if the technology was available to replace all human tissues and cells with the polymers used in plastination, plastinates are still human. They are deserving of respect, dignity, accountability, gratitude, and transparency. Humanity is more than who we are as the sum of our parts. Our identities and contexts are important and, to an extent, transcendent. The stories our bodies can tell through plastinates are valuable and deserving of highly ethical treatment. It is my greatest hope that the ISP comes together to consider the formulation of an ethical framework so that we may continue to progress as a global community responsible for extending the deepest respect to donors, regardless of who they are, because they make plastination possible.

Appendix 1.

Recommendations of Good Practice for the Donation and Study of Human Bodies and Tissues for Anatomical Examination⁶

The following text is replicated verbatim:

The study of human cadavers is essential for teaching, advanced training, and research in medical and anatomical sciences. Institutions rely on donation of bodies by the general public, and are immensely grateful to donors. However, it is imperative that institutions follow procedures of the highest ethical standards in order to give donors full confidence in their decision to donate. Transparency regarding the use of human material and institutional procedures increases public trust and in turn increases public support for body donation.

1. Informed consent from donors must be obtained in writing before any bequest can be accepted. Consent forms should take into account the following:
 - a. Donors must be entirely free in their decision to donate; this excludes donation by minors and prisoners condemned to death.
 - b. Although not essential, good practice is encouraged by having the next of kin also sign the form.
 - c. Whether the donor consents to their medical records being accessed.

⁶ International Federation of Associations of Anatomists (IFAA). (2012). Recommendations of good practice for the donation and study of human bodies and tissues for anatomical examination. <https://ifaa.net/wp-content/uploads/2017/09/IFAA-guidelines-220811.pdf>

2. There should be no commercialization in relation to bequests of human remains for anatomical education and research. This applies to the bequest process itself, where the decision to donate should be free from financial considerations, and also to the uses to which the remains are put following bequest. If bodies, body parts, or plastinated specimens are to be supplied to other institutions for educational or research purposes this may not yield commercial gain. However, charging for real costs incurred, including the cost of maintaining a body donation program and preparation and transport costs, is considered appropriate. Payment for human material *per se* is not acceptable.
3. There needs to be an urgent move towards the establishment of guidelines regulating the transport of human bodies, or body parts, within and between countries.
4. Specimens must be treated with respect at all times. This includes, but is not limited to, storing and displaying human and non-human animal parts separately.
5. The normal practice is to retain donor anonymity. Any exceptions to this should be formally agreed to beforehand by the bequestee and, if appropriate, the family.
6. Limits need to be placed on the extent to which images, or other artefacts produced from donations are placed in the public domain, including in social media, both to respect the privacy arousing morbid curiosity. No individual should be identifiable in images.
7. A clear and rigorous legal framework should be established on a national and/or state level. The legal framework should detail:

- a. The procedures to be followed in accepting bequests of human remains for anatomical examination, including who is responsible for human remains after death.
 - b. The formal recognition of institutions which may accept bequests, which in some jurisdictions may involve licensing.
 - c. The safe and secure storage of human remains within institutions.
 - d. The length of time such remains will be retained by the institution.
 - e. The procedures to be followed in disposing of remains once the anatomical examination is complete and they are no longer required for anatomical education and research.
8. Institutional procedures should be formally established by an oversight committee, which shall review the body donation program at regular intervals.
- Such procedures should include the following:
- a. Copies of the bequest should be retained both by the donor and by the institution for whom the bequest is intended.
 - b. Records should be kept for a minimum of twenty years from the date of disposal to ensure that human material can be identified as originating from a specific donor.
 - c. Good conservation procedures should be employed throughout the entire period during which the human remains are retained to ensure that the most effective use is made of any bequest received.
 - d. Efficient tracking procedures should ensure that the identity and location of all body parts from an individual donor are known at all time.

- e. Facilities where cadavers are used must be appropriate for the storage of human remains and secured from entry by unauthorized personnel.
9. There needs to be transparency between institution and potential donors and their relatives at every stage, from the receipt of an initial enquiry to the final disposal of the remains. The clear communication of information should include but not necessarily be limited to the production of an information leaflet (hard copy and/or digital), which could also help publicize anatomical bequests and increase supply of donors. This should set out the following:
- a. The procedures relating to registering bequests, acceptance criteria, the procedures to be followed after death (including under what circumstances a bequest might be declined), and the procedures relating to disposal of the human remains. Sufficient grounds for rejection could include, but need not be limited to:
 - i. the physical condition of the body
 - ii. the virological or microbiological status of the donor in life
 - iii. the existence of other diseases (for example neurological pathology) that might expose staff or students handling the body to unacceptable risks
 - iv. body weight over a specified limit
 - v. the possible over-supply of donations at that institution at that time
 - vi. place of death outside the designated area from which bodies are obtained.
 - b. The range of uses of donated bodies at that institution.

- c. Possible costs, if any, that might be incurred by the bequestee's family in making a bequest, and the costs to be met by the institution accepting the bequest.
 - d. Whether the donor's anonymity will be preserved and whether their medical history accessed.
 - e. Whether the body or body parts might be supplied to another institution.
 - f. The maximum length of time the body will be retained, including any legally sanctioned possibility of indefinite retention of body parts. The relatives of the donor should be given the option of being informed in due course of the date when the remains will be disposed of.
 - g. Donors should be strongly encouraged to discuss their intentions with their relatives to ensure that their relatives are familiar with their wishes and that as far as possible those wishes will be carried out after death.
10. Special lectures/tutorials in ethics relating to the bequest of human remains should be made available to all students studying anatomy. This is to encourage the development of appropriate sensitivities in relation to the conducts and respect that is expected of those handling human remains used for purposes of anatomical education and research.
11. Institutions should be encouraged to hold Services of Thanksgiving or Commemoration for those who have donated their bodies for medical education and research, to which can be invited relatives of the deceased along with staff and students.

Appendix 2.

Unstructured Interview Questions

1. How long have you been plastinating?
2. What drew you to this practice?
3. How have ethical procedures changed throughout your time plastinating?
4. How can the plastination community improve its ethical standards?
5. What suggestions do you have for an ethical framework for the plastination community?
6. What are your thoughts on plastination's implementation in China?

Appendix 3.

Informed Consent Form

What is the purpose of this research?

This research will explore plastination and identity. I am interested in understanding and clarifying the history and current state of human plastination, particularly in China, how the concept of identity relates to non-Western bodies, and the relation between identity and plastinates overall. The aim of this research is to suggest why the International Society for Plastination (ISP) might benefit from an ethical model that not only reflects the current rigorous ethical standards plastinators adhere to, but also acknowledges beliefs about identity and the body that are important in non-Western cultures like China.

What can I expect if I take part in this research?

- Information for this research will be collected through one-on-one interviews.
- All participants will be kept anonymous. Participants will be referred to by a number and gender only in the notes taken by the researcher as well as in any published materials. The researcher will only be taking hand-written notes which will be stored in a secure place for the duration of the research and afterwards.
- The time frame for the research is from May 1, 2024 to October 1, 2024.
- For Interviewees:
 - Individuals should expect to be asked a series of general questions about plastination, rituals, and/or beliefs over the course of one hour (60

minutes). Both the researcher and the interviewee will be in a quiet, private place during the interview.

- If the initial time frame of one hour does not provide enough time for discussion, a second interview may be scheduled. However, this is not mandatory.
- I would like to use direct quotes, however there will be no names or identifiable factors used. There is minimal risk, however participants are more than welcome to decline the use of direct quotes.

What should I know about a research study?

- Whether or not you take part is up to you.
- Your participation is completely voluntary.
- You can choose not to take part.
- You can agree to take part and later change your mind.
- Your decision will not be held against you.
- Your refusal to participate will not result in any consequences or any loss of benefits that you are otherwise entitled to receive.
- You can ask all the questions you want before you decide.

Who can I talk to?

If you have questions, concerns, or complaints, or think the research has hurt you, talk to the researcher at 732-900-8655 or alw520@g.harvard.edu

Appendix 4.

ISP Recruitment Message

Hello!

My name is Alexandra Wheelan, and I am an ALM degree candidate in the Anthropology program at Harvard University Extension School. I am incredibly passionate about plastination, and I have centered my thesis around a social scientific exploration of the history of the discipline as well as how the concept of identity in non-Western cultures relates to the practice. Through this research I would like to suggest the benefits of cultivating an overarching ethical framework for all ISP members that not only reflects the rigorous ethical austerity practitioners adhere to, but also acknowledges how identity might be important within non-Western cultural contexts like China. I joined the ISP as a student member in 2022, and the experience has been immensely rewarding so far. To get the most accurate and holistic information possible I would be enormously grateful to have the assistance of my fellow ISP members!

I would be thankful to anyone who would be open to participating in an interview which will better inform my project. The interviews will be unstructured and last no longer than 60 minutes. In cases where this amount of time is not sufficient, a secondary meeting can be scheduled for an additional 60-minute time frame. The secondary meeting is not mandatory. No more than two interviews per participant will be conducted. Interviews will be scheduled through any platform convenient to the participant (phone call, Zoom, or in-person). Through these interviews I am hoping to gain more knowledge

on the history of plastination, ethical protocols employed by individuals who work with human plastinates, and how ISP members would like to see the discipline progress. All interviewees will remain completely anonymous throughout the research.

My hope is to make a positive contribution to the plastination community through my work, and I sincerely look forward to any correspondence I get to have with those who are interested. I can be reached via my cell at 732-900-8655 and via email at alw520@g.harvard.edu or alexwheelan621@gmail.com .

Please do not hesitate to reach out with any questions about my project or more details about the interview process. I am excited to share my work with the community and to make a difference within the ISP!

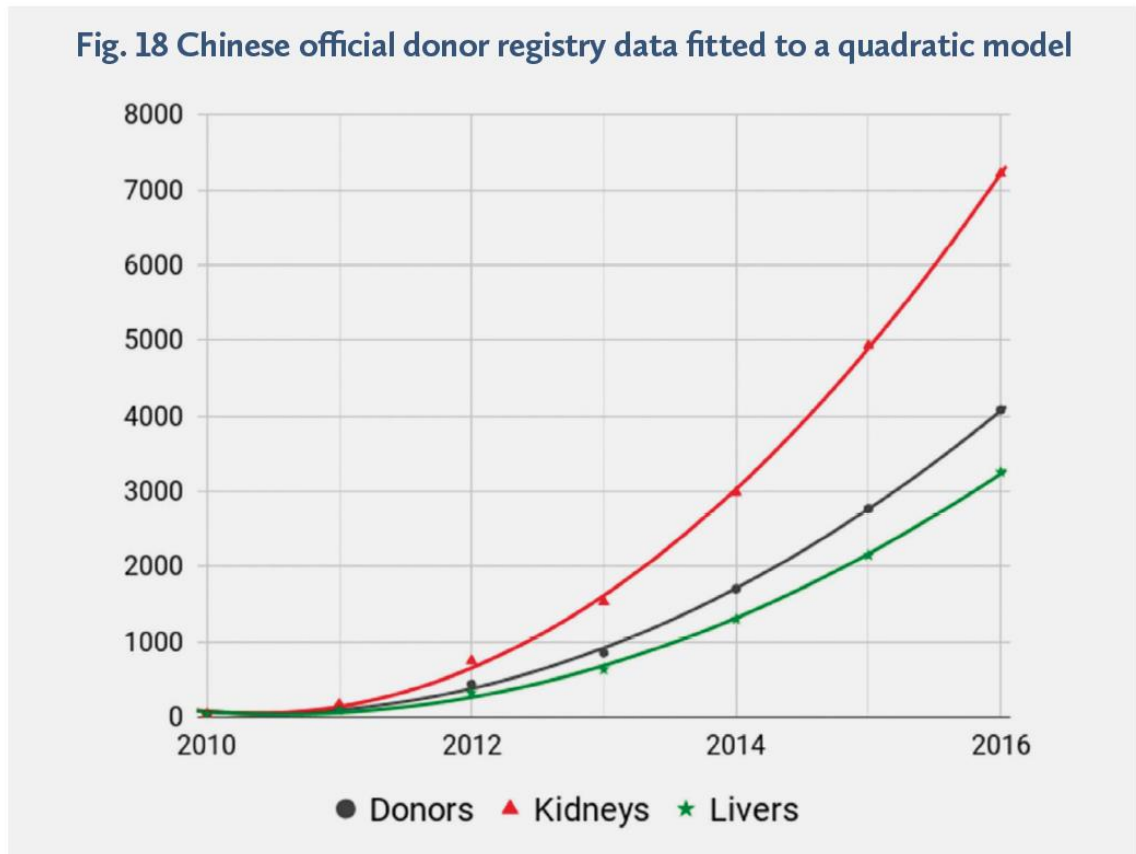
Thank you all so very much!

Warm Regards,

-Alexandra

Appendix 5.

Apparent Rise in Organ Donation in the PRC Since 2015



A November 2019 paper in *BMC Medical Ethics* shows that China's voluntary organ transplant data from the China Organ Transplant Response System (COTRS) conforms extremely closely to a simple quadratic model. This, along with numerous other anomalies, indicate the data may have been falsified. (*BMC Medical Ethics*)

This table was extracted from:

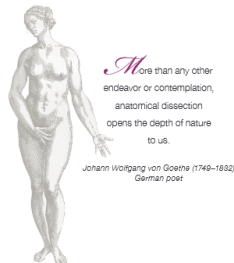
Robertson, Matthew. P. 2020. *Organ Procurement and Extrajudicial Execution in China: A Review of the Evidence*. Victims of Communism Memorial Foundation.
https://victimsofcommunism.org/wp-content/uploads/2020/03/Organ-Procurement-and-Extrajudicial-Execution-in-China_VOC-2020.pdf

Appendix 6.

Institute for Plastination “Guide for Donors” Brochure

Prerequisites for the Acceptance of a Donated Body

- (1) You must have died a natural death, i.e., a death not caused by violence, or self-inflicted.
- (2) Your written consent (“Donor’s Consent”) must be on file. This consent includes a burial waiver.
- (3) The body must be largely intact, i.e., no autopsy may have been performed at an institute of pathology or forensic medicine. Also, the IP cannot accept bodies severely injured in an accident. In case of an accident resulting in death, the body of the deceased normally will be claimed by the authorities and will be autopsied on their behalf at an institute of forensic medicine. This is generally necessary to resolve questions of liability and insurance claims.



Advanced age or diseases of any kind are not unfavorable in terms of body donation. Every single body is a valuable anatomical treasure.

Also, being an organ donor does not in any way prevent body donation for plastination. Because organ donation is a life-saving or life-supporting measure, it takes precedence over body donations. Even after individual organs have been removed, the body will be suitable for Plastination, provided that it is transported to an IP embalming facility immediately after organ removal.

Amputation of individual limbs does not interfere with Plastination, either.

If an infectious disease (e.g., HIV, hepatitis) is present, the IP will decide on a case-by-case basis whether or not to accept the donated body. In such a case, it is absolutely necessary that the IP is notified of this prior to transporting the body.

Costs

The IP does not charge any fees for body donation. There are no burial costs nor, of course, the cost of maintaining a grave.

There will be costs for the issuing of the death certificate, for keeping the body until transport is arranged, for transportation of the body to an IP embalming facility, and for a memorial service if desired. These costs are the responsibility of the survivors of the body donor and are only paid to the mortuary or agency designated by the survivor. There is no payment to the IP.

 Institute for Plastination



IN THE US & CANADA

Phone **+1 213 291 9572** or
bodydonation@plastination.com

Snyder's Embalming Office
606 West Fremont Street
Upland, CA 91784

Snyder's Embalming & Care Center
9320 Santa Anita Ave #103
Rancho Cucamonga, CA 91730

Phone **+1 909 985 0525** or
+1 888.4.EMBALM
Fax **+1 866 614 8320**

IN EUROPE AND REST OF THE WORLD

GERMAN BODY DONOR OFFICE
Institute for Plastination
Im Bosseldom 17
69126 Heidelberg, Germany

Mon.–Fri. between **9 a.m. and 4 p.m.** (GMT +1)

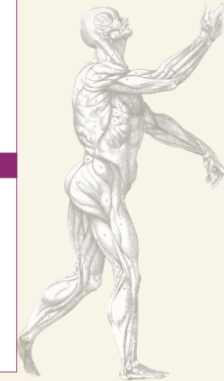
Phone **+49 (0)6221 3311 50**

Outside of normal office hours, please call

Cell Phone **+49 160 74 55 188**
Fax **+49 6221 3311 45** or
koerperspende@plastination.com

Body Donation for Plastination

GUIDE FOR DONORS



How to Donate Your Body for Plastination

1. Carefully read the information brochure, “Body Donation for Plastination”, and share it with close family and friends to make them aware of your wishes.
2. Complete the “Donating Your Body for Plastination – Donor’s Consent” form in duplicate, sign both copies, and return them to the address indicated on the form.
3. If you have reason to believe that your survivors may not be in favor of your donating your body, your signature should be notarized on both forms.
4. We will countersign the forms and return one of them to you to confirm your intent. You should file this form with your personal documents or give it to a designated executor or doctor for safekeeping. You will also be issued a body donor identification card. We strongly recommend that you carry your donor card with you at all times.

When you become a body donor, you should inform your likely survivors of your decision so that they can initiate the rapid transfer of your body to an IP embalming facility after your death. Examples of people you might choose for this task include relatives, close friends, or your primary care physician.

The donor’s last will and testament, donating his/her body for plastination, **is not a contract, but rather a living will** that can be revoked by either party, without cause. There are no fees to be paid for donating a body, nor will donors or their survivors receive any monetary compensation. The Institute for Plastination (IP) does not have a legal claim to the body, nor is the Institute legally required to accept the body.

Procedures and Body Transportation

The following is intended as basic and general information regarding the procedures for body donation, as they will vary from country to country. In the United States and Canada, the IP partners with authorized embalming facilities that are responsible for embalming and preparing the body before it is transported to the Institute in Germany. Donors in all other countries must have their body shipped directly to Germany. Should the laws in your state, province, or country require that the body be embalmed prior to transportation, the mortuary assisting with the procedure should contact the IP to receive the necessary instructions for embalming.

When the countersigned consent form is returned to you, an “Embalming Information Sheet” and the donor card are included, which list the current locations of authorized embalming facilities.

After your death, **the next of kin**, executor, hospital personnel, or the individual that was designated to make arrangements for you should:

- Immediately notify your doctor or the local coroner.
- Contact a local mortuary that can coordinate the transport with the IP.
- Keep the deceased’s body as cool as possible until it is transported.

It will be the responsibility of the survivors to arrange and pay for transportation to an IP embalming facility through a mortuary if there is no appointed IP embalming facility in the immediate area. The IP body donor office and the IP embalming facility can be of assistance to the mortuary if need be, but will not conduct the transport.

Transportation can take place only after the death has been documented and registered according to all legal requirements. The mortuary arranging transport can also assist with fulfilling all of these requirements, which will include filling out the forms to obtain a death certificate and other paperwork required in your country, state, or province.



A death certificate signed by a doctor stating the cause of death must be filed, usually in the county or district where the death occurs, or where the body is found. A coroner will supply a health department or office of vital records and will issue the permit for disposition.

It is your responsibility to ensure that someone is appointed to complete all of these requirements. The steps to be undertaken by the trusted person you designate, as well as the required documentation, are described in detail in the “Guide for Survivors”.

He or she should have access to the following documents:

- A copy or certified copy of your **birth certificate**
- A copy or certified copy of your **marriage and/or divorce certificate(s)**
- A **document** authorizing said person to request a **death certificate**. This will be necessary if the trusted person is not a family member.

Other Forms

For educational and research purposes, it is helpful for the IP to have permission to access the health records of body donors after their death. Also, significantly better preservation results may be achieved if details on the kind and course of disease(s), if any, are known.

Thus, it is advantageous for us to have the name and address of the last attending primary care physician of the deceased as well as copies of health records (including x-ray films). If you agree to make these available, you will have to authorize the IP accordingly in writing. The “Medical History Release” form is included with the documents for body donors or can also be downloaded from our website. You may, of course, opt to send us copies of your health records during your lifetime.

The IP assures you that the confidentiality of such records will be maintained.



These images were extracted from:

Institute for Plastination. N.D. "Body Donation for Plastination Guide for Donors."

Institute for Plastination https://koerperspende.de/wp-content/uploads/2023/02/BD_DonorsGuide_US23.pdf

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