The Curriculum of Globalization: Mapping the Development of Integrative Consciousness

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Mapping the development of integrative consciousness

Qualifying Paper

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Table of Contents

Abstract

Adequate solutions to today's globalized challenges require normative paradigms that are justifiable among diverse communities. In this circumstance, a critical task for educational psychology is to understand the developmental process by which individuals learn to reason about intercommunal issues through such paradigms. This paper represents an attempt to shed light on this process by using related insights from various fields of behavioral and philosophical inquiry as a guide to gathering and interpreting open-ended responses to problematic intercommunal issues. This resulted in a tentative model of development comprising four hierarchically integrated epistemological structures: an initial *Conventionalist* structure (deriving judgments from conventional ideas without understanding their social constructedness or context dependence), a *Contextualist* structure (focused on the arbitrariness or context-dependence of judgments), a *Transcontextualist* structure (generating non-arbitrary judgments that can be justified across historically contingent contexts), and finally a *Universal Paradigms* structure (articulating general analytical approaches from which valid transcontextual judgments emanate). This paper offers an empirically testable model of the development of the cognitive capacities demanded by globalized society.

Introduction

Global processes demand universalistic reasoning structures

Do you think your country has a right to develop nuclear weapons?

Compare the following two responses to this question:

Response A:

> If other countries have nuclear weapons, then my country has a right to have them too. Nuclear weapons are a way for my country to stand independent from other countries and defend itself. My country deserves as much respect as any other.

Response B:

> In a certain sense, it is not fair for one country to have nuclear weapons and then try to keep other countries from having them. But that doesn't mean that each country has a 'right' to possess nuclear weapons. For one country to keep up with another country's military power is not a meaningful goal in itself. We should think in terms of people and protecting their safety, not in terms of nations and their 'rights.' Protecting all people justifies having a small nuclear club until nuclear weapons can be completely eradicated. Getting rid of nuclear weapons all at once would be irresponsible. It would defeat the goal of protecting people and their freedom. For the sake of humanity, the elimination of nuclear weapons has to be done responsibly. So the principle of protecting humanity justifies both non-proliferation activities and the temporary maintenance of limited nuclear arsenals by a few countries. They are different tools for attaining the same goal. This goal is justifiable to all parties.

What similarities and differences do you notice between these two answers?

Now consider another question, and another pair of answers:

Do international NGOs have a right to urge your country to democratize?

Response 1:

> Foreign people do not have a right to interfere in my country's affairs. We have our own unique history that cannot be judged by any outside standard. The whole idea of "democracy" is based on Western values. We have different values from the West.

Response 2:

> We will have to find the system that works best for our own society. But it is natural that people in other countries are concerned about this. It is too simple to just say, "Democracy is only a Western thing". There are many different ways of making democracy. None of them is perfect, but there are ways to make it work in our country too. It doesn't matter whether you call it "democracy". What really matters is having institutions that balance different interests and correct mistakes or abuses when they happen, institutions like separation of powers, rule of law, a free press, and free elections. These don't have to be organized the same way as in America. What matters is protecting people and giving them the ability to know the truth and pursue what matters to them. Whatever culture you are in, this helps people make the most of that culture. It helps the culture itself develop.

What similarities do these responses exhibit? What differences?

These responses are concise summaries of the views expressed in focus group discussions. They represent not just different substantive viewpoints, but different *structures of interpretation*, whose conceptual complexity can in fact be *ranked*. In the first example, one response uncritically and unreflectively favors a particular group, while the other transcends the question itself. In the second example, one response is bound by the notion of context, while the other reflects on how to transform the contexts themselves. In each example, the more complex response logically encompasses and transcends the other. It indicates that the other response's logic is fully understood, while the reverse is not true. Hence it operates in a more comprehensive analytical space.

The more sophisticated responses exemplify the complexity of reasoning required to meet the cognitive demands posed by global problems and processes. This kind of

reasoning must fully incorporate the lessons of modern pluralism, and yet recognize pluralism as a partial truth that is inadequate for solving challenges demanding intercommunal cooperation. It must resolve the contradictions of pluralism – and the simpler but still extant problem of ethnocentrism – by assimilating these stances into more inclusive modes of reasoning that permit non-arbitrary judgment across national and cultural contexts. Such contexts constitute only the simpler part of contemporary human reality.

These superordinate modes of thought are of a level of abstraction to which our kind is not yet accustomed. Humanity's lived experience has historically been, and to a large extent still is, firmly bound within the contexts of specific social, political, and ideological communities. It is within these limited "social worlds" that our capacity for ethical and epistemological reasoning has evolved. As a result, the challenge of generating solutions that *integrate* the truths of these worlds is one that severely tests the capacities of human cognition. And yet mastering this skill is precisely what our new cognitive environment demands of us. This is the curriculum of globalization – a curriculum for which we still have no textbook.

The capacity to generate frameworks of judgment that integrate the truths of diverse social worlds, while closely related to other epistemological capacities, constitutes a discrete *domain* of cognition, one that I call *integrative consciousness*. Issues demanding

integrative consciousness require individuals to transcend ingroup-embedded structures of meaning, including self-identifications, loyalty commitments, and standards of truth. In short, they require us to *resolve the contradictions among contrastive cultural or communal points of view*. Such demands constitute a distinct domain of adaptive mental development because they appear together in our cognitive environment, whenever we must contemplate issues that are subject to consensual resolution among different communities. Development in this domain, I will argue, moves in the direction of increasingly self-reflective, autonomous, and logically comprehensive ways of interpreting intercommunal problems. This growth results in increasingly adequate ways of making meaning about issues that require us to transcend ingroup-embedded meanings.

Objectives of this study

The research for this paper aimed to cast light on this developmental process. Its tentative results derive from the following procedure: (a) gathering data on how adults of varying levels of education and experiential complexity generate judgments about intercommunal issues, (b) combining insights from constructive-developmental psychology and other fields to identify the basic structures of meaning in these judgments, and (c) discerning a developmental logic and teleology organizing these structures. Through an iterative conversation between theory and data collected in over seventy interviews and focus groups, I have arrived at a tentative theoretical model of

development comprising four hierarchically integrated epistemological patterns, outlined at the close of this section.

Previewing the model

I will close this introduction by briefly summarizing the four patterns, using an example illustrating growth from "democratic fundamentalism" (Senge, 2013) to more contextualized and holistic normative understandings about democracy. The following developmental pathway contains idealized quotes adapted from statements made by research participants:

Level 1 (**Conventionalism**) issues a judgment based on a conventional understanding derived from within a single sociocultural context:

> *Other countries should imitate my country's democratic system.*

Level 2 (**Contextualism**) relativizes conventionalist judgments, by putting them into context:

> *To say that other countries should also adopt democracy is naive and ethnocentric. The correct form of government for those countries can only be determined in context.*

A contextualist epistemology enables us to think from the perspective of multiple sociocultural contexts at the same time. This contextual dimension gives us the leverage to pull ourselves out of (or in Piaget's term [1954 /1937], to "decenter" from) socialized

assumptions, and to recognize that the shared meanings taken for granted at Level 1 are socially constructed and could have potentially taken any number of other forms.

Level 3 (**Transcontextualism**) overcomes Level 2's critique by putting the contexts themselves in context:

> *The argument that other countries should adopt democracy need not be naive. Democracy can take different forms according to context, and can be justified in terms of those countries' own values.*

A transcontextualist epistemology enables us to contemplate different institutional variations within different contexts, and vice versa. It allows us to think *systematically* about cross-contextual variation and thereby to disembed ourselves from context-dependent reasoning. This permits us to generate cross-contextual rules of judgment.

Level 4 (**Universal Paradigms**) goes one step further, by articulating a paradigm that generates and justifies (or potentially transforms) the cross-contextual generalizations developed at Level 3:

> *Democracy is not an end in itself, but is merely the best system modern societies have yet discovered for supporting people's growth, self-expression, and empowerment.*

Such highly abstract reasoning is capable of coordinating different Level 3 dimensions of cross-contextual judgment into a general paradigm or process of reasonable comparison. At this fourth level we move past thinking merely in terms of judgments across contexts, because by reasoning through universal paradigms we attain a kind of

antecedent impartiality or aperspectival vantage point in which contextualized thought is intrinsic.

In this "Integrative Consciousness Model" (ICM), each cognitive pattern represents a different level of complexity in the way a person constructs factual and normative judgments about intercommunal issues. The use of more complex structures presupposes the grasping of less complex ones, which are indeed the very components from which the higher structures are organized.

ICM structures can be ranked in terms of hierarchical complexity in a way that is commensurable with other models and measures of cognitive development. These models include Kohlberg's stages of justice reasoning (measured by the Standard Issue Scoring System) (1981), Fischer's General Skill Scale (1980), King & Kitchener's Reflective Judgment Model (1994, 2004), Commons's Model of Hierarchical Complexity (Commons et al., 1998), Suedfeld's Integrative Complexity model (Suedfeld & Rank, 1976), and Dawson's Lectical Assessment System (2008) (see Appendix A).

Theoretical concepts

The ICM is based on a set of theoretical concepts and assumptions. This section aims to briefly introduce the most important of these.

Constructive developmentalism and rational reconstruction

The research for this paper partakes in a tradition that Kegan (1982) has aptly called "constructive developmentalism". This century-old research paradigm traces its lineage back through Lawrence Kohlberg, Jean Piaget, George Herbert Mead, John Dewey and James Mark Baldwin. Research in this tradition proceeds from the theoretical assumption that a person's interpretations of the world reflect organized epistemic patterns or structures, which (a) comprise a logically interrelated set of habitual rules for processing information or connecting events, (b) originate in one's own interpretive efforts in conversation with environmental inputs, and (c) develop through a fixed sequence of basic reorganizations in adaptation to environmental feedback. In short, a person's ways of making meaning are *self-organized structures* that *develop* through successive interpretation and feedback toward a more adequate approximation of objective reality.

These structures are not taught, nor are they simply the product of biological maturation. Instead they emerge from a person's own thinking about identifiably distinct sets of mental problems ("cognitive domains"). Because one experiences different levels of stimulus (challenge and support) in different domains, one's development proceeds more or less independently in each area. Both education and experience promote development, but they do so by compelling a person to actively apply or expand the interpretive structures he has himself generated in trying to make

sense of the world. Development thus results from an interactive dialogue between subject and environment.

In this dialectic process, it can be said that a person's way of making sense is partly the product of science or rational philosophy (the attempt to supplement or correct an epistemic pattern that proves inadequate to sensory, mental, or spiritual experience), and partly the product of history (a succession of challenges encountered and solutions generated). Yet the result is no mere historical accident, but the product of a dialogue with the inescapable conditions of objective reality. It is "a 'yes' hardened in the fire of many 'no's'" (Tillich, 1966, p. ix). Each "no" is qualitatively distinct from the one before, in that it presents contradictions that only arise once a given level of complexity has been reached. Adaptation to increasingly complex challenges is thus a fundamental teleological feature of an individual's cognitive evolution, just as it is of cultural and biological evolution.

The constructive developmentalist's task is to trace this history of meaning organizations – in Habermas's words, to *rationally reconstruct* it (1979). "Reconstruction" refers to the historical side of this inquiry – to piece together specific causes and turning points. "Rational" refers to the philosophical side of this inquiry – to uncover the logic and directionality that underlies the story, and ultimately to explain the developmental process itself.

Domain specificity

A cognitive "domain" is an identifiably distinct set of interrelated cognitive demands that tend to appear together in our "mental environment". Cognitive development proceeds more or less independently in different domains of thought, although there are deep structural parallels across domains (Dawson-Tunik et al., 2005; Fischer & Bidell, 2006). As will become clear, the justification for adding the ICM to existing models rests partly on the premise that development in thinking about intercommunal issues is not an automatic outgrowth of development in related domains or in general intelligence.

Levels, stages, and variability

The "levels" of the ICM constitute Piagetian stages insofar as they are identifiable, logically self-coherent, relatively discrete and stable sets of principles for organizing information (Crain, 1985; Piaget, 1970). The ICM adopts the following features of the Piagetian stage concept:

Qualitative differences. Each new level generates qualitatively new emergent properties. Development within one level is *quantitative*; to a new level, it is *qualitative*.

Structured wholes. A level comprises a holistic, networked, internally coherent set of rules for processing information.

Invariant sequence. Development occurs one step at a time, because each new level develops as a solution to the inadequacies of the previous one. Barring dementia, a person's general level of functioning cannot go from higher levels to lower.

Hierarchical integration. Each new level incorporates the capacities of the previous one within a more developed structure. Thus the capacities of lower levels are never lost, only transcended. Lower levels are not *wrong*, but rather *partial* (within their own scope, they are actually correct). More advanced structures permit us to fully understand and operate on the insights of simpler structures, but the opposite is not true.

Universal sequence. Levels are the same across cultures, because they refer not to the content of what people think, but the cognitive structure they use to think about them.

The ICM uses the term "level" rather than "stage", in order to emphasize that it does not adopt the Piagetian concept of "hard stages". The latter notion suggests that development proceeds in single, neat steps – like climbing a ladder – and that each of us right now is "in" a particular stage. In fact development is not neat and ladder-like, but messy, resembling a sequence of overlapping waves (Fischer, 2011; Rose & Fischer, 2009; van Geert, 1994). Rather than being "in" a stage, each of us has a *developmental*

range between what Fischer & Kenny (1986) have called our *functional level* and our *optimal level*. Within this range, our performance varies widely based on context, support, motivation, and other factors. Nevertheless, each of us does have a *highest* stage (our optimal level), as well as a "center of gravity" within our developmental range (Fischer & Kenny, 1986; Wilber, 2000).

Structure yes, content no

Structural developmentalism is not concerned with the specific content of a people's views, but with the depth of their epistemological perspective (Dawson, Xie, & Wilson, 2003; Dawson-Tunik et al., 2005; King, 2009). From this research orientation, the thought of Adam Smith (with its analysis of the self-regulating nature of supply and demand) and that of Karl Marx (with its analysis of the self-reinforcing nature of the institution of private property) appear more similar than different, for being structurally analogous (Marx & Engels, 1996/1867; Smith, 2001/1776). Both explain economic behavior at a high level of abstraction and generalization, even if their substantive conclusions sharply differ.

In keeping with this structuralist orientation, ICM ratings ignore content. Indeed, different levels of reasoning within the ICM can generate the same substantive conclusion. For example, the statement, "I oppose a global regime for Internet governance" can be justified just as easily at ICM Level 4 ("I oppose such a regime

because it would allow national governments to restrict the free flow of information and expression") as at ICM Level 1 ("I oppose such a regime because it would result in a loss of sovereignty for my country"). Conversely, the same level of reasoning within the ICM can generate opposite substantive conclusions. For example, one could counter the ICM 4 argument against nuclear proliferation quoted at the outset of this paper with an equally abstract ICM 4 argument based on the peace-preserving logic of "mutually assured destruction".

The deep structure of developmental consciousness

Hierarchical integration

The levels of integrative consciousness constitute nested orders of complexity because the governing assumptions at one stage become the object of reflective attention at the next stage. For example, while ICM 1 reasoning analyzes issues *through* socially embedded ideologies, ICM 2 reasoning can analyze issues by talking *about* these ideologies. Likewise, reasoning that advances from ICM 2 to ICM 3 goes from questioning the authority of conventional meanings in light of constructivism to critically reflecting on the limitations of constructivism itself. In this way, reasoning at one level largely represents a taking into awareness of the limitations of reasoning at the previous level. From stage to stage, increasing complexity is revealed in new understandings that represent the *hierarchical integration* of earlier ways of thinking (Commons et al., 1998, 2007; Dawson, 2001, 2002, 2003, 2004; Fischer, 1980; Kegan, 1982, 1994; Piaget, 1960).

Hierarchical integration implies that each new self-organization incorporates the capacities of the previous one within a more developed structure. Thus the capacities of simpler structures are never lost, only transcended. Advanced reasoners can fully understand “where people are coming from” when they use a simpler structure, but the opposite is not true. This is what establishes an objective hierarchy of complexity among structures.

The notion of hierarchical integration has a long history that goes back through Werner (1948) Piaget (1965/1932) and Baldwin (1895, 1904) to nineteenth-century philosophers, especially Hegel (1993/1812), who wrote that in the evolution of ideas “that which is superseded is at the same time preserved”. It underpins many cognitive developmental stage models, including Kohlberg’s stages of moral judgment (1984), Fischer’s model of skill hierarchies (1980), Kegan’s stages of ego development (1982, 1984), Pascual-Leone & Goodman’s work on attention capacities (1979), and Case’s model of conceptual processing (1991).

Although not all cognitive developmental models attribute precisely the same set of features to hierarchical integration, they generally imply a relationship in which the conceptual unit *constitutive* of cognition at one stage becomes an objectified *component* of cognition at the next stage. This feature can be readily seen in the ICM, in

which Level 2 objectifies Level 1's *social conventions*, Level 3 likewise objectifies Level 2's preoccupation with the *context or construction of social conventions*, and so forth (see Appendix A). Each new stage generates the capacity to reflect on, coordinate or integrate the conceptual unit constituting the previous stage within a larger analytical dimension. This new dimension opens up possibilities of evaluation, judgment and transformation that did not exist at the previous stage.

This new evaluative, arbitrating, analytical capacity makes possible the resolution of contradictions endemic to the previous stage – indeed literally *constitutive of it*. For example, the social conventions emergent at ICM 1 help resolve tensions among concrete primary groups who coinhabit a social system. Similarly, the cross-systemic space emergent at ICM 2 unites social systems previously conceived as being primordially different into a single dimension of legitimate variation. As these examples illustrate, the problem-solving capacities of each self-organization are qualitatively new. Moreover, they are not fortuitous but are in fact a direct adaptation to the problems left unresolved by (or created by!) the previous organization. In this way each new organization can be said to be *non-arbitrary* (Commons et al., 1998, 2007; Dawson, 2002).

Kurt Fischer's Skill Theory conceptualizes the emergent capacity of a new structure as a new dimension of *variation*. He and a coauthor (Fischer & Kenny, 1986) define cognitive complexity

> in terms of a developmental scale of hierarchically ordered skill structures involving the coordination of *sources of variation* in behavior. ...[at higher levels] the sources of variation are based in a structure called an abstraction, which typically specifies an intangible characteristic for coordinating some of the sources of variation in representations (concrete characteristics of people, objects, or events). Examples of abstractions include concepts such as justice, honesty, law, and responsibility, as well as arithmetic operations such as addition and division. [italics added] (p. 58)

In the 1980 article in which he offered his first full statement of Skill Theory, Fischer classified these sources of variation into three hierarchically integrating "tiers" of skills: sensorimotor actions, concrete representations, and abstractions (he later added an embryonic stage preceding sensorimotor actions; the figures below thus refers to the latter as "Tier 2"). Together these tiers comprise the "General Skill Scale" (GSS). Figure 1 summarizes the sequential waves of development through the three tiers of the GSS, while Figure 2 offers a geometric representation of development through the "representational" and "abstract" tiers. The GSS assimilates data from numerous domains offering evidence of developmental discontinuities corresponding to the levels and tiers represented in Figures 1 and 2 (Dawson, 2003; Dawson, Xie & Wilson, 2003; Fischer & Biddell, 2006; Fischer & Kenny, 1986).

Figure 1. Fischer's General Skill Scale: Sequential waves of development

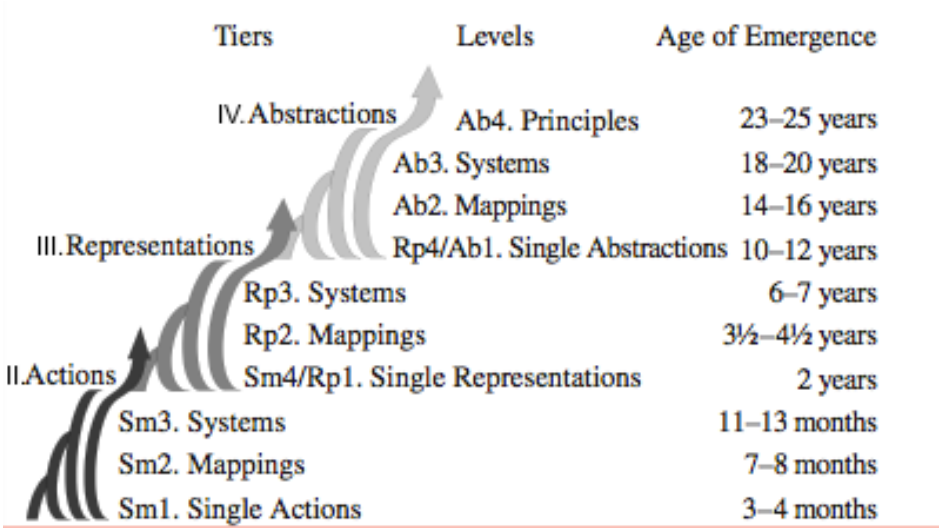
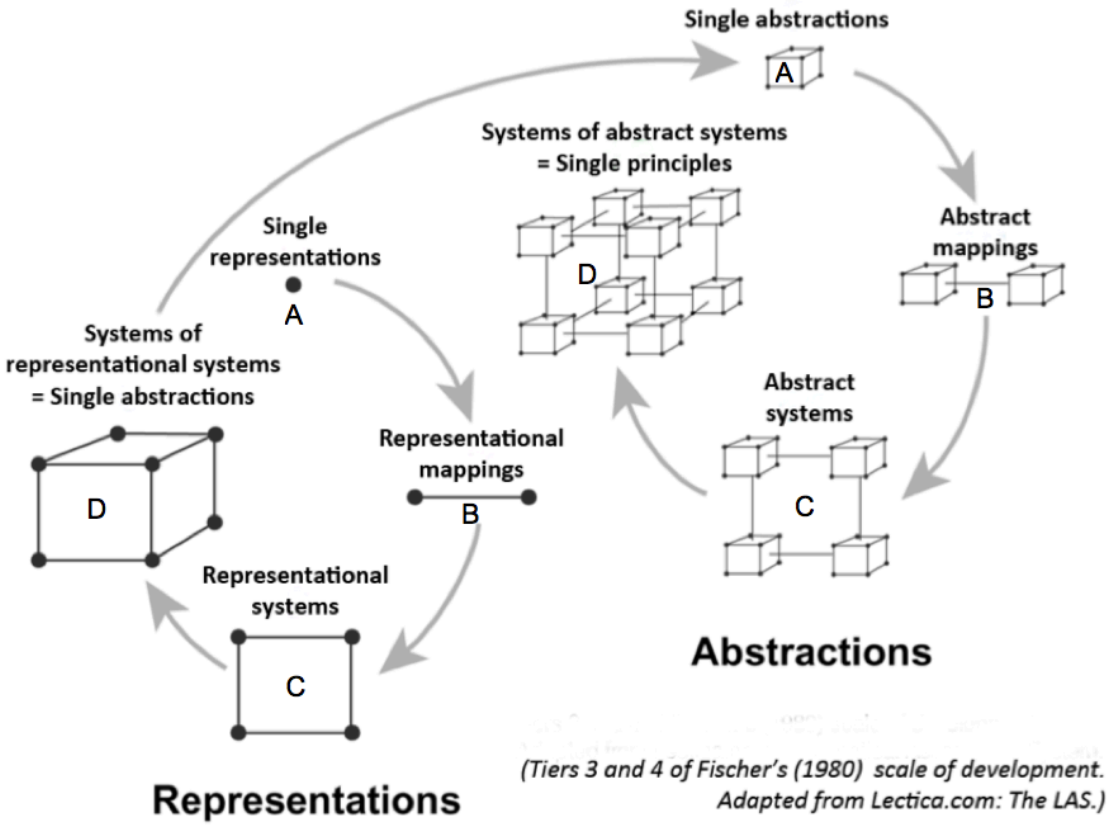


Figure 2. Geometric illustration of tiers 3 and 4 of Fischer's General Skill Scale



(Tiers 3 and 4 of Fischer's (1980) scale of development. Adapted from Lectica.com: The LAS.)

Figure 3. Geometric illustration of the development of integrative consciousness

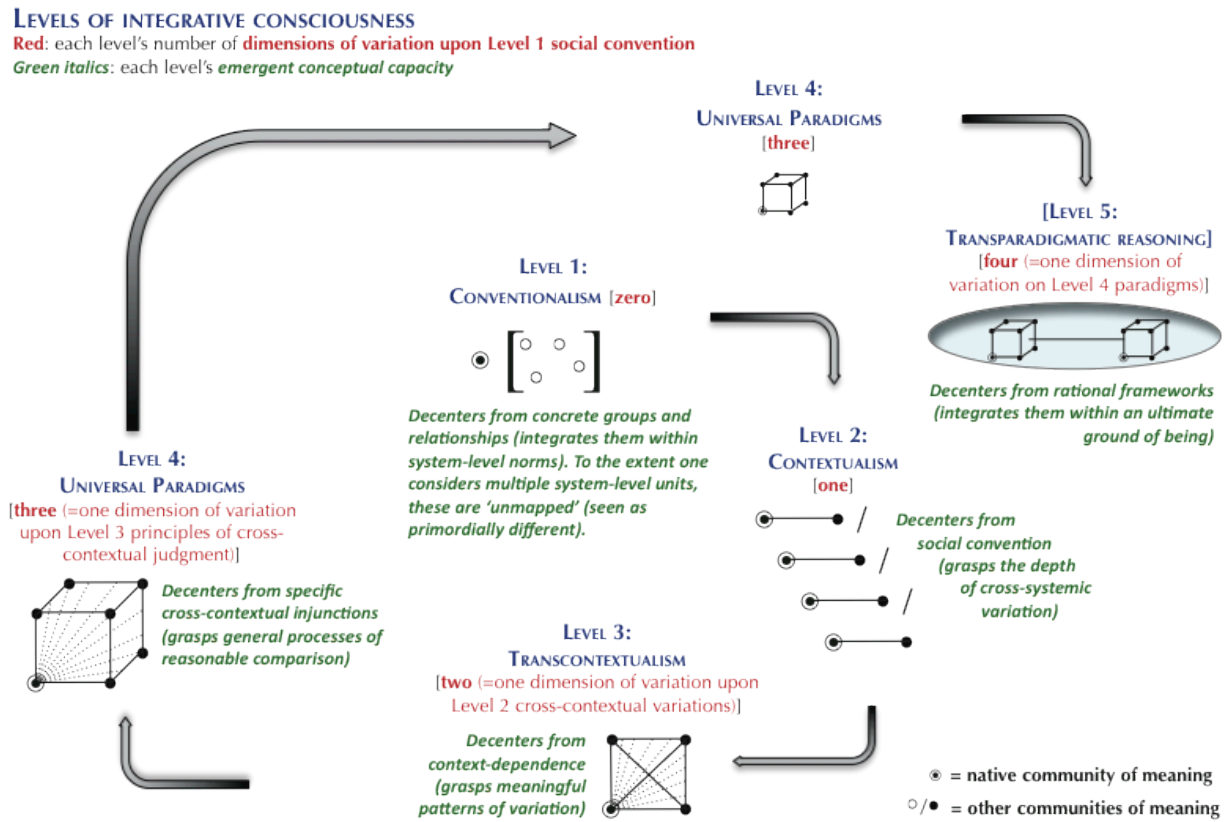


Figure 3. This figure graphically illustrates level-to-level transformations from conventional Level 1 up through the post-conventional Levels 2-4 and post-post-conventional Level 5. At Level 1 the figure represents foreign sociocultural units as empty dots, to indicate that the subject does not yet understand them to be alternative configurations of a general process. These dots become "filled" at the post-conventional levels, which no longer think of distinct systems as primordially different.

As represented geometrically in Figure 2, each tier begins with (A) a “single sets” level consisting of a primary conceptual “unit”. Within a tier, this “single sets” level can be visualized as a single dot.[1] Note that there may be multiple such dots or “units” within the set, but they are not integrated into a *dimension of variation* until the next level. In hypothesis, ICM 1 is just such a “single sets” level, because its epistemology is largely determined by a single sociocultural system (or by multiple systems that have not been ‘mapped’ within a dimension of variation – a possibility that Fischer’s model also allows for). ICM 1 is graphically depicted as a “single sets” level in Figure 3.

At the next level (B in Figure 2), we coordinate or “map” these primary units. We connect the dots. This generates a new cognitive dimension of variation along which we can imagine how the original unit *could be different* (just as a point can appear at any one of an infinite number of positions along a line). This corresponds hypothetically to ICM 2 (the contextualist stage), in which one becomes able to think from the perspective of multiple sociocultural contexts at the same time (see Figure 3). Just as a line reveals an infinite number of potential positions for a given point, ICM 2 reveals the insight that the conventional meanings one took for granted at ICM 1 are socially constructed and could have potentially taken any number of other forms.

[1] Though meaning does not exist in physical space, developmentalists frequently use spatial metaphors to conceptualize its "growth".

At the next level (level C in Figure 2), we coordinate the mapped relations into a "system" of variations of the original primary unit. In the geometric analogy, we connect the lines (of variation) into a plane that allows us to *compare and coordinate variations among lines* (ie, variations of variations). As we have already seen, ICM 3 similarly possesses two dimensions of variation, because it allows us to contemplate different institutional variations within different contexts (see Figure 3). This permits us to triangulate simple, static (one-dimensional) variations into dynamic patterns of (two-dimensional) variation that enable evaluative, creative, and potentially transformative thinking across contexts.

At the final level of the tier (level D in Figure 2), we coordinate multiple systems into a metasystem or "system of systems"; that is, we connect the planes into a three-dimensional figure that opens up the possibility of *coordinating systems of variation into a general framework or principle*. As we have seen, ICM 4 similarly possesses three dimensions of variation, because it permits us to coordinate different ICM 3 dimensions of cross-contextual judgment (see Figure 3).

As shown in Figure 2, this both culminates the tier of development and constitutes a new primary unit for the next tier. Level D "actions" constitute Level A "representations"; similarly, Level D "representations" constitute Level A "abstractions". In this way, the pattern of development continues in cyclical fashion from tier to tier.

An important corollary of this cycling feature is that more “complex” cognition is not necessarily more ponderous or “complicated”, because we are able to simplify or “chunk” our thoughts into more abstract units – for example, we operate on meta-systems of representations as single abstractions, or meta-systems of abstractions as single principles. We therefore do not need to assume that cognition at higher tiers requires greater absolute brain processing capacity (Burtis, 1982; Pascual-Leone & Goodman, 1979). This makes it reasonable to postulate that cognitive development continues during adulthood.

That more logically complex statements are not necessarily more “complicated” can be readily seen in the scaled statements about democracy shown earlier. Compare for example the statement for ICM 4 (“*Democracy is not an end in itself, but is merely the best system modern societies have yet discovered for supporting people's growth, self-expression, and empowerment*”) is not noticeably more complicated in its coordination of conceptual units than the statement for ICM 2 (“To say that other countries should also adopt democracy is naive and ethnocentric. The correct form of government for those countries can only be determined in context”). What makes the ICM 4 statement more *complex* is the number of differentiations between this statement and the socially embedded consciousness of ICM 1.

Skill theory’s concept of developmental tiers is suggestive for thinking about the differences between conventional and post-conventional reasoning. Conventional

reasoning, which occupies the range of complexity above egocentric thinking and below post-conventional (ie, "prior-to-society") thinking, corresponds to Skill theory's "Representations" tier and culminates in abstract social conventions (simultaneously the last level of the Representations tier and the first level of the Abstractions tier, as shown in Figure 2). From this point there begins a new wave of development, post-conventional reasoning, which corresponds to the movement through the "Abstractions" tier.[2] In this wave of development, social conventions are reflected upon at multidimensional levels of abstraction, culminating in universal paradigms, which sublimate the concept of conventional normativities within a new, more abstract unit of reflection.

In sum, the most important concept the ICM borrows from Skill Theory is that a new cognitive structure is in essence a new *dimension of variation*. Skill Theory follows Piagetian theory more generally in that these dimensions of variation are hierarchically integrating in a structured manner, and that each dimension generates an emergent self-reflective ground that the previous structure does not have – an evaluative, arbitrating and potentially self-transformational space.

Situating this study

[2] Kitchener & King (1990) have mapped their Reflective Judgment Model onto the GSS's Abstractions tier in a similar fashion.

Here let me pause briefly to foreshadow how this study relates to and departs from previous work. As suggested earlier, the aim of this study has been to combine the research procedures of developmental epistemology with related insights from several behavioral and philosophical disciplines to map out the growth of complex reasoning about intergroup issues. I have attempted to generate a plausible working model of the composition and origin of a global mindset, using a structural-genetic approach that combines a psychological theory of cognitive growth, a philosophical justification for the directionality of this growth, and empirical tools for observing and measuring this growth.

The neo-Piagetian cognitive developmental approach has been subject to numerous criticisms over the past three decades. Some of these have been unwarranted (eg the claim that cognitive models cannot account for cultural variation), overdrawn (eg the argument that cognition is merely used for rationalizing judgments rooted in emotion) or easily addressed (eg the purported lack of empirical evidence for postconventional reasoning). Other criticisms have been justified, including criticism of ladder-like conceptualizations of developmental stage (Rest, 1979), insufficient attention to variability in context (Fischer, Yan & Stewart, 2003), imprecision regarding the nature of complexity and inter-level transformations (Commons et al., 1998; van Geert, 2004), and the use of substantive concepts as heuristics for identifying stage (Dawson, 2002). These criticisms have not invalidated the cognitive approach; on the contrary, the researchers cited above have contributed to refining the approach and improving its

explanatory power. This study builds on their contributions, employing an updated cognitive approach that rejects hard functional stages, emphasizes variability in individual performance, attempts to define the nature of level-to-level relationships in relatively precise terms, and distinguishes levels of performance based on structural criteria. It will be the burden of the dissertation to fully demonstrate how the approach used in this study responds to the justified questions raised about the cognitive developmental approach, and to refute criticisms that I claim are unwarranted.

In addition to building on recent advances in cognitive developmental theory, this study has aimed to combine insights from this field with related insights from other behavioral and philosophical disciplines concerned with the relationship between individual cognition and sociocultural authority, including social anthropology (Brown, 1991; Hallpike, 2004; Kato, 1982; Kluckhohn, 1960; Laszlo, 1987), comparative sociology (Bellah, 1962, 1985/1957, 2003; Donald, 1991; Eisenstadt, 1986; Jaspers, 1953; Marx & Engels, 1995/1848; Nolan & Lenski, 2004; Parsons, Bales, & Shils, 1953; Weber, 1963/1922), comparative religion (Fowler & Vergote, 1980; Geertz, 1966; Humphreys, 1975; Niebuhr, 1995/1932; Smith, 1991/1958; Schwartz, 1975, 1985; Tillich 1966, 1967), political science (Inglehart & Welzel, 2005; Welzel, 2013), moral philosophy (Habermas, 1979, 1990/1983, 1990; Kant, 1995/1785; Rawls, 1997, 1999) intellectual history (Berlin, 1990; Popper, 1945, 1959, 1965), and education (Vickers, 2005). In their own distinctive idioms, these varied fields have offered mutually corroborating accounts of the development from particularistic to universalistic modes of reasoning. This study has

also benefited from other fields illuminating the evolution of complex thinking, including evolutionary epistemology (Campbell, 1960; Harms, 2004), complex-systems science (Meadows, 2008; Mitchell, 2009; Wolfram, 2002), and artificial intelligence (Kurzweil, 2005). Without attempting to introduce any of the above literatures in this short paper, I do attempt to incorporate their insights into the ICM, giving the model a broader understanding of the development of postconventional thinking than is available from cognitive psychology alone.

This study also departs from previous work by applying the structural-genetic paradigm to a domain of cognition that has not heretofore been systematically studied with this toolset. As it will be easier to understand the nature of this contribution later, I shall return to this point toward the end of the paper. I mention it now only to help the reader anticipate what the paper aims to accomplish.

Contributions to specific subfields of psychology and education are described in the Discussion section.

The section that follows will briefly summarize the empirical procedure that, in conversation with my initial theoretical orientations, resulted in the ICM.

Research design and methods

The research questions for this study were:

1. What patterns of meaning can be found in the way people make sense of problematic intercommunal/international issues?
2. Is there a developmental logic connecting these patterns, and if so, what is it?

To answer these questions, I conducted a series of seventy interviews with participants of fifteen nationalities and levels of education varying from college freshman to senior research professor. Roughly half the interview participants were from Mainland China, which was initially the focus of the study before I decided to internationalize the sample. The Chinese participants were primarily graduate students, with a smaller proportion of professors and undergraduates. Of the non-Chinese participants, about two-fifths were from the United States (mostly graduate students), while the other three-fifths were from a variety of countries around the world (mostly graduate students at either a Chinese or a US university). The seventy interviews included twenty participants selected as "experts" in order to increase the proportion of high complexity responses; these were professors or doctoral students with expertise in philosophy, social science, and/or international affairs.

To identify the deep structure of participants' reasoning about intercommunal issues, I used the "clinical cognitive-developmental interview" technique. This method, pioneered by Piaget, aims to discern the logic, organizing principles, and bedrock concepts that subjects use to make judgments, even when these cognitive constructions are largely invisible to the subjects themselves. Teams in several domains of cognitive-

developmental research have used this approach, notably with Kohlberg's Moral Judgment Interview, Kegan's Subject-Object Interview, and Kitchener & King's Reflective Judgment Interview (Colby et al., 1987; Lahey et al., 1988, Kitchener & King, 1990). My own interview protocol adapted ideas gathered from these models to my own theoretical presuppositions about how growth occurs in thinking about intercommunal issues. The most important such presupposition was that ethical and epistemological reasoning that is particularistic (ie, based on concrete social relations) is both less cognitively and less culturally developed than that which is universalistic (ie, based on abstract principles).[3]

In each interview I began by having the participant read a hypothetical "issue statement" that presented contradictory ingroup and outgroup positions, but did not present any specific approach for *resolving the tension* between these positions. I then asked the participant to evaluate these different positions.

I designed the issue statement to test respondents' capacity to transcend particularistic standards and frames of reference and, more challengingly, to integrate them into a higher-order system capable of resolving the contradictions that exist among diverse

[3] This paper is not the place to offer a full defense of this assumption. But it is worth noting here that the notion that universalistic reasoning is in some sense more advanced than particularistic reasoning is widely supported across a range of behavioral and philosophical disciplines, including those cited above under "Situating this study". I have made use of this conception as a basic theoretical orientation regarding the general directionality and shape of development I have attempted to observe.

communities of meaning. I also aimed to activate specific cognitive patterns (among those so predisposed), including ethnocentric or nationalistic feelings, sensitivity to the issue of national sovereignty, attitude toward the possibility of cross-civilizational frameworks of value judgment, and commitment to universalistic principles such as international peace and human rights. In this way, the interview allowed me to probe participants' capacity to construct solutions that resolve the contradictions between loyalty demands at narrower levels and appeal to consensual agreement across group boundaries.

The above process refined the ICM, and resulted in a general coding rubric for rating the level of "complexity" contained in any scorable argument in this domain (see Appendix A). This rubric provides a way of evaluating responses of widely varying content by focusing on *structural* features of respondents' argumentation (more on this shortly). The rubric resulted from a "bootstrapping" set of iterations between theory and data over the course of dozens of interviews. At present it consists of a set of four broad structure-oriented categories, rather than a detailed set of coding instructions, such as Kohlberg's Standard Issue Scoring Manual or Dawson's Lectical Assessment System (Colby et al., 1987; Dawson, 2008).

The developmental pathway of integrative consciousness

Level 1: Conventionalism

You're either with us, or you're against us
– US President George W. Bush, 2003

We must clearly see that hostile international forces
are intensifying the strategic plot of Westernizing and dividing China,
and that ideological and cultural fields are the focal areas of their long-term infiltration
– Chinese Communist Party General Secretary Hu Jintao, 2012

I classify as "conventionalist" any argument that indicates an identification with conventional ideas and norms but does not indicate an understanding of their social constructedness or context dependence. Conventionalist arguments suggest that the speaker interprets ideas that are conventional within a given community (ie, self-identifications, standards of truth, and loyalty commitments) not as arbitrary or semi-arbitrary constructions but as part of the natural order of things. From the conventionalist viewpoint, the native civic community is an intrinsic feature of reality and the entity in which political value is realized. Criticizing its actions vis-à-vis other civic communities is therefore intrinsically wrong – a mindset familiar to Americans from the nationalistic rhetoric heard frequently around the time of the 2003 invasion of Iraq, famously by President George W. Bush in the statement quoted in the epigraph.

At this level of consciousness, we are fused with the perspective of our civic community. Having come to understand the importance of ego-transcendent social norms, we are particularly concerned with maintaining their integrity, rather than with the more

complex problem of integrating them with other systems. Because our thinking is centered in the perspective of a single membership community (ethnic group, religious community, nation, state, etc.), we are not yet able to transcend this community's loyalty and identity demands, and lack freedom from an ethnocentric perspective on intercommunal issues. In sum, we have not yet developed an externalized, "prior-to-society" vantage point that would permit us to objectify, judge, and potentially stand against the standards of our own society (Bellah, 2003; Ienaga, 1940; Kohlberg, 1984; Rest, Narvaez, Thoma & Bebeau, 1999, 2000; Tillich, 1966; Weber, 1946/1924).

Because our consciousness is fused with the perspective of the group, we are not able to think critically *about* that perspective. *Its* perspective is *our* perspective. What happens to *it*, we perceive, happens to *us*. For this reason we are quick to defend our group and are easily affected mentally and emotionally by the honors and slights we think it has received. Our civic consciousness remains embedded within group identification:

> [Research participant] *If things happen in China that do not affect other countries, what gives other countries the right to criticize? It is our own family thing. Other families should not interfere. You have your own parenting style. I don't have the right to teach you how to talk to your son or daughter. It is not my business. Human rights is a national issue. We have our own conditions. … We don't need other people to criticize.*

This level of reasoning lacks a constructivist point of view. That is, at this level, we tend to see our group's conventional norms as natural and pre-given (for "us" in any case), rather than dependent upon continuously evolving context and choices:

> [Research participant] *I think [culture] is where the heart of the whole Chinese nation lies. If we were to lose our culture, this Chinese nation would have a hard time holding together. Many nations have risen and disappeared. We, China are a civilization of five thousand years. Why are we able to go on passing this down through the generations? Because the script we use, the culture we use, is always one. So regardless of time this nation of ours always exists, unlike so many nations that arise and then disappear.*

At the conventionalist stage, we tend to experience encounters with diversity as simplistic contrasts, and to interpret intercommunal differences as primordial, rather than as constitutive of a dimension of legitimate variation that would subject the social order to critical reflection. Similarly, we may interpret the perceived other as the "antagonistic holder of a competing point of view" (Kegan, 1994, p. 44), and lack the capacity to understand outgroup members' claims and interests from their own perspective:

> [Research participant] *I think the Nobel Prize is receiving money from certain places. I think it is opposed to China. They gave the Literature Prize in 1989 to someone who didn't write that well. We have many more who write better. Then they gave [the Peace Prize] to the Dalai Lama and Liu Xiaobo. This is a conspiracy! Their standard is, 'Who opposes China?'*

This argument, like several others quoted in this section, reveals an "us and them" epistemology in which the world is made up of competing groups. This mindset is reinforced in daily life by visible intercommunal differences such as skin color and clothing, by the structures of everyday communication, by the nationalist pattern of the world's political system, by the tone and orientation of most news coverage, and by popular sporting and cultural events that organize competition along nationalist lines. These structures contribute to a point of view from which different groups appear to constitute "whole and distinct entities" (Kegan, 1994, p. 312).

When this group-competitivist mindset is confronted with criticisms from a principle-oriented mindset, it typically misinterprets the criticisms as being directed against one's group (antagonistically, when coming from outsiders, or traitorously, when coming from insiders):

> [Research participant (different from the one in the previous quote] *The West is always giving prizes to dissidents in China. We know that they are picking the winners based on who opposes the Chinese system. This just makes Chinese more suspicious of the West, and damages relations between China and the West.*

In this interpretation, the awarding organization is seen as representing the West, and its award is seen as a criticism of China itself, when in fact it expresses criticism toward the violation of a principle that encompasses Chinese people and their own highest values. Because the message is interpreted through a groupist epistemic structure, its true nature – an expression of inter-individual solidarity – is missed (Kegan, 1994). An expression of ethical universalistic principles is misinterpreted as one of nationalism or racism.

Because this mindset lacks the basis for integrating diverse group-embedded understandings, it is not able to meaningfully interpret the notion of universal values. Conventionalist thinkers who have little awareness of intercommunal differences may construct the idea of universal values as a simplistic extension of their own values. Conversely, conventionalists who are highly aware of intercommunal differences are likely to see "universal values" as being possible only through the imposition of one's group's values upon all the others:

> [Research participant] *There is no such thing as universal values. This would be like taking the viewpoint of the group and forcing it upon an individual. This goes against human sympathy. So there can't be something really universal.... You think this thing is good, so you just force it upon him. Even if you think it's good, even if all people think it's good, you still can't say that person thinks it's good.*

This participant appears – in relation to the intercommunal issues discussed in the interview – to be completely self-identified with his group and its point of view. From the vantage point he expresses here, human relations beyond the bounds of his group are essentially intercommunal relations, not inter-individual or intra-human relations. Indeed, he interprets intercommunal relations as if they were *analogous* to inter-individual relations, reifying the group into a concrete, person-like entity. He is thus unable to analyze intercommunal relations in terms of an abstract category that would transcend that of the group. Moreover, he discusses his group's value system as if it were given, rather than something that is subject to critical evaluation; he appears to lack a prior-to-society perspective. From his angle, intercommunal cooperation is not a matter of finding comprehensive solutions, but one of reaching *compromise* among competing viewpoints rooted in distinct group identities.

From the constructive-developmentalist perspective it is to be assumed that the ICM 1 mindset exists because it represents a novel insight as compared with a still earlier one (Kegan, 1982). This emergent capacity is one whose contours are not to be discerned through my intercommunal issues interviews – or adult sample – but we can perhaps draw a rough picture of it if we compare the most simplistic statements from my sample with the purely egocentric thinking that has been described by Piaget (1965/1932) and

Kohlberg (1984) in their research on children's moral development. In contrast with the ego-dominated orientation we experience in childhood, at ICM 1 we have developed the capacity to see communal norms and meanings as legitimate. This concept of norm legitimacy is the basic cognitive unit from which intercommunal consciousness develops.

In Figure 2, Conventionalism corresponds to the first level of the "Abstractions" tier, representing the ability to operate on abstract social conventions. This ability constitutes the fundamental unit of a new wave of "post-conventional" development in which we learn to reflect on social norms at increasingly complex levels of abstraction – first contextual, then transcontextual, then paradigmatic. At the next such level these conventions are subjected to a thorough critique.

Level 2: Contextualism

In the end there is never a right and a wrong
– Research participant

Nothing can be sole or whole
That has not been rent
– William Butler Yeats

Arguments at this level indicate an understanding of the arbitrariness, social constructedness or context dependence of conventional norms, but do not indicate an understanding of how to construct new, non-arbitrary, integrative norms across these contexts.

Level 2 is distinguished by an emphasis on constructivism and contextualism, and reflects the capacity to explain the legitimacy of variations among the norms and values of different sociocultural systems. At this level, we critically reevaluate system-level judgments, but do not possess a conceptual framework for reenvisioning them at a cross-system level. From this perspective, we see each sociocultural system as relative to its context. This gives us a tendency to question aspects of our native system as arbitrary, and to deny any basis for making judgments across systems:

> [Research participant] *From different social backgrounds, the same concept can be defined differently. The NGO's annual report exposed [my] country's human rights abuses. These abuses could be considered commonplace in [my] country, so that the people don't even think there's anything wrong with it. But people in other countries don't think so. On the basis of their culture they might establish a standard and norm, and borrow this to pass judgment on whether the behavior is right or wrong. This results in different ways of seeing the same thing, that is, one country thinks a behavior violates human rights and another does not. My evaluation of this issue relies on thinking about the unique background of each culture.*

In Figure 2, Level 2 corresponds to "abstract mappings" on Fischer's General Skill Scale. Following this model, I depict Level 2 in Figure 3 as a series of lines connecting filled dots. These lines refer to a new cognitive *dimension of variation* along which we can imagine how the original units *could be different* (ie, the conventional norms we took for granted at Level 1 could have potentially taken any number of other forms). However the lines themselves are not coordinated into a plane; this conveys the idea that we are not yet able to make meaningful judgments *about the variations between systems*.

Level 2 improves on Level 1 in that it permits us to disidentify with ingroup-embedded standards and sublate socially determined norms within a larger dimension of variation. It thereby allows us to objectify the limitations of Conventionalism, which interprets conventional norms as static and essentialistic. Level 2 resolves these limitations by generating a new analytical dimension in which we coordinate the perspectives of multiple sociocultural contexts. This contextual dimension gives us the leverage to decenter from the conventional meanings taken for granted at Level 1, understand the extent to which these meanings have been artificially constructed, and imagine new possibilities.

Level 2 is more comprehensive than Level 1, because we become able to explain why (ethnocentric) generalizations at the level of social systems can't generalize beyond that level. Level 2 is also more self-consistent than Level 1, because it grants the same possibilities of legitimacy to other communities of meaning as it does to its own, as illustrated by the interviewee's quote above.

Pathological (ie, fixated and intolerant[4]) versions of this level become overly preoccupied with the notions of constructivism and context dependence, resulting in nihilist criticism and strong versions of relativism. These totalizing versions of constructivism may actually hinder further development since higher levels of reasoning depend on submitting constructivism to its own limiting conditions. The concepts that

[4] Lenzenweger & Haugaard, 1996.

are differentiated at Level 2 – norms and legitimacy – must be reintegrated for development to proceed and for the critical insight of Level 2 to fulfill its creative potential.

An intrinsic deficiency of Level 2 is that it lacks a dimension in which cross-systemic variations can themselves be compared. In other words, it does not provide a basis for meaningfully judging the variations themselves as better or worse:

> [Research participant] *Do YOU think there is any objective standard by which you can judge right and wrong?* [Skeptical tone]
>
> [Interviewer] *Do YOU think that there is?*
>
> [Research participant] *It's something you need to think about. If you believe that there is, then there is. If you believe there is not, then there is not. This is from an individual point of view.*

So although at ICM 2 we no longer perceive systems of meaning as pregiven, we face a new, relativist trap in which we tend to see variation itself as pregiven, unjudgeable, and inescapable. This results in the exaltation of context and diversity, and the disparagement of judgment and hierarchy. With judgment suspended, we become incapable of meaningfully ranking values, purposes, or interpretations of truth, or of generating integrative principles that would resolve the tensions among competing ideologies.

> [Research participant] *I don't think some cultural values are better than others. I think this is always subjective and often a source of antagonism between countries. Cultural values, although distinct, can be used to justify harmful actions and separate countries. I also think these values are contextual, meaning that they arise due to different circumstances. Thus, certain values may make sense in some country but not another*.

The next pair of quotes illustrates the same deficiency:

> [Interviewer] *Given that such different cultural perspectives exist regarding human rights, is it possible to determine a most reasonable and objective way of thinking about this issue?*
>
> [Research participant] *I don't think it's possible, because these different viewpoints produced from different cultures and values reflect intensely subjective consciousness, and it is very difficult to attain a high degree of consistency between these subjective consciousnesses of human groups of different cultures and backgrounds. For this reason, they generate different standards of evaluation, so there's no way to decide which viewpoint is most objective or rational.*
>
> [Separate research participant, responding to the same question] *Toward different cultural views, I take a fair attitude. There is no absolute right or wrong. Each person has his own opinion. Now how do the cultures of two countries shape the views of two peoples? I cannot explain this. I cannot systematically explain the differences between cultures.*

For those whose environmental demands call on them to choose among or integrate conventions across contexts, the deficiency shown by the above statements generates adaptive pressure toward development to Level 3.

Level 3: Transcontextualism

The loss of faith can become the faith of loss
– Robert Bellah

I think it is politically correct (and easy) to be culture-agnostic. It requires some self-confidence and skill and experience to be able to critique someone's culture in a way that does not immediately elicit self-defensiveness.
– Research participant

Level 3 (transcontextualist) arguments describe legitimate sources of cross-contextual judgment, based on the recognition of systematic, non-arbitrary patterns of variation across contexts. But they do not coordinate these sources of judgment into a general analytical approach or paradigm, an ability that emerges at Level 4.

Transcontextualism is distinguished by an emphasis on the *limits* of contextualism and a preoccupation with context-independent judgment and purposes. At Level 3 we seek to overcome the limits of the previous level by formulating specific injunctions that permit meaningful comparisons and value judgments across contexts. The potential for consensual agreement across context is a guiding criterion in formulating such injunctions.

Transcontextualism improves on Contextualism in that it permits us to objectify the limitations of constructivism and overcome the suspension of judgment. It does so by generating a new analytical dimension that allows us not only to consider variations among contexts but also to contemplate the outcomes of different institutional variations within different contexts, and vice versa. With this new analytical dimension we become able to sublate simple, static variation within dynamic patterns of variation. This allows us to put context itself in context, ie, to compare across contexts along objective evaluative dimensions. At this level, we no longer view context-dependent constructivistic processes as absolute, because we come to understand how they are subject to general principles that apply across contexts – even if these principles

manifest themselves in diverse ways across different settings. This realization opens up a new evaluative space that permits cross-systemic judgment.

In Figure 2, Level 3 corresponds to "abstract systems" on Fischer's General Skill Scale. Following this model, I depict Level 3 in Figure 3 as lines integrated within a surface, depicting two-dimensional variation on conventional norms. This two-dimensional surface represents a new cognitive dimension of variation in which cross-systemic variations can be subjected to normative comparisons. This permits us to triangulate simple, static (one-dimensional) variations into *dynamic patterns of* (multi-dimensional) *variation* that enable evaluative, creative, and potentially transformative thinking across contexts.

Just as Contextualism takes a "meta" perspective on Conventionalism, so too Transcontextualism takes a meta perspective on Contextualism. It does this by taking the limitations of cultural and contextual relativism into critical awareness. In interviews and surveys I often asked, "Can you say that one society's cultural values with respect to [a given set of issues] are in some way better than another's?" Numerous *Contextualist* responses to this question said something along the lines of, "No. Whether one value or another is better depends on your *perspective*". For example,

> [Participant] *It is very difficult to attain a high degree of consistency between these subjective consciousnesses of human groups of different cultures and backgrounds. For this reason, they generate different standards of evaluation, so there's no way to decide which viewpoint is most objective or rational.*

Responses at higher levels, by contrast, are not preoccupied with *perspective*, but tend to think about the objective ground on which a perspective should be based:

> [Participant] *It is easy to say 'no' and embrace basically cultural relativism. But for some issues there probably are societies that have 'better' cultural values for the issue in question. For instance, producing 1 pound of beef requires 25 times the land as producing 1 pound of soy beans (and soy beans have a higher protein content)…. I think that we can justify that some societies' values are incommensurate with a sustainable global society and work to confront those unsustainable values. I think it is politically correct (and easy) to be culture-agnostic. It requires some self-confidence and skill and experience to be able to critique someone's culture in a way that does not immediately elicit self-defensiveness.*

The *reconstructive* capacity exhibited by this participant comes from comparing multiple sets of social norms and understanding the systematic, *non-arbitrary* ways they can vary. Level 2 is prerequisite to this understanding, because one must first understand what is arbitrary before one can discover what is not arbitrary. We know with some confidence that this participant has encompassed and transcended the relativist critique, which he explicitly refers to in two places. His statement that to be culture-agnostic would be "politically correct" indicates that he understands how the contextualist stage represents a correction of simple-minded statements based on unquestioned cultural views. He includes this critique and then transcends it. The verdict he passes on beef-consuming food cultures is thus not an ethnocentric Level 1 judgment, but a judgment that has been made on "this" side of constructivism.[5]

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[5] The phrase "It is easy to be culture-agnostic" is a good example of the "chunking" phenomenon discussed earlier. The phrase is short and simple and yet cognitively highly complex, in that it embeds multiple layers of differentiation from the ICM 1 concept of cultural normativity.

This judgment is based on a powerful concept – sustainability. A great deal of analytical depth is packed into this one word, which has the power to evaluate whole societies. It stands outside and above them. It says, “Your society can be as wonderful as you please, but if it cannot sustain itself, then there is a contradiction built within it. Hence I can dismantle its legitimacy by its own internal logic, without having to resort to extracontextual standards. The principle of sustainability is one that can be constructed just as easily from within your cultural framework as from within mine, because it transcends both frameworks and includes both frameworks.” Had the participant expressed the principle in such abstract terms, the statement would have earned an ICM 4 rating. As it is, his statement demonstrates at least an ICM 3 logic. The transcontextual principle of “sustainability” can both be derived from and abstracted to a universal paradigm.

In the return to judgment that is Transcontextualism, the reappropriations of truth are made “not on the basis of simple affirmation but of doubt and disillusion” (Bellah, 1970, p. xv). The relativist critique is not discarded, but rather taken up in more subtle form. Transcontextualism understands that, yes, relativism is true, but that transculturalism is *more* true; it embraces the truths disclosed by relativism and adds a new layer of emergent truths to it. But Transcontextualism without relativism would cease to be Transcontextualism. Context is an integral *component* of ICM 3, and of the levels that follow it. Indeed ICM 3 is *made of* contexts.

In responding to the relativist critique of Group B in the “Foreign NGO” dilemma (see Appendix B), the following participant demonstrates both a recognition and an overcoming of the relativist critique:

> *I don't completely agree [with Group B]. At least if Group B sees that every country's current situation is formed from the synthetic function of its history, culture and values, these foundations can influence things like the way "human rights" is defined. But to say that to criticize must imply a misunderstanding of history, culture and values, I think is off the mark. Because history, culture and values are not completely natural or rational; within them there is the wheat but also the chaff.*
>
> *I believe they [Group B] think this way because I think they hold the following assumption: that history, culture and values are shaped by a natural and spontaneous process and so are natural and rational, and therefore that the ways it addresses various problems all have a natural basis.*
>
> *Culture is a really vague and subtle thing, although it does exist within a group, and guides behavior, this does not mean that it is completely rational or justified. Chinese culture and values have been accumulated over many centuries, and influences our behavior often without our being conscious of it, but it must be examined and guided.*

As we know from the nested hierarchic nature of constructive development, the insights of simpler interpretive structures are not replaced but rather *integrated* into more adequate structures. Even though Contextualism’s relativist insight is too simplistic to solve all the problems we must solve, it is more right than wrong. Indeed, Contextualism is the indispensable solvent to the myth of national and cultural integrity (Kegan, 1994). It does not itself produce transcendent values, but without it there would be no possibility of transcendent values.

And so the capacity to “contextualize context” does not overturn the insight of constructivism, but rather enables us to advance from a simplistic, disconnected, one-

dimensional constructivism to a subtle, integrated, multi-dimensional constructivism. The one-dimensional variety recognizes that judgments are socially constructed, but cannot describe an objective basis for different societies to agree on one judgment or another. It has internalized only the dimension of variation, not the objective conditions in which this variation is embedded. As we have seen, this "cross-contextual context" is what allows us to judge that some solutions are better than others, *across contexts*. Multi-dimensional constructivism is a limited, mature, non-arbitrary version of constructivism that has internalized *both* the arbitrary dimension of variation *and* the objective conditions in which this variation is embedded.

One-dimensional, totalizing constructivism (ICM 2) precedes multi-dimensional, relativized constructivism (ICM 3+) because one must first discover constructivism before one discovers what its limitations are. As I gather from both the logic of participants' statements and their self-reports of developmental sequences, one's first activity upon internalizing constructivism is to apply that profound insight across a wide range of issues. Only when the deconstructivist principle (ICM 2) bumps up against obvious limitations is one forced to foray into re-constructivist thinking (ICM 3). This appears to be precisely what happened to the following participant, who in the underlined portion crosses the boundary between Contextualism and Transcontextualism:

> *No, I don't think some cultural values are better than others. I think this is always subjective and often a source of antagonism between countries. Cultural values, although distinct, can be used to justify harmful actions and separate countries. I*

> *also think these values are contextual, meaning that they arise due to different circumstances. Thus, certain values may make sense in some country but not another. The only way that I can disapprove of certain values is if these values are oppressive and harmful to people. In these cases, I do think it's appropriate for the international community to critique these countries and possibly intervene.*

This statement seems to be eminently reasonable by allowing for both judgment and non-judgment, but in fact contradicts itself. Here we observe both the process of development and the fact that structures of consciousness are *habituated*. The participant starts out with the habitual thought. This shows the basic embedded assumption, the processing rule, the organizing principle of thought the respondent feels at home in. Analyzing it though, he bumps up against the limitation of this way of thinking. He responds to this realization by contradicting himself: if one can say that a people's values are harmful to itself, then one can say that some cultural values are better than others. As happens regularly in interviews of this kind, the question has pushed the participant to the boundary between one way of knowing and another.

At Level 3 we grow in comprehensiveness because we become able to explain the necessity for cross-systemic generalizations (these differ fundamentally from ethnocentric Level 1 generalizations in that they incorporate the insight of relativism/constructivism).

Pathological versions of Level 3 become overly fixated on specific rule-like principles for judging across diverse contexts, elevating these injunctions to the status of ultimate

ends. This notion, which Kohlberg (1984) called “rule principlism”, holds that certain cross-contextually valid principles like “freedom” and “human rights” are adequate for resolving the many tensions among diverse cultures and sets of local conditions. In fact one eventually learns that what is needed is not rule-like principles but the flexibility of a *general approach* from which these principles arise. This is the defining characteristic of Level 4.

Level 4: Universal paradigms

The only long-term ethical use of power is empowerment.
– Research participant

His argument violates the conditions of its own existence.
- Personal e-mail communication

Level 4 (“Universal paradigms”) is distinguished by an emphasis on general processes or approaches for making valid context-independent judgments. Arguments at this level indicate cognitive control over analytical frameworks from which credible cross-systemic conventions can emanate. They evince an integration of all the lower capacities in that they articulate general approaches or paradigms (Level 4) for justifying (Level 3) constructions (Level 2) that can be validly adapted to any specific system (Level 1). At this level, we articulate impartial paradigms of evaluation that generate integrative and highly abstract trans-systemic norms that dissolve tensions among diverse perspectives. Level 4 reasoning is itself aperspectival (not “the view from

nowhere”, but "the view from *everywhere*") in that it synthesizes cross-contextual perspectives into general frameworks or processes of analysis.

In Figure 2, Level 4 corresponds to “Systems of abstract systems (=Single principles)” on Fischer’s General Skill Scale. Connecting the “planes” of “Abstract systems” into a three-dimensional figure opens up the possibility of *coordinating systems of variation into a general framework.*

Similarly, I depict Level 4 in Figure 3 as surfaces integrated into a figure, to convey the idea of three-dimensional variation on social conventions. This includes a new *dimension of variation* capable of coordinating different Level 3 dimensions of transcontextual judgment into holistic processes of evaluation.

Level 4 improves on Level 3 in that it permits us to *coordinate* different Level 3 dimensions of transcontextual judgment into a general process of reasonable comparison. This allows us to transcend specific, rule-like injunctions such as “freedom” or “democracy” and instead pursue the general values such specific institutions are intended to advance.

A good example of producing a generic Level 4 framework from specific Level 3 comparisons is the interviewee whose arguments formed the basis of the idealized statements about democracy listed above. This interviewee combined comparisons

highlighting the relatively successful cross-civilizational performance of decentralized decisionmaking patterns across three areas (governance, economic productivity, and public expression) into a single generic principle of inquiry regarding the extent to which a system tends to empower individuals (underlining added):

> [Participant] *So let's say that democracy is a relative concept. So I think of Vietnam, one of the few countries left that claims to be communist, yet they're embracing free market principles left and right. So while they're communist on paper, they seem to be getting the hang of capitalism pretty well. And I think there's a democratization of the market that capitalism is. So they might not call themselves a democracy, but I think they're evolving in that direction. And the extent to which say Internet-based media help spread free speech in a place like China or North Korea, that's adding more democracy, whether their governments call themselves that or not. That's a separate issue. Maybe one way to put it would be, I just have this feeling that the only long-term ethical use of power is empowerment, and the extent to which power structures become entrenched and self-serving, that's not serving the greater good. So the extent to which power can be distributed and more voices can be heard, whether you call it democracy or not, I think that's in humanity's best interests.*
>
> [Interviewer] You mentioned that 'democracy is a relative concept'…
>
> [Participant] *I guess I was trying to respond to the critique that what I was saying was inherently ethnocentric. So I guess to say that there are different flavors of democracies. American democracy is different from British democracy is different from Chinese democracy is different from Vietnamese democracy. So I think the culture can still be there even if the system is listening to more voices.*

This participant has clearly incorporated the insight of pluralism (ICM 2), which he resolves in favor of democracy cross-contextually (ICM 3), but guided by a more general approach that seeks the long-term empowerment of individuals (ICM 4), without determining the specific institutional expression of that value. The ICM 4 rating does not owe to his substantive preference for democratization, as an argument for the cross-

cultural validity of one-party governance could be similarly structured (ie, attempting to derive cross-culturally valid conclusions from a pluralistically generated principle of human empowerment).

At this fourth level we move past thinking merely in terms of judgments across contexts, because with paradigmatic reasoning we attain a kind of aperspectival, preveniently impartial vantage point in which contextualized thought is intrinsic. We no longer need to pursue valid injunctions by considering those that would be acceptable across a diversity of specific systems, but can derive them directly from highly abstract principles of the good that have the capacity to integrate the worthiest values of any sustainable human society.

Universal paradigms do not of themselves determine a single, privileged solution across contexts, because they are built precisely to address the challenges that the recognition of pluralism imposes. While concrete solutions are derived from universal paradigms, this is done by way of an accounting of contextual conditions. In this way, context-*independent* insight guides decisions made in light of context-*dependent* specifics. Universal paradigms' source of right is not a concrete vision of the good life, but the context-independent normative presuppositions of sustainable human existence, including the conditions inherent in the coexistence of diverse communities.

For this reason, universal paradigms do not point to a single best resolution to each intercommunal challenge. Instead they present us with a *framework* or *procedure of* resolution that accounts for both pluralism and the conditions of existence in which it is embedded. Consider, for example, the reasoning of a participant in response to the claim that a cross-culturally valid system of global justice is not possible:

> *Liberal political theory has the assumption that … 'the reason we make wrong and terrible decisions is that we're not well informed'. … The implications for domestic political order are to have a good and robust democracy, therefore people can discuss things, and then we can make consensus. Internationally you still have the conception about sovereignty, so we're still working this out. But for liberal political thinkers, the international community should somehow be like the domestic process, where a good, robust democratic process will eventually produce good results.*

Again it is not the argument's substantive conclusion that earns the ICM 4 rating, but its abstract, procedural orientation. The speaker articulates not simply the possibility of transnationally valid jurisprudence, but a process for producing that jurisprudence. A different type of transnational process, perhaps one framed in communitarian rather than liberal terms, would receive the same rating.

The next and final sample response further illustrates the abstract, procedural orientation that typifies Level 4 reasoning. This participant was asked how he would propose to address a situation in which an international scheme to reduce fossil fuel consumption pushed for particularly onerous sacrifices for his own country's consumption, even though it is still developing:

> *It's one of those things that's just a continual evolving process, negotiation, renegotiation, of different needs. And whether humanity survives or not in the*

> *next few centuries is going to come down to whether people can make those choices in terms of the broadest possible perspective.*
>
> *I don't think there's one right answer. The simplest thing I can think of to say is to iteratively harvest the wisdom of the crowd. What's hard about that is when I say "the crowd", I mean the average citizen is living in terms of a much smaller world, just their local environment, so it's not as simple as a popularity contest. But also harvesting the wisdom of the experts, people involved in the science of it, in NGOs. One thing that comes to mind is this notion of "multi-stakeholder change processes" that bring representatives of different constituencies into one room to make a long-term learning community around such an issue, and not only provide sort of a well-appointed focus group, but also act as liaisons to each of their constituencies.*

In its abstractness and universalizability, ICM 4 is closely analogous to Kantian frameworks of moral judgment such as Rawls's "public reason", Habermas's "discourse ethics", and Kohlberg's "ideal reciprocal role-taking" (Habermas, 1990/1983; Kohlberg, 1973; Kohlberg, Boyd & Levine, 1990; Rawls, 1997, 1999). Indeed any of these frameworks, if used to generate *cross-systemically* justifiable judgments about issues demanding such justification, would produce ICM 4 arguments. At this level of abstraction, there is in fact a high degree of convergence between argumentation about interpersonal and intercommunal issues. What distinguishes ICM 4 from these other universalistic reasoning processes is that *it is generated from resolving contradictions among contrastive cultural or communal points of view*. An ICM 4 argument invokes a generic approach for making valid judgments for the purpose of resolving such contradictions. It always demonstrates an understanding of contextuality and derives its judgments from an *awareness of the need for valid sources of agreement across context*. These are the special demands of transcommunal issues.

"Is that all there is?" Notes on development beyond ICM 4

The adequacy of any ultimate perspective is its ability
to transform human experience so that it yields life instead of death.[6]
– Robert Bellah

It is possible to reason about transcommunal issues through structures that transcend universal paradigms. Such holistic or transparadigmatic reasoning is identifiable in statements that *coordinate* abstract rational frameworks, or *evaluate* such frameworks on the basis of higher, typically spiritually oriented, purposes. Because transparadigmatic reasoning structures operate at an even higher level of abstraction than is required for resolving transcommunal norm conflicts, my present view is that such structures are too general to be meaningfully considered part of the transcommunal domain.

Hence I do not include a "Level 5" in the ICM, though I affirm that reasoning about transcommunal issues can and does occur at this level of abstraction. The statement in the epigraph, for example, could conceivably arise as an evaluative principle for resolving intercommunal norm conflicts. Yet it could also arise as a solution to any number of other epistemological problems.

Transparadigmatic reasoning defines an upper limit for the domain of integrative consciousness, because at this level of abstraction the primary elements of cognition are

[6] By "life" Bellah implies meaning and wholeness; by "death", meaninglessness and disintegration (Bellah 1970, pp. 244-45).

no longer conventional, group-based systems of meaning, but universal frameworks of understanding and expression. Where has social convention gone? Let us review. Level 1 understood convention. Level 2 objectified and contextualized it. Level 3 systematized it across contexts. But at Level 4 it was sublimated within a higher principle, and an entirely new primary element was born. A new wave of development began. Hence at transparadigmatic reasoning we move beyond the post-conventional (which operates on conventions) and into a trans-rational wave of development, which operates on types of truth. This “post-post-conventional” stage has been clearly described by developmental researchers such as Smith (1991/1958), Wilber (2000), and Cook-Greuter (2005), and hypothesized or strongly intimated by researchers whose work principally examined rational structures, including Baldwin (1904), Maslow (1954), Loevinger (1966), Kohlberg & Power (1981), and Kegan (1980).

If we borrow Wilber (2000)’s metaphor of consciousness development as a flowing river, we can think about integrative consciousness as a “current” that emerges to address the problem of intercommunal norm conflicts, then merges back into the larger developmental stream at ICM 4. After this level there is no longer any reason to operate on group norms as cognitive units, for the claims of convention have already been subsumed within a larger category of understanding. Convention is the operating unit within the post-conventional wave of development, but beyond that we might say that it gets “chunked” within more general frameworks (Burtis, 1982).

In short, the ICM should be understood to address only the post-conventional wave of development, as applied to transcommunal issues.

Discussion

Developmental models are inherently controversial. They are also very difficult to empirically substantiate. And yet we must pursue them, for they offer the most powerful and practically useful framework for understanding people's ideas – a framework that is at once deeply qualitative and empirically quantifiable. To the extent they are accurate, developmental models allow us to "witness the genesis of structures of consciousness" (Habermas, 1990/1983, p. 5). Through them we can know where people's ideas have come from (the antecedent ideas from which they have grown, and the logical contradictions they were designed to solve), where they are now (the problems they leave unresolved, and the new problems they create), and where they may be headed (the types of concepts that would resolve the contradictions presently faced). Developmental models also help us in the pedagogical task of identifying the kinds of cognitive stimulus that are needed for growth at each point along a given person's learning pathway. Finally, they shed light on the overall nature and directionality of change in people's way of thinking – a teleology of meaning that offers each of us a plausible view of how our own way of thinking may be able to grow. Developmental models offer us answers to the question of what learning means.

I have pursued one such answer, in the area of cognition about transcommunal issues. To do so I have used the investigative tools of neo-Piagetian constructive developmentalism. This approach offers three powerful lenses for discerning logics of growth connecting diverse interpretations of reality: (a) a *constructivist* lens, which allows us to see how different individuals generate vastly different interpretations of the same transcommunal reality; (b) a *developmental* lens, which allows us to see how each interpretation represents a generative transformation of a simpler one; and (c) a *normative* lens, which allows us to see how such transformations represent real advances, in that they give us ways of thinking that are more cognitively autonomous, more deeply reflexive, more potentially self-correcting, more internally coherent, more ethically generalizable, and more powerfully able to address complex problems.

Applying these lenses to people's ways of reasoning about transcommunal issues has generated the ICM, a construct that can be used in further empirical study of the development of cognitive complexity in this domain. If it proves accurate, it will allow us to understand developmentally how people come to have a global mindset.

Contribution to existing scholarship

The ICM both builds on and moves beyond previous scholarship. This scholarship includes work on moral reasoning, political reasoning, global citizenship/cosmopolitanism, and intercultural competency.

Moral reasoning

The ICM owes an obvious debt to the tradition of cognitive-developmental research into moral reasoning descended from the work of Jean Piaget and, more directly, Lawrence Kohlberg (Haste, 1992, 1993; Kohlberg, 1984; Kohlberg, Boyd, & Levine, 1990; Kohlberg & Candee, 1984; Kohlberg & Mayer, 1972; Piaget, 1965/1932; Piaget, & Weil, 1995/1965; Perry, 1970; Rest, 1983, 1986; Rest, Narvaez, Thoma & Bebeau, 1999, 2000; Selman, 1971, 1980). This body of scholarship has generated understandings regarding the development of conventional and post-conventional reasoning that are fundamental to understanding the development of reasoning about intercommunal issues.

The ICM's primary contribution to the Kohlbergian research tradition is to apply its methods to a domain of thought that has not been a specific concern for this tradition. Research on moral reasoning has not systematically investigated the specific cognitive skills and concepts involved in reasoning about complex transcommunal issues. These include learning to overcome ingroup-preferential biases, transcending particularistic loyalty demands, articulating cross-culturally valid frameworks of analysis, and developing a sophisticated understanding of cultural differences and similarities. None of Kohlberg's nine classic moral dilemmas attempts to elicit these skills (Kohlberg, 1984). The same is true of his research on political reasoning, which posed intra-societal questions about housing laws, civil disobedience, press freedom, and income distribution, without invoking issues of intergroup or international tension (Kohlberg,

1975). Given that the development of cognitive complexity has been found to be highly domain-specific (Dawson, Xie, & Wilson, 2003; Dawson-Tunik et al., 2005; Fischer, 1980, 2006), we should not expect higher-order reasoning about intergroup dilemmas to be an automatic outgrowth of higher-order reasoning about moral dilemmas, especially if these moral dilemmas have not been designed to test the cognitive skill set described above.

That the Kohlbergian moral dilemmas differ in focus from those I have used in this study is significant, because it means that they investigate a different set of skills and concepts. While it is true that participants' *responses* are evaluated on their structure rather than their content, the focus of the dilemmas themselves is critical in that it determines what kinds of reasoning structures can be evaluated. Kohlberg's dilemmas focused on macro-moral questions regarding just ways of organizing social institutions, rather than questions of interpersonal relations (Rest et al., 1999). By contrast, my own dilemmas focus on issues that arise in the specific situation of conflict or competition between norms of different communities. While it stands to reason that developing the types of ethico-epistemic capacities studied by Kohlberg would tend to support more complex reasoning about ICM dilemmas, the concepts and skills involved are identifiably distinct, and are called on in different situations. In particular I would highlight the way in which complex moral thinkers with limited international experience are often bewildered by challenges suggesting that their whole structure of argumentation is embedded within a particular culture or civilization.

Even within the domain of moral reasoning Kohlberg's work was not exhaustive in scope, as several researchers have shown (Pritchard, 1991; Habermas, 1990; Rest et al., 1999; Walker, deVries & Trevethan, 1987). Kohlberg himself came to argue (1986) that his theory investigated only one aspect of this domain:

> The research program of myself and my Harvard colleagues has moved …to restricting it to the form or cognitive-structural stage of moral judgment as embodied in judgments of justice….The restricted range of the moral domain as we have now come to define it for our own theory or research program does not imply that these restrictions should guide all fruitful moral psychology research. The moral domain is large and varied, and no one approach to is conceptualization and measurement will exhaust or explain the variance in it. (499-500)

To be sure, the ICM does build closely on Kohlberg's theory, which provides a broad model of how people learn to judge public issues in logically comprehensive ways. At the same time, by applying this framework specifically to *intercommunal* issues, the ICM highlights a set of mental demands that have received little emphasis in the research on justice reasoning, in particular, a transcendent understanding of culture and way of generating ultimate commitments. It thus offers an illuminating link between the insights of research on moral reasoning and the study of intercultural competence and cross-cultural adaptation (discussed below). In relation to issues of intergroup concern, transcending culturally embedded norms is vital to generating just and adequate solutions.

Political psychology

In analyzing frameworks of understanding issues with obvious political content, the ICM is closely related to studies in the field of political psychology, including Tetlock's work on political ideology (1984), Adelson's studies on ideology development (1966, 1969, 1971, 1975), and, in particular, the neo-Piagetian research on political reasoning by Ward (1981), Rosenberg (1988, 2002), and Chilton (1988). Like the research on moral reasoning, these studies have contributed to the ICM's approach to analyzing the development of cognitive complexity, but have not addressed the specific challenges inherent in the domain the ICM addresses. In referring to these skills, I have chosen to use the term "integrative consciousness", rather than "political consciousness", specifically to emphasize people's reasoning *qua* members of distinct solidary groups. In particular, I am interested in the extent to which they are able to construct general frameworks that resolve contradicting claims of truth, right, and commitment across boundaries of civic identity and sociocultural authority.

Moreover, the methods of constructive developmentalism are at present largely dormant within the field of political psychology, which instead focuses primarily on examining the content, variation and origins of political attitudes and ideologies, and their potential causal relationship with assorted social and behavioral variables (Ashton et al., 2005; Conover & Feldman, 2004; Feldman, 2014; Jost & Sidanius, 2004; Simon & Klandermans, 2001).

Social psychology

Global thinking and identification is a subject of growing interest to social psychologists, who have produced a series of measures attempting to capture this construct. These include scales of Global Orientation (Chen, 2013), Identification with All Humanity (McFarland, 2012), Cosmopolitanism (Cleveland, LaRoche, & Papadopoulos, 2009), and Global Identity (Türken & Rudmin, 2013). As can be discerned from the names of these measures, social psychologists have focused primarily on examining the identity component of global thinking, rather than universalistic structures of reasoning. Moreover, they have not approached this issue with either a constructivist or a developmental lens, as can be seen from the reliance of self-reports in the above measures. From the constructive-developmentalist viewpoint, asking respondents to assess their own propensity to think with a "global perspective" relies on the unsound assumption that all respondents possess equal capacity to understand what such a concept means. With its constructive-developmentalist lens and Piagetian empirical tools, the ICM has the potential to contribute significantly to research on global thinking within the field of social psychology. To the extent one can judge from the admittedly limited evidence of a group discussion held during a 2013 symposium entitled *Identity in a Globalized World*, there appears to be a lack of satisfaction within social psychology with existing measures of global thinking (Reese, Proch, Cohrs & Gleibs, 2013).

Identity development and intercultural competence

The ICM has the potential to contribute to existing frameworks for conceptualizing and measuring identity development and intercultural competence. The ICM presents suggestive parallels with these literatures, which emphasize development from unquestioned identities to confusion and exploration and finally to a self-authored identity with acceptance of multiple perspectives (AACU, 2007; Bennett, 1993; Braskamp & Engberg, 2011; Chickering & Braskamp, 2009; Chickering & Reisser, 1993; Cross, 1991; Glass, 2012; Josselson, 1996; King & Baxter Magolda, 2005; Marcia, 1980; Pascarella & Terenzini, 2005; Phinney, 1990; Torres & Hernandez, 2007).

At the same time, this literature typically regards mutually affirming communication among people of diverse backgrounds as the *summum bonum* of cross-cultural perspective-taking. As Landreman (2003) concluded in a thorough review, the literature on intercultural competence in particular has failed to examine underlying assumptions regarding intergroup differences. More recent work done in this area has also failed to conceptualize cultural understanding in a framework broad enough to clarify and overcome the limitations of context-focused frameworks such as multiculturalism (Braskamp & Engberg, 2011; Glass, 2012; Global Perspectives Institute, 2011; King, 2009; King & Baxter Magolda, 2005; Torres & Hernandez, 2007).

Lacking sufficient accountability to selfconsciously universalizing lines of inquiry in moral philosophy and developmental psychology, the intercultural competence literature has produced conceptions of learning that are unfavorable to the development of

generalized frameworks of cross-cultural judgment, and that are therefore disempowering in the face of critical challenges that span boundaries of civic identity. The ICM thus offers the potential for a more comprehensive framework, one that has the capacity to seek resolution to questions that are beyond the means of multiculturalism (ICM 2), and even "inter-culturalism" (ICM 3), to address.[7]

The developmental lens offers a key insight to the study of intercultural competence, which is that we must embrace not only diversity, but also development. Here we return to the criticism I raised earlier against the effort to cultivate "global citizens" simply by expanding citizens' identification horizontally outward, without recognizing that this goal is only attainable through a vertical process of cognitive *growth*. Growth necessarily implies a *hierarchy of values*, which for some may seemingly violate the egalitarian spirit of the horizontal dimension through which they prefer to approach the issue. Nonetheless hierarchy is implicit in their own value structure.

And of course it must be. To understand how people get to global consciousness, we must think about more than just the horizontal dimension (comprehensiveness), but also the vertical dimension (autonomy and reflexivity). Vertical hierarchy does not conflict with horizontal inclusiveness, in fact, because all developing persons have the

[7] Examples of such questions would be, "How does one decide whether constitutional democracy is the best available system of governance for modern state societies outside the Western tradition?" Or, "Can I justify the assumption that my own society constitutes a unique standard of civilization?"

full range of consciousness potentially available to them, and every society enfolds the full range of consciousness within it. The lines of division do not run *between* different cultures and persons, but *within* them (Wilber, 2000).

Research on global citizenship/cosmopolitanism

The literature on cosmopolitanism and global citizenship has not produced a coherent theory of the structure, composition, or genesis of cosmopolitan thinking. While there is a rich literature on cosmopolitan citizenship and the importance of educating students toward it (Appiah, 2006, 1996a, 1996b; Noddings, 2005; Nussbaum, 1997, 1996a, 1996b; Reimers, 2006, 2008), little research has been done on how a global outlook *develops* (Reimers, 2006; Mansilla & Gardner, 2007; UNESCO, 1995, 1996a, 1996b). Scholarship in this field puts forth a worthy goal but no way to reach it.

Only Hinton (2012) has examined these questions through a constructive-developmental lens. Her dissertation produced a provisional "ruler" (based on Fischer's General Skill Scale [1980, 1986]) for measuring the development of "cosmopolitan skills" among students and recent graduates of a cosmopolitanism-themed high school. She broke new ground not only by applying a constructivist framework to the study of cosmopolitan skills, but also by attempting to measure their development along Fischer's universal scale of learning. However, by interviewing such young subjects, her observations of students' "cosmopolitan skills" more closely reflect the conventional ingroup norms emphasized by the school than truly transcontextual or paradigmatic

understandings of global affairs on the part of the students. By tracing development in this domain to a higher level of complexity using data gathered from dozens of expert adult respondents, the ICM is better able to fill the lacuna Hinton identified.

What is needed

In sum, none of the literatures above has produced a satisfactory framework for conceptualizing and measuring the development of a global mindset. The ICM represents an initial attempt to fill this gap. It does so by applying the powerful concepts and methods of developmental epistemology to analyzing reasoning on transcommunal issues among a sample of respondents chosen to represent the full range of cognitive complexity in this domain.

Potential criticisms and limitations

A model of this nature is subject to a variety of strong critiques on both theoretical and methodological grounds. While it will be the burden of my dissertation to address these in full, I shall attempt here to raise some of the more important likely criticisms from within psychology, and briefly foreshadow how they might be addressed.

The cognitive skills measured by the ICM are not necessarily best described in terms of a single integrated structure.

My principal justification for treating the skills measured by the ICM as an integrated whole is that they empirically appear together in response to the same environmental demands. I address this issue in detail in Appendix C.

The methods used for developing the ICM rely on interview data, which are limited by participants' abilities to speak articulately, or even to accurately represent their own way of thinking. "[P]eople know more than they can tell" (Shweder et al., 1987, p. 16, cited in Rest et al., 1999, p. 20).

The interview method I have used does face a challenge in accessing tacit or intuitive knowledge that subjects are unable actively to put into words. That said, there are several reasons to believe that my interviews were able to generate a fairly clear picture of subjects' reasoning, at least in aggregate.

a) For one thing, the interviews were based on issue statements with opposing "Group A" and "Group B" arguments, which allowed subjects to recognize arguments that made sense to them, rather than having to generate these arguments from scratch. The interviews were therefore able to activate subjects' existing interpretive schemas and offer them alternative tracks for constructing an argument. In this way, the interviews aimed at providing enough material to activate subjects' existing thought patterns while leaving them the space to justify their choice by their own argumentation (what Rest, Narvaez, Bebeau &

Thoma refer to as balancing “top-down processing” and “bottom-up processing”) (1999, p. 6).

b) Once subjects offered an argument, the interviewer used multiple follow-up questions to continue “double-clicking” on subjects’ statements until they expressed the full depth of their justification for the judgment they made. This provided an additional way of ensuring that subjects were able to express the full scope of their reasoning about each issue.

c) Finally, the interviews went through an extensive piloting process, including iterative revisions and feedback from subjects themselves, to ensure that the issue statements made sense and that the follow-up questions were appropriate for addressing subjects’ real thinking about these issues.

It should also be noted that the interviews did not pretend to accurately measure the sophistication of any one respondent’s reasoning, but rather to gather a wide range of responses so as to identify general patterns. For the purposes of developing the model, the important thing is not to accurately rate specific individuals, but to draw out a range of arguments from simple to complex. Indeed my decision to include the expert sample was based on the assumption that others might not be able adequately to articulate answers at the higher levels of complexity.

At a later stage of research, I plan to supplement interview and questionnaire data with data from a pure recognition task (a multiple-choice test), which will offer the opportunity to cross-validate the data from verbal responses.

The patterns of thought theorized in the model as being developmentally superior may simply be more appealing to older participants based on their particular life experiences, political attitudes, personality, etc.

At present the ICM represents a construct subject to additional empirical research. The cross-sectional study for this dissertation is designed to address claims such as the above (including cohort effects), although the model will ultimately need to be subjected to longitudinal testing, cross-cultural studies, and validation through alternative empirical approaches.

The model does not address developmental precursors to Level 1, which itself is already quite sophisticated.

The ICM attempts to fill a specific gap, which is how to conceptualize and measure the development from conventional to contextual, transcontextual, and finally paradigmatic ways of constructing communal norms. It does not pretend to add to our understanding of how we develop the capacity for conventional thinking, ie, the capacity to see communal norms and meanings as legitimate in the first place.

Potential implications

A fresh contribution of the ICM is to offer a coherent theory of the structure and composition of cosmopolitan thinking, and its genesis. Just as biology without the concept of evolution is mere taxonomy, discussions of “cosmopolitanism”, “identification with all humanity” or “global competency” are, without a theory of structural development, essentially descriptive rather than theoretical or predictive. This field has not yet matured from an “entity” orientation to a “process” orientation (Kegan, 1982, p. 13). A genuine understanding of this domain requires a holistic model combining a psychological theory of development, a philosophical justification for the direction that development takes, and empirical observation of whether development indeed moves in that direction. Only a structural-genetic approach allows us to bring these three sources of knowledge under one roof, allowing us to understand more deeply what cosmopolitan consciousness is and where it comes from.

Pending empirical testing, the ICM may identify a general learning pathway toward global consciousness and the capacity to construct integrative solutions to complex global problems. It also potentially offers a framework for qualitatively *and* quantitatively assessing a learner’s complexity of reasoning in this domain.

One of the truly exciting things about the ICM is the possibility of discovering empirically a learning pathway that leads inexorably toward normatively desirable ends. Following

Kohlberg and others (Greene, 2003; Kohlberg, 1971; Rest, 1979), I postulate an inherent connection between “is” and “ought”, in that the empirical existence of hierarchically integrating epistemic strategies – each one believed by its adherents to be more logically adequate than the one before – offers evidence of the ethical and epistemological superiority of higher stages. In every interview I have asked respondents an “evolution of meaning” question (“I used to think…; now I think…”), and no respondent has ever reported changes in thinking that violate the general directionality of the ICM. For example, consider this excerpt from an interview about the “universal values” issue,

> [Interviewer] *Has your way of thinking about this issue changed?*
>
> [Participant] *It has. I once thought that it was not possible to have a full dialogue between cultures about a given problem, because the way different cultures define concepts is not completely the same. But I think this has changed. Different cultures can define problems or concepts differently, but there is always a value orientation (the source and reasons behind a moral standard); this is universal to all cultures.*

Similarly, we have responses that suggest an evolution of meaning themselves, such as this one that we have seen:

> *It is easy to say 'no' and embrace basically cultural relativism. But for some issues there probably are societies that have 'better' cultural values for the issue in question. … I think it is politically correct (and easy) to be culture-agnostic.*

By saying “politically correct”, this respondent seems to suggest that he sees how the pluralistic stage (ICM 2) represents a correction of ethnocentric views (ICM 1). And then by referring to culture agnosticism (ICM 2) as “easy”, this respondent indicates that he sees it as an approach that is simpler and less preferable than his own (ICM 3+).

Such empirical confirmation of the ICM's developmental logic offers initial tentative evidence that the ICM indeed describes growth toward more adequate structures of reasoning, a finding that aligns with strong logical and normative arguments pointing in the same direction. In this way the ICM has the potential to offer us a solid foundation for sorting and ranking arguments about intercommunal issues based on the degree to which they represent universally credible normative thinking – that is, the degree to which they are cognitively autonomous, ethically generalizable, logically comprehensive, internally consistent, potentially self-correcting, and capable of resolving complex problems.

The ICM forms the foundation of a long-term research program that aims to make the following theoretical and practical contributions: (1) advance our understanding of how to educate complex, integrative thinkers capable of managing the cognitive demands of globalized society; (2) provide effective tools for measuring the development of this kind of thinking; (3) leverage these assessment tools in empirically examining relationships between integrative consciousness level and other variables; (4) provide curriculum and self-study tools with which people can learn and practice more integrative approaches to intercommunal problems, and (5) use theory and data to inform conflict resolution strategies.

Let me pick up on that last point to close with a final reflection. The ICM suggests that the roots of intercommunal conflicts – and their resolution – lie partly in the cognitive schemas with which we *construct* the reality we inhabit. Indeed, it suggests that these problems are in part an enactment of the simplistic interpretive schemas we impose upon the world around us. In this respect, the source of conflict in intercommunal relations is not an external adversary, but an internal one – our own way of understanding the world.

Appendix A: Structural guidelines for probing and scoring

LEVELS OF INTEGRATIVE CONSCIOUSNESS (structural guidelines for interview probing and transcript coding)

	Conventional (intrasystemic)	Post-conventional (cross-systemic)		
2014/11/26	1 CONVENTIONALISM Sublevels: (a) concrete; (b) abstract	2 CONTEXTUALISM	3 TRANSCONTEXTUALISM	4 UNIVERSAL PARADIGMS
Organizing principle	Legitimate sociocultural authority: (a) Passively identifies with communal meanings; (b) Can explain legitimacy of these meanings.	Contextualism: Can explain legitimacy of variations among systems of meaning (in light of context dependence).	Cross-contextualism/Transculturalism: Can explain limits of contextualism and legitimacy of judgments across systems.	Principled universalism: Can explain general approaches/processes for making judgments across systems.
Summary characteristic	Concerned w/community-level norms that transcend narrow personal & factional loyalties; sees community of meaning as essential and natural (nonarbitrary).	Critically reevaluates system-level judgments and commitments, but does not possess a conceptual framework for reenvisioning them at a cross-system level.	Articulates objective criteria for generating specific cross-system judgments & commitments, w/o integrating these under a general principle.	Articulates universalistic principles that generate trans-systemic judgments & commitments and dissolve tensions among diverse perspectives.
Orientation	(a) Identification with social community; (b) System integrity	Each system's arbitrariness/context dependence. Not yet able to conceptualize a governing principle that would overcome this arbitrariness.	Non-arbitrary, context-independent judgment; specific principles that justify constructions within contexts; limitations of contextualism	General frameworks or approaches for justifying constructions within contexts; a general point of view for making context-independent judgments
Perspective	Sociocentric perspective: Does not take a "prior-to-society" perspective; takes each sociocultural system as "given" and discusses their differences as if they were primordial.	Anti-perspectival: Sees each sociocultural system as relative to its context; therefore, (1) questions native system as arbitrary and (2) sees no basis for trans-systemic judgment.	Transperspectival: Compares across contexts and combines into specific abstract systems of cross-contextual judgment	Aperspectival ("the view from everywhere"): Synthesizes cross-contextual perspectives into general frameworks, processes, or principles of analysis
Source of right	(a) Sociocultural authority (concrete); (b) Sociocultural authority (abstract)	Context	Agreement across context	Sources of agreement across context
Comprehensiveness/ Sphere of generalization	Able to generalize to the level of the whole society (imposing impartial standards across individuals and concrete primary groups). May ethnocentrically apply these generalizations across cultures OR assume cross-cultural generalizations to be impossible due to essentialistic differences among groups.	Able to explain why (ethnocentric) generalizations at the previous level can't generalize beyond that level	Able to explain the necessity for cross-order generalizations (these differ fundamentally from ethnocentric Level 1 generalizations in that they incorporate the insight of relativism even as they seek to go beyond it). However, lacks an adequate conceptual framework for generating or organizing these cross-order generalizations.	Able to articulate paradigmatic frameworks that generate and justify cross-systemic generalizations.
Emergent unit of cognitive control	System-level structures of meaning (primary unit), which include important ego-transcendent values such as group identity and commitment. Multiple units are 'unmapped' (seen as primordially different).	Arbitrariness or context-dependence of variations among systems of meaning (now 'mapped' inside a single category of variation)	Sources of meanings that are legitimate *across* sociocultural contexts (based on the recognition of regular, non-arbitrary patterns of variation among systems of meaning)	General analytical approaches from which legitimate cross-systemic meanings emanate
Committed to	Maintenance of group meanings	Attack on arbitrariness	Cross-contextual purposes	General frameworks coordinating L3 purposes
Emergent analytical dimension	Able to understand and identify with collective values and norms that transcend egocentric interests	Able to think from the perspective of multiple sociocultural contexts at the same time	Able to contemplate different institutional variations within different contexts, and vice versa	Able to *coordinate* different Level 3 dimensions of cross-contextual judgment into a general paradigm or process of reasonable comparison
Dimensions of variation upon Level 1 conventions	Zero	One	Two (=one dimension of variation upon Level 2 cross-contextual variations)	Three (=one dimension of variation upon Level 3 principles of cross-contextual judgment)
Emergent capacity	(a) I can identify with the collective meanings of my group; (b) I can think abstractly about why these meanings are legitimate	I can see how these meanings are constructed and context-dependent	I can see how this process of construction is itself dependent on objective conditions. I can put the context itself in context. I can compare across contexts on objective evaluative dimensions.	I can articulate a PROCESS of reasonable comparison that is consistent across any dimension of comparison.
Deficiency/ developmental need	(a) Cannot independently construct the unit (meaning system); (b) Cannot "map" the units, ie, cannot subsume them within a larger dimension of variation. Units therefore seen as static and pregiven (essentialistic).	Cannot map the VARIATIONS; ie, cannot subsume them within a larger dimension in which the variations themselves vary. Variation now seen as pregiven, essentialistic, unjudgeable, inescapable. This results in the exaltation of context and diversity, and the disparagement of judgment and hierarchy.	Cannot map the DIMENSIONS of variation. For example, does not possess a system for answering the Q, "Which kinds of variation matter more?"	Lacks a common, absolute ground in which to hold universal rational truths. Experiences truth spheres (paradigms) as lacking ultimacy or common foundation.
Differentiates from ("object")	Egocentric/factional interests	Ingroup-embedded norms	Context dependence	Specific, rule-like injunctions
But fuses with ("subject")	Community of meaning	Perspectivism/context-dependence	Specific cross-contextual injunctions	General approach or process
Integrates x (within Y)	Egocentric and primary reference group meanings (within SYSTEM-LEVEL MEANINGS)	Systems of meaning (within new dimension of context-dependent VARIATION)	Contextualist cross-system variation (within SYSTEMS OF VARIATION)	Systems of cross-systemic variation (within rational PRINCIPLES of variation)
Exemplar	*"Other countries should imitate my country's democratic system."*	*"To say that other countries should also adopt democracy is naive and ethnocentric. The correct form of government for those countries can only be determined in context."*	*"The argument that other countries should adopt democracy need not be naive. Democracy can take different forms according to context, and can be justified in terms of those countries' own values."*	*"Democracy is not an end in itself, but is merely the best system we have yet discovered for supporting people's growth, self-expression, and empowerment in complex state societies."*
CORRESPONDING SCALES				
Kohlberg SISS	(a) Stage 3; (b) Stage 4	Stage 4.5	Stage 5	Stage 6
Kitchener/King RJM	(a) Stage 3; (b) Stage 4	Stage 5	Stage 6	Stage 7
Fischer GSS	(a) Representational systems; (b) Single abstractions	Mappings of abstractions	Systems of abstractions	Single principles
Commons & Richards MHC	(a) Concrete; (b) Abstract	Formal	Systematic	Meta-systematic
Suedfeld IC	Level 1	Level 3	Level 5	Level 7

Appendix B: Sample interview protocol ("Foreign NGO" dilemma)

Interview protocol

Introduction

This survey contains questions designed to explore the way you reason about public issues. Your responses will be analyzed based on the structure of reasoning employed, rather than their content, so there are no right or wrong answers.]

The purpose of the survey is to understand the **kind of thinking you actually use** to make judgments about the issue presented. So the important thing is to describe clearly and thoroughly your best thinking about the issue.

You will first be asked to provide some personal data. I will then ask you to read about a challenging international issue. After you read a description of the issue, you will be asked to analyze it, identify relevant considerations, and suggest how to address it. You will then be asked to discuss your thinking about the nature of things like knowledge, justice, civic duty, and/or intergroup differences.

Issue statement

A foreign non-governmental organization (NGO) that advocates human rights has just published its annual "World Human Rights Report." In its recent report, the global NGO has pointedly criticized your country for human rights violations. The report echoes criticisms that some foreigners have long made of your country. The members of this NGO come from many countries, although only a few come from your own country, and all the members live overseas. In response to the report, some people in your country (Group A) claim that the organization's criticisms are part of an effort to disparage your country and reduce its influence around the world. Other people in your country (Group B) claim that the criticisms simply reflect a misunderstanding of your country's history, culture, and values. Many members of both Groups A and B are now criticizing the citizens of your country who joined foreigners in preparing this disparaging report.

Questions：

1. Do you agree with Group A's claim that the NGO's criticisms are part of an effort to disparage your country and reduce its influence around the world? Why or why not? Explain your view in full.
    a. Why do the people in Group A think this way?
2. Do you agree with Group B's claim that the NGO's criticisms reflect a fundamental misunderstanding of your country's history, culture, and values? Why or why not? Explain your view in full.
    a. Why do the people in Group B think this way?
    b. What is meant by, "Chinese culture and values"?
    c. What makes cultures similar to or different from each other?

   d. Who is best qualified to understand what Chinese culture and values should be like?
3. Different cultures generate different perspectives on the issue of so-called "human rights." Why?
   a. Given that these different perspectives exist, is it possible to determine a most reasonable and objective way of thinking about this issue? If yes, how? If not, why not?
   b. On what basis would you personally decide your position on this issue?
4. From your perspective, is it appropriate for the foreign NGO to pass judgment on your country's practices? Why or why not?
   a. In response to question #4, some people try to make the claim that there is such a thing as 'universal values.' In your view, do so-called 'universal values' exist? Why or why not?
5. Is your way of thinking about these issues different from what it would have been in the past? If so, how has your thinking developed over time, and why?
   a. [USE IF NEEDED] If you can, please describe a specific event (such as an international or domestic incident, a personal experience, a lecture, a book, or a conversation) that shaped your way of thinking about these issues.
6. Did the citizens of your country who participated in preparing this report do anything wrong? Why or why not? What should they have done differently, if anything?
   a. What do you think should be the most fundamental aims for a citizen of your country? Why?

Appendix C: Treating ICM levels as integrated structures

Many abilities described in the psychological literature as general capacities turn out to be "summary variables" of items that are in fact weakly correlated (Fischer & Immordino-Yang, 2002). Researchers who propose a general construct bear the burden of providing evidence of a "central generalized structure that generates common activity across a wide array of tasks" (Fischer & Bidell, 2006).

At the present stage of research, my principal justification for treating the skills measured by the ICM as an integrated whole is that they empirically appear together in response to the same challenges. Recall that I have defined "domain" as an identifiably distinct set of interrelated cognitive demands that tend to appear together in the environment. Integrative consciousness constitutes a domain, I contend, because it poses the distinct *problem* of reflecting comprehensively on issues that are subject to consensual resolution among different communities of meaning (for example, how to address cross-border corruption, how a difficult episode of Japanese-Korean history should be memorialized within the United States, whether and how to establish a system of global Internet governance, etc.).

That such a problem (or "set of interrelated cognitive demands") exists is a conclusion I derive neither from theoretical generalization nor from empirical synthesis, but instead from the observable fact of mutual incompatibility among meanings constructed within different social worlds. The set of mental demands arising from this incompatibility generates a field of cognitive development in which individuals have the potential to operate upon sociocultural norms at increasingly detached levels of

abstraction. Even if overall development of this field could be analyzed into distinct sub-skills, these could be expected to develop together as they are called for together, in response to the problem of concern to this research. Hence the domain of interest in fact defines the scope of the skill set I attempt to measure.

From this standpoint, one could argue that there is some empirical justification for measuring together whatever skill sets appear in response to intercommunal problems, regardless of whether it might be possible to further subdivide them. I would argue that the relationship between the broader skill set and possible subsets is not that of a construct derived from items, in the way that "social class" is constructed from clearly discrete items such as income, education level, frequency of museum visits, and frequency of watching football games. Rather, the relationship is that of a general variable to various specific ways in which it can be expressed – akin to that between "appreciation of literature" and "appreciation of poetry/drama/novel". The kinds of statements one could derive revealing a respondent's appreciation of drama would almost certainly indicate sensibilities that applied also to appreciating other forms of literature. If we knew that a researcher had started out with the domain of "literature appreciation" and had operationalized it into appreciation of poetry, drama, and novel, we would perhaps not question whether it makes sense to think about "literature appreciation" as a "central generalized structure", or whether it relates meaningfully to those subdomains. Arguably, the relationship does not pose the same types of problems as that between "social class" and clearly discrete measurable items like education level and income.

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