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Knowledge and beliefs about national development and developmental hierarchies: The viewpoints of ordinary people in thirteen countries

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ABSTRACT

Scholars and policy makers have for centuries constructed and used developmental hierarchies to characterize different countries. The hypotheses motivating this paper are that such social constructions have been circulated internationally, are constructed similarly in various countries, and follow the social constructions of elite international organizations, such as the United Nations. This paper uses data from 15 surveys in 13 diverse countries to study how developmental hierarchies are understood in everyday life. Our research shows that most people have constructions of developmental hierarchies that are similar across countries and are similar to the developmental hierarchies constructed by the United Nations. These findings suggest that developmental hierarchies are widely understood around the world and are widely available to ordinary people as they make decisions about many aspects of life.

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1. Introduction

This paper uses data from ordinary people in 15 regional or national surveys in 13 diverse countries to examine the social constructions of ordinary people concerning developmental hierarchies. We address three interrelated questions: (1) whether people in everyday life have models of developmental hierarchies; (2) whether the general structures of developmental hierarchies held by ordinary people are similar across geographical settings; and (3) whether the developmental models held by ordinary people generally match commonly-used constructions of development used by international institutions. In our 15 surveys, we asked representative samples of individuals to rate several countries on their levels of development. Here, we analyze the ratings that respondents gave to these countries. We also compare how ordinary people rate countries on development with how the United Nations (UN) rates the same countries on its Human Development Index (HDI). These

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analyses show whether individuals perceive an international development hierarchy and the extent to which their perceived hierarchies match those commonly used by international organizations.

The motivation for this research comes from the large and expanding literature describing and explaining the importance of a world culture or belief system (Krücken and Drori, 2009; Meyer et al., 1997; Thomas et al., 1987). This world culture originated in the West, but has spread worldwide. It is a system of beliefs and values for understanding the world and for living in the world. It also provides standards of behavior and motivations for action. Among its principles are the importance of the individual person, education, freedom, equality, certain family forms, justice, and human rights. One particularly important element of world culture is the idea of progress, development, and developmental hierarchies.

Like other elements of world culture such as human rights, justice, and equity, development and developmental hierarchies are social constructs that can be especially powerful forces affecting decisionmaking, behavior, and social change. World culture has been an important force generating many societal changes, including worldwide increases in school attendance and in the provision of a common public school system and curriculum (Baker and Letendre, 2005; Benavot et al., 1991; Chabbott, 2003; Frank and Meyer, 2007). It has been shown to be an important factor spreading international support for human rights (Cole, 2005; Elliott, 2007; Koo and Ramirez, 2009; Meyer et al., 2010; Tsutsui and Wotipka, 2004; Wotipka and Tsutsui, 2008), family planning and population control (Barrett and Frank, 1999; Thornton, 2001, 2005), opportunities for women (Berkovitch, 1999), the elimination of female genital cutting (Boyle, 2002; Yount, 2004), changing the criminal regulation of sex (Frank et al., 2010), and changing several elements of family life, including marriage and gender relations (Thornton, 2001, 2005).

The power of the idea of development is exemplified by the fact that the United Nations and other international organizations specify development to be a central goal for the countries of the world. Governmental and non-governmental agencies generally enthusiastically endorse development and strive to implement it.

Unfortunately, there is little systematic evidence concerning our three questions about the extent to which the social construction of developmental hierarchies has been circulated throughout populations and is known and endorsed by ordinary people. The research reported in this paper was designed to help fill this gap by documenting the extent to which ordinary people understand the idea of development, whether the general structure of such ideas is similar across settings, and how such understandings are similar and different from those that international organizations endorse. Our research, thus, provides a valuable test of the permeation of this element of world culture beyond the level of governments, nongovernmental organizations, laws, and textbooks to the ideas of ordinary people around the world. In this way, our research goes beyond much of the world culture literature in that we go below the societal or organizational level to study the ideas of people in everyday life.

Our paper is a first effort to understand how ordinary people construct and understand developmental hierarchies. Because of our emphasis on general patterns of the dissemination of developmental constructs internationally, several important questions about the causes and consequences of these ideas go beyond the current scope of our research. These questions include, for example, how people learn and construct developmental hierarchies, what attributes of people, such as education and labor force participation, facilitate or hinder the learning of developmental hierarchies, and how perceptions of developmental hierarchies influence decisionmaking, behavior, and other beliefs and values. These questions are important ones for future research that are best conducted with longitudinal data that are not currently available.

We now turn to the ways in which academics and policy makers have, for centuries, constructed and used developmental hierarchies. As part of this discussion, we present the three hypotheses guiding our research. We then discuss our 15 data collections in the 13 countries and our methods of analysis. Then we present our results and conclusions.

2. Theoretical background

Scholars, policy makers, and other elites have at least since the 17th century constructed and used developmental hierarchies to think about different countries. Some of the important manifestations of the construction and use of hierarchical thinking in rating countries are the centuries-old models of development or modernization—concepts that we use interchangeably in this paper. The developmental model assumes that countries progress along the same trajectory, but at different rates, so that at any one time societies are believed to be at different levels, thereby, forming a developmental hierarchy (Harris, 1968; Mandelbaum, 1971; Nisbet, 1969/1975; Sanderson, 1990; Thornton, 2001, 2005). For centuries, scholars and other elites have placed northwest Europe and its overseas migrant populations at the top of this developmental hierarchy, the indigenous peoples of America, Australia, and Africa at the bottom of the hierarchy, and other countries scattered elsewhere along the hierarchy.

The United Nations uses this model to place countries into categories of developed and developing, with a least developed subgroup divided out of the developing society group (UN Statistics Division, 2009). The UN also regularly constructs and publishes its HDI, which numerically rates countries on a scale from low to high development (UN Development Programme, 2007/2008). The World Bank categorizes countries into developing and industrial, while the International Monetary Fund uses two categories of development: the advanced economies; and the emerging and developing economies (World Bank, 2010; International Monetary Fund, 2009).

For centuries, this developmental hierarchy has not been perceived statically but as a dynamic model describing the pathway of countries along a trajectory (Harris, 1968; Mandelbaum, 1971; Nisbet, 1969/1975; Sanderson, 1990). In this model,

countries can and do move upwards along this perceived trajectory of development. Japan and other East Asian countries, such as China, Korea, and Taiwan are examples of countries that are seen to be ascending the ladder. Other examples of perceived upward movement include several countries in the Middle East, such as Qatar, Saudi Arabia, and the United Arab Emirates. Thus, although the idea of hierarchies is very old, the positions of countries in the hierarchy are not fixed but can change as the relative positions of countries rise and fall.

Although an overarching model of development has permeated scholarly and policy discussions, there have been important variations on this overall construction. For example, both capitalism and communism have had constructions of development, each with quite different trajectories and methods. There also have been discussions of multiple or alternative modernities, which question the notion of a dominant development model (Eisenstadt, 2000; Taylor, 2004). Some literatures also have brought to discussions of development a wide range of sometimes negatively evaluated components of development, including such things as sexual excess, atheism, and violence (Liechty, 2003; Deeb, 2006; Yount et al., 2010).

Our interest in studying the views of ordinary people concerning national developmental hierarchies does not come from a belief that developmental models are useful paradigms for research or public policy. We know that developmental hierarchies and the related theories of modernization have been strongly challenged in the social science and policy literature (Amin, 1989; Baker, 1998; Bock, 1956; Böröcz, 2000; Böröcz and Sarkar, 2005; Cesaire, 1972; Chakrabarty, 2000; Comaroff and Comaroff, 1992; Hodgen, 1964; Jennings, 1975; Mandelbaum, 1971; Nisbet, 1969/1975; Szreter, 1993; Tilly, 1984; Wallerstein, 1991). At the same time, as we noted earlier, developmental models continue to influence certain parts of academia, public policy, and the language and programs of many international organizations. We also expect that these models are widespread and used in everyday life in much of the world.

This socially-constructed worldview of developmental hierarchies is more than a system for ranking countries. Worldviews give people models for understanding how the world is organized and operates and how they should act in the world (D'Andrade, 1984; Fricke, 1997a, 1997b; Geertz, 1973). Such models act as schema, frames, or social imaginaries in providing meaning and guidance for people to interact with their communities and lead their lives (Johnson-Hanks et al., 2011; Shanahan and Macmillan, 2008; Taylor, 2004; Thornton et al., 2001). They also provide frameworks for evaluating goals and the methods for achieving them.

The worldview associated with development provides these kinds of models and schema for understanding and dealing with the world (Ferguson, 1999; Krücken and Drori, 2009; Meyer et al., 1997; Osella and Osella, 2006; Pigg, 1992; Thomas et al., 1987; Thornton, 2001, 2005). By locating certain countries at the apex of development, the model specifies that these societies define what modernity is. Furthermore, the model allots to societies at the top of the hierarchy an aura of goodness and moral authority, and many elements of societies believed to be modern are defined as modern and good (Böröcz, 2006; Taylor, 2004). According to the model, these societies also reflect what Mannheim (1936/1968) calls a liberal humanitarian utopia, which gives people an unachievable model of the future to which they should strive and by which they should measure progress:

The utopia of liberal humanitarianism, too, arose out of the conflict with the existing order. In its characteristic form, it also establishes a "correct" rational conception to be set off against evil reality. This counter-conception is not used, however, as a blueprint in accordance with which at any given point in time the world is to be reconstructed. Rather it serves merely as a "measuring rod" by means of which the course of concrete events may be theoretically evaluated. The utopia of the liberal-humanitarian mentality is the "idea". This, however, is not the static platonic idea of the Greek tradition, which was a concrete archetype, a primal mode of things; but here the idea is rather conceived of as a formal goal projected into the indefinite future whose function is to act as a mere regulative device in mundane affairs. (Mannheim, 1936/1968, p. 197)

Such constructions of developmental hierarchies have played important roles in international affairs. They frame how different groups present their political identities and their strategies in a global environment. European elites have long viewed Western Europe as more developed than Eastern Europe (Böröcz, 2006; Melegh, 2006; Todorova, 1997; Wolff, 1994). Wolff (1994) has argued that this perception of Eastern Europe played an important role in the division of Europe between "east" and "west" following World War II. Böröcz (2000) has suggested that perceptions of this developmental hierarchy played a role in recent years in how countries were considered for admission into the European Union.

The developmental model and the differential placement of countries in the hierarchy of development also have affected how history has been written (Chakrabarty, 2000; Mandelbaum, 1971; Nisbet, 1969/1975; Thornton, 2005). Scholars have mistakenly assumed that the past state of a currently developed society could be proxied by the current conditions of a so-called less developed society. Scholars also have assumed that the histories of societies seen as less developed were following the "universally valid" histories of the more developed societies or, if they deviated from that "standard" trajectory, that they were following an "inadequate", "distorted" line of development (Chakrabarty, 2000, p. 32; Melegh, 2006, p. 30).

The dynamic developmental model also assumes that social change is normal and expected. Development can also become a goal that delegitimizes the old and legitimizes the new (Wallerstein, 1991). The model also shows the direction of change—typically towards Western Europe and North America (Chakrabarty, 2000; Wallerstein, 1991). In this framework, the only difference between countries seen as developed and countries seen as less developed is that the latter are not developed yet. With development being seen as dynamic, countries perceived to be at the top of the hierarchy can move onto yet higher levels of development.

The hierarchical model of development suggests mechanisms for people to employ to develop. It indicates that the patterns of government, family life, economics, and human rights in societies viewed as developed will bring development elsewhere and that development will bring certain changes in these dimensions of human life (Thornton, 2005).

This model of developmental hierarchies and the trajectory of development has been spread widely among the world's elite. Many colonial administrators, revolutionary leaders, feminist advocates, leaders of family planning movements, and other social movement leaders have relied heavily on developmental models. Similar developmental models are embraced and aggressively promoted by governmental and nongovernmental organizations around the world (Latham, 2000; Meyer et al., 1997; Nisbet, 1969/1975).

We expect that knowledge of such development hierarchies and models has been disseminated internationally to people in everyday life through numerous mechanisms, including colonialism, education, mass media, social movements, foreign aid, the United Nations, and government and nongovernment programs (Thornton, 2005). For example, we know that the messages of the international family planning program have explicitly emphasized the importance of development and the role of family planning in developing countries (Barrett and Frank, 1999; Bier, 2008). Melegh (2006) also has demonstrated that the international mass media carries explicit messages about developmental hierarchies, with rankings of countries on development. Also, school curriculums have been globalized and standardized with many messages related to development (Baker and Letendre, 2005; Benavot et al., 1991; Chabbott, 2003). Developmental messages are also often very explicit in school textbooks, with one Nepali text informing students about the world developmental hierarchy and even giving students instructions on the calculation of the UN HDI (Ghimire et al., 2008).

The acceptance or rejection of developmental hierarchies and the developmental models associated with them have great potential for influencing the behavior of ordinary people, and we expect that those who accept such developmental hierarchies and models will behave differently than those who do not. This potential for influencing behavior does not depend on whether the elements of the model, themselves, are true or false, good or bad but simply whether they are believed.

Ethnographic data from Subsaharan Africa, China, Egypt, India, Nepal, and New Guinea indicate that at least some ordinary people understand developmental hierarchies and use them in their conceptualizations of the world (Abu-Lughod, 1998; Ahearn, 2001; Amin, 1989; Blaut, 1993; Caldwell et al., 1988; Dahl and Rabo, 1992; Ferguson, 1999; Guneratne, 1998, 2001; Justice, 1986; Osella and Osella, 2006; Pigg, 1992, 1996; Wang, 1999). Papers using survey data indicate that ordinary people have an understanding of developmental hierarchies, but these papers use data from only three countries, Argentina, Bulgaria, and Nepal (Binstock and Thornton, 2007; Melegh et al., 2012; Thornton et al., 2008). Without additional survey data, we cannot judge how widespread such worldviews are among the world's ordinary people. The research in this paper was designed to fill this gap.

Our paper evaluates three hypotheses growing out of the theoretical considerations discussed above. Hypothesis One is that the social construction of developmental hierarchies has been widely disseminated among ordinary people around the world. We hypothesize that the spread of developmental thinking has extended beyond academics, policy makers, the mass media, and other international elites to the grassroots, with ordinary people in everyday life using the language and concepts of developmental hierarchies.

Hypothesis Two is that the general structures of developmental hierarchies held by ordinary people are similar across geographical settings. This hypothesis is motivated by the understanding that there is a world culture that has been disseminated similarly among international elites. We hypothesize that these ideas have also been disseminated similarly to the grassroots.

Hypothesis Three is that the developmental constructions held by ordinary people generally match commonly-used constructions of international organizations. This hypothesis goes further than the others and specifies the nature of the developmental hierarchies held by ordinary people. The construction of the development concept in the academic and policy communities generally emphasizes technology, transportation systems, health, income, and education as key parts of development. Our expectation is that these elements of the definition of development have been disseminated widely around the world and are used by people in everyday life.

At the same time that we hypothesize extensive similarities in social constructions of developmental hierarchies across countries and individuals, we expect that local differences exist within this overarching culture of development, We expect that such variance will occur because there are somewhat different constructions of development and development hierarchies among the international elites and because of local circumstances and interpretations that come from such things as geography, regional experiences, and national interests. Such local differences are expected to exist within the larger general worldview disseminated around the world.

Although many elements of developmental constructions are in need of research, this paper focuses only on developmental hierarchies and how ordinary people view them. We created new ways of measuring people's views of such hierarchies and administered surveys in several countries to measure them. We investigate here whether respondents rate different countries differently on development. We also compare the answers of respondents to the developmental ratings constructed by the UN HDI.

We include regional or national data from 15 surveys in 13 countries: Albania; Argentina; Bulgaria; China; Egypt (2); Iran; Iraq; Lebanon; Malawi; Nepal; Saudi Arabia; Taiwan; and the United States (2). The 13 countries are diverse geographically, economically, socially, religiously, demographically, and culturally, thereby providing extensive heterogeneity for our analyses. These surveys were conducted between 2004 and 2009.

Depending upon one's perspective, our collection of 13 countries is either very small or very large. Much of the world culture literature uses the country as the unit of analysis and uses data from many scores of countries. From this perspective,

our set of 13 countries is small and does not permit the use of country as the unit of analysis. Despite their advantages, studies with the country as the unit of analysis cannot go beyond the country level to include the beliefs, values, and worldviews of individuals. Our ability to go below the country level and consider the constructions of ordinary people is thus an important strength of our study. From this perspective, data on the ideas of ordinary people from 13 diverse countries represent a very large resource.

3. Materials and methods

As shown in Table 1, our 15 data collections include a variety of sample definitions and interviewing approaches. This variety was necessitated by budgetary limitations, the different methodological approaches required in different places, and the evolution of the project over time. Consequently, we cannot make strict comparisons across settings, but we can examine the overall awareness of developmental hierarchies in the various settings and provide general evaluations of different constructions of such hierarchies.

Six of the 15 surveys were designed to be representative of the adult populations of their countries: Albania, Bulgaria, Iraq, Lebanon, and the two in the United States. The US data collection was conducted in two different 15 minute supplements to the Survey of Consumer Attitudes, a monthly telephone survey. The Argentina survey was national in scope, but was limited to people living in urban agglomerates of 500 thousand people or more, which includes approximately 60% of the country's population.

The remaining nine surveys were designed to be representative of certain regions, provinces, or other geographical units. The China survey was conducted in Gansu Province in West-central China and having a large Muslim minority group and relatively low income. The Iran survey was conducted in Yazd, a city of more than 400 thousand people in central Iran. Yazd has extensive industry, maintains a high socioeconomic level, and is religious and conservative (Abbasi-Shavazi and Askari-Nodoushan, 2008). The Egyptian adult sample was drawn from one district in Qaliubia Governorate located north of Cairo and one district in Fayoum Governorate located south of Cairo. The youth survey in Egypt was conducted among adults ages 18–25 in the cities and rural surroundings of Alexandria, Cairo, and El-Minya. The survey in the Kingdom of Saudi Arabia (KSA) was conducted among adults ages 18–25 in the cities and surrounding rural areas of Jeddah, Riyadh, and Damman-Khobar and their surrounding rural areas. The Malawi survey was conducted in Traditional Authority Kuntumanji in Zomba District, a rural area in the country's Southern Region. Villages were randomly selected, and within villages, respondents were selected randomly with stratification to ensure a mixture of Christians and Muslims.

The Nepal survey was conducted in the Chitwan Valley in South-central Nepal and combines data from two samples of adults. The first sample consists of adults aged 15–59 years living in the study area in 1996, plus the non-resident spouses of these adults. The data were gathered in 2008 from the 1996 sample members who had moved elsewhere in Nepal between 1996 and 2008, as well as those who stayed in the study area. The second sample includes adults 15–59 living in the study area in 2008, plus the non-resident spouses of married residents aged 15–34 and the non-resident parents of unmarried residents aged 15–34 years.

Table 1 Characteristics of sample surveys.

Countries surveyed	Study location	Respondent ages	Respondent sex	Interview mode	Study dates	Sample size
Albania	National	15 and older	Both	Face-to-face	2005	3390
Argentina	Urban Agglomerates >500,000	Adults	Both	Face-to-face	2008	1003
Bulgaria	National	Adults	Both	Face-to-face	2009	336
China	Gansu Province	Adults	Both	Face-to-face	2007	633
Egypt	One District each in Fayoum and Qaliubia Provinces	Women 18–54 and their husbands	Both	Face-to-face	2007- 2008	1500
Egypt youth	Cities and rural surroundings of Alexandria, Cairo, and El-Minya	18–25	Both	Face-to-face	2005	928
Iran	Yazd City	Married: 15-54 Unmarried: 15-29	Women	Face-to-face	2007	703
Iraq	National	Adults	Both	Face-to-face	2006	2701
KSA	Cities and rural surroundings of Jeddah, Riyadh, and Damman-Khobar	18–25	Both	Face-to-face	2005	954
Lebanon	National	Adults	Both	Face-to-face	2008	3039
Malawi	Rural area of Traditional Authority of Kuntumanji in Zomba District	20–45	Men	Face-to-face	2009	908
Nepal	Chitwan Valley	15 and older	Both	Face-to-face	2008- 2009	7455
Taiwan	National Cheng-chi University.	17–29	Both	Self-administered with interviewer present	2004	1369
USA	National	Adults	Both	Telephone	2006	486
				*	2007	494

Table 2Respondents' demographic characteristics.

Respondents' characteristics	Albania	Argentina	Bulgaria	China	Egypt	Egypt youth	Iran	Iraq	KSA	Lebanon	Malawi	Nepal	Taiwan	US
Sex (% female)	51.9	52.6	48.8	51.3	58.3	46.4	100.0	51.6	40.6	44.2	0.0	57.1	63.6	55.5
Age Mean (Std. dev.)	38.8 (15.6)	41.6 (16.7)		41.5 (14.1)	36.0 (11.6)	21.1 (2.6)	34.9 (12.4)	37.1 (13.8)	21.5 (2.4)	32.8 (13.0)	32.1 (5.2)	36.6 (14.5)	18.5 (0.8)	52.3 (17.2)
Marital status Single Married or cohabiting Separated/Divorced Widowed	21.0 73.2 0.6 5.2	31.5 51.9 10.4 6.1		8.7 86.3 0.9 4.1	11.3 85.7 1.1 1.8		22.0 74.8 0.1 3.0	21.2 72.1 1.3 5.4		53.5 41.7 3.2 1.7	5.4 89.9 4.0 0.8	17.7 76.9 1.5 3.9	100.0	14.2 59.6 14.3 11.8
Education ^a Never attended to school	1.9				26.4	2.3	3.1	16.7	0.2	2.6	11.3	30.9		
Below elementary Complete elementary Incomplete high school	8.3 36.2 7.4	6.2 16.0 17.8	2.1 22.6	21.4 23.0 32.7	13.5 3.5 11.3	1.7 6.2 14.9	17.8 8.8 21.1	12.7 21.2 16.8	0.2 2.5 24.0	4.4 8.4 8.9	51.3 14.6 14.5	10.5 6.3 25.6		1.1 4.1
Complete high school Superior Some college – no	35.5 10.7	27.3 32.7	51.8	12.0 10.6	29.1 16.2	39.4 16.2	31.6 17.6	16.4 5.3	45.5 19.5	16.7 25.6	8.0 0.1	5.8 17.4	100.0	23.9 22.8
degree College/post graduate degree			23.5			19.3		10.9	8.0	33.3		3.5		48.0
Religion Affiliation Buddhism Catholic Christian – not further	6.8	0.1 74.9 0.3		9.1 1.4	1.5			0.1 0.7		4.9 30.9		11.5 1.5		1.0 24.4 4.8
specified Muslim Protestant Hinduism	81.1	8.4		9.3	98.5			99.1		62.7		0.6 83.0		0.6 54.6
Other None/Atheist/Agnostic	11.9 0.2	0.4 15.2		0.8 79.5						1.6		1.5 1.9		3.8 10.7
Importance of religion Very important Somewhat important Not important at all		33.0 47.5 19.6		12.7 13.1 74.2	99.1 0.8 0.1			96.1 3.7 0.2				56.1 40.6 3.4		63.2 23.0 13.8
Importance of God in you Mean (Std. dev.)	ır life (1–	10 scale)				9.9 (0.6)			9.7 (1.4)	5.5 (2.8)		8.1 (6.4)		
Unweighted N	3390	1003	336	633	1500	928	703	2701	954	3039	908		1369	980

^a In Bulgaria and in China, education was registered as the highest level completed, therefore it may be underestimating the actual highest level achieved (e.g., those attending Junior High School has been registered as Complete Elementary, College dropouts have been counted as Complete High School).

Our Taiwan data collection was conducted with college students at National Cheng-chi University in Taipei. The students were interviewed several times during their college careers, with our data coming from the first wave corresponding to their first year of college.

Table 2 provides background information for the survey respondents. A wide variety of attributes is reflected in the distributions shown in the table, reflecting diversity within and across settings.

Each survey asked respondents to rate several countries on development. We did not define what was meant by development, but asked respondents to use their own definitions. This approach was necessary because we wanted to learn about the social constructions of the respondents rather than about the social constructions of someone else.

We also did not ask respondents what they were thinking about when they rated countries and thus do not have direct information about the social constructions of the concept of development that people had in their minds. It is possible that they had such things as technology, wealth, income, education, health, or geographical location in mind when they rated countries on development. Or, they might have been combining such indicators or using other criteria. Focus group information suggests that many high school students in Argentina associate development with factors like those just mentioned (Binstock and Thornton, 2007). It also is possible that many respondents rated countries on development based only on vague and general, although important, impressions without any clear definition.

Respondents rated development levels for each country from 0 to 10 or from 1 to 10, with 10 beng the highest development and either zero or one being the lowest. Both the number and identity of countries rated varied across surveys. The countries rated are listed in Table 3. To some extent the exact form of the questions evolved over time and depended on the auspices of the data collection. The different question variants are provided in Appendix A.

Table 3Respondents' mean country scores on development and United Nations HDI.

Countries rated	Countrie	s surveyed														UN HDI 2005
	Albania	Argentina	Bulgaria	China	Egypt	Egypt youth	Iran	Iraq	KSA	Lebanon	Malawi	Nepal	Taiwan	US '06	US '07	
Albania	3.1		3.1													0.801
Argentina		5.6														0.869
Austria			8.0													0.948
Brazil		6.5		5.6	5.9		6.5				6.7	6.6		6.1	5.6	0.800
Bulgaria			3.6												4.5	0.824
Cambodia													2.8			0.598
Central African Rep.	3.1	3.4	3.3	4.7	4.4		3.1					5.6		3.4	3.5	0.384
China	7.1	7.7		6.9	8.1	8.6	7.8	8.9	8.6	8.1	7.6	7.4	5.1	7.5	6.9	0.777
Croatia			5.0													0.850
Democratic Rep. of Congo											5.1					0.411
Egypt					6.6	5.3		6.5	7.1						5.5	0.708
France		7.7		6.7	7.6	8.6	7.9	9.2	9.4	8.4	7.1				7.3	0.952
Georgia			3.9													0.754
India	3.4	3.6	4.4	5.1	5.8		4.6				6.2	5.8	4.4	5.3	5.0	0.619
Iran						5.4	7.0	6.9	6.8	6.6						0.759
Italy	7.7		7.5													0.943
Japan		8.8		7.2	8.2		8.7				7.7	8.2	8.8	8.8	8.6	0.953
Kuwait								7.1								0.891
Kyrgyzstan			3.1													0.696
Lebanon										4.9						0.772
Malawi											3.3					0.437
Nepal												3.3	3.4			0.534
Nigeria	2.6	3.5	3.0	4.4	5.2		3.4				5.9	5.6	2.8	3.3		0.470
Pakistan	2.9	3.8		5.0	5.6		4.4					5.1		4.1	4.0	0.551
Poland			6.0													0.870
Russia			6.9												5.9	0.802
Saudi Arabia						6.4		7.3	7.3	5.0					5.6	0.812
South Africa											6.5				0.0	0.674
Sweden			8.4								3.0			7.4		0.956
Syria										4.5						0.724
Taiwan													7.0			0.932
United Arab Emirates						7.2		8.2	8.1							0.868
United Kingdom			8.5					3.2	0.1			7.5				0.946
United States	9.5	8.4	0.5	8.4	8.6	9.2	8.6	9.3	9.5	8.9	9.3	9.1	9.2	8.8	8.7	0.951
Yemen	3.3	0.7		5.4	5.0	4.8	0.0	4.1	4.2	0.5	٥.5	5.1	J.2	5.0	0.7	0.508
Zimbabwe						7.0		7.1	7.2					2.9		0.513
Corr. between each country respondents' score and UN HDI	0.82	0.91	0.75	0.89	0.91	0.81	0.97	0.88	0.95	0.75	0.85	0.83	0.95	0.95	0.84	-

Note: all correlations are significant at least at the .05 level, except for Lebanon which is significant at .06 level assuming that the countries represent a simple random sample.

 Table 4

 Bivariate correlations between individual respondents' ratings of development and the United Nation's Human Development Index.

	Albania	Argentina	Bulgaria	China	Egypt	Egypt youth	Iran	Iraq	KSA	Lebanon	Malawi	Nepal	Taiwan	US'06	US'07
Deciles															
10th	0.48	0.53	0.30	0.15	0.21	0.17	0.43	0.14	0.56	0.16	0.09	0.13	0.79	0.56	0.36
20th	0.59	0.65	0.44	0.33	0.42	0.37	0.62	0.48	0.70	0.40	0.27	0.29	0.85	0.70	0.49
30th	0.66	0.72	0.51	0.48	0.54	0.50	0.71	0.58	0.75	0.49	0.41	0.40	0.88	0.77	0.56
40th	0.71	0.78	0.57	0.58	0.63	0.58	0.77	0.66	0.79	0.54	0.49	0.49	0.90	0.81	0.62
50th	0.75	0.81	0.62	0.68	0.69	0.65	0.80	0.72	0.81	0.60	0.58	0.57	0.92	0.85	0.67
60th	0.79	0.84	0.66	0.74	0.74	0.70	0.84	0.77	0.84	0.65	0.66	0.65	0.93	0.88	0.71
70th	0.82	0.86	0.70	0.79	0.79	0.75	0.87	0.79	0.86	0.70	0.71	0.72	0.94	0.90	0.75
80th	0.86	0.89	0.74	0.85	0.84	0.79	0.90	0.83	0.88	0.75	0.78	0.79	0.95	0.93	0.79
90th	0.89	0.92	0.79	0.90	0.88	0.85	0.92	0.88	0.91	0.83	0.84	0.86	0.96	0.95	0.85
% with corr .5 or higher	88.7	92.3	73.0	68.7	74.3	70.7	88.3	78.1	91.9	69.2	60.0	59.3	97.9	92.8	79.3
% with corr .7 or higher	63.4	73.1	30.3	46.6	49.2	40.5	71.1	54.6	80.9	31.4	33.4	33.5	95.4	80.6	42.4
N	2884	933	204	627	1337	767	660	1713	859	2859	897	7385	1363	470	476

Our questions were designed to measure constructions of developmental hierarchies and were not intended to measure whether people thought that such hierarchies were good or bad, just or unjust. The latter issues are important but are outside the scope of our analysis.

We analyzed the data from these country ratings in several ways. For each survey, we calculated the average rating for each country rated in that survey. These averages are reported in Table 3. The columns of Table 3 designate the countries where the surveys were conducted, the rows indicate the countries rated, and the cell entries indicate the average development score that survey respondents in the column country gave to the row country.

Table 3 also reports the UN HDI scores for 2005 for the countries rated in the data collections. The HDI scores are created as a composite index consisting of the following three indicators: national adult literacy combined with the gross school enrollment ratio in primary, secondary, and tertiary school; life expectancy at birth; and per capita Gross Domestic Product (GDP). The HDI scores range from 0 to 1.

We compared the average respondent developmental ratings of countries with the UN HDI ratings of the same countries. We also calculated Pearsonian correlations between the average respondent scores and the HDI scores for the same countries. These correlations are recorded in the bottom panel of Table 3.

We also calculated the Pearsonian correlations between the average respondent scores and each of the components of the UN HDI: education, income, and life expectancy (not shown in tables). We did so to evaluate if respondents were replicating one aspect of the HDI more than others.

Just as correlations can be computed between the average scores of respondents and the UN HDI scores, correlations can be calculated between a single respondent's scores and the UN's scores. For each n individuals in a data set, we calculated n correlations between those n individuals' scores and the UN scores using exactly the same procedures as in calculating the correlations of the average respondent scores with the HDI. We then arrayed the n correlations in each survey from the smallest to the highest and summarized the distribution of n correlations by dividing the distribution into deciles from low to high. The decile breaks for each of the 15 surveys are summarized in Table 4, along with the percentages of correlations in each survey exceeding .50 and exceeding .70.

For the observed correlations between respondent and UN scores to be high, respondents must have a conception of societal development that they can use in rating countries and that conception must be similar to the conceptions of the creators of the UN HDI. In addition, respondents must be able to use our development rating scale reliably and to have some understanding of the countries rated. If respondents cannot use the development scale reliably or do not have some understanding of the countries rated, the correlations will be driven toward zero, even if respondents have conceptions of development that exactly matches that of the UN.

4. Results and discussion

4.1. Hypothesis One and the existence of developmental social constructions

Our first evidence concerning Hypothesis One and the existence of developmental social constructions comes from the ability of respondents to answer our questions about country development levels. In each of the countries at least 97% were able to rate their own country on development, with the exception of Iraq where 92% rated their own country. In addition, at least 95% were able to rate the United States, with the exception of Iraq where the proportion was lower, but still reached 82%. These high completion rates suggest that when the country is well known (such as the US and the respondent's own country), an exceptionally large percentage can rate its development level. For many countries surveyed, such as Albania,

Argentina, China, Lebanon, Malawi, Nepal, Taiwan, and the US, the completion rates for each country rated was 96% or more. Again, these are very high completion rates, even for countries that are less well known. Lower completion rates were observed for some of the other countries surveyed. The lowest item specific completion rates were observed in the Iraq survey, where only 68% rated Yemen, and for most of the surveys, the country-specific completion rates were much higher. Because the completion rates for the US and the respondent's own country were so high, we interpret the lower completion rates for other countries rated to be the result of a lack of knowledge about the country rather than a lack of familiarity with the development construct. Consistent with Hypothesis One, these high completion rates indicate widespread knowledge of the development construct and a willingness to use it in rating countries.

Of course, it is likely that some respondents did not know about a particular country and guessed about its development level. This would have increased the completion rates for country ratings, but if there were extensive random guessing concerning development levels, the average country development ratings would tend to be bunched in the middle of the scale rather than spread throughout much of the scale. Also, such random guessing would make the correlations of respondent ratings with the UN HDI biased toward zero. As we report below, there was considerable variability in ratings of countries and many high correlations.

We now turn to Table 3 and the average ratings given for the various countries. We see that Hypothesis One suggesting that the social construction of developmental hierarchies has been widely disseminated is clearly supported. Each of the surveys reveals developmental hierarchies in the country ratings given by the respondents. In each survey some countries are rated low, others are rated high, and others have middling positions. Such distributions are contrary to the null hypothesis of people not having constructions of development, which would be reflected in people refusing to rate countries, giving random responses, or giving every country the same rating.

4.2. Hypothesis Two and the similarity of developmental social constructions across settings

The data in Table 3 also support Hypothesis Two in showing great similarity in the ways that the various countries are rated in different settings. Although the exact ratings for specific countries vary somewhat by the country where the ratings were conducted, there are also important commonalities across all sets of ratings.

Japan and the United States were universally rated highly. In all settings where they were rated, either Japan or the United States received the highest average rating, with the average ratings for the two countries often being very similar. The average ratings for the United States ranged from 8.4 to 9.5, and the average ratings for Japan ranged from 7.2 to 8.8. These are exceptionally high ratings when the maximum possible rating is 10.

The Western European countries of Austria, France, Italy, Sweden, and the United Kingdom also received quite high average scores. The lowest average rating for any of these five countries was 6.7 for Chinese respondents rating France, and the highest was 9.4 for Saudi Arabian youth rating France. However, in all cases where these Western European countries were rated in the same survey as Japan or the United States, they received a lower average score than Japan and the United States. Another country generally rated highly was China, with average ratings in the same range as those for the Western European countries.

Another country consistently rated highly in surveys where it was rated was the United Arab Emirates—with average scores ranging from 7.2 to 8.2. Unfortunately, we asked only respondents in Middle Eastern settings to rate the Emirates and do not know how development in the Emirates is viewed elsewhere. Interestingly, the high average ratings for Japan and the relatively high ratings for China and the Emirates indicate that development is not currently perceived as an exclusively Western European or North American phenomenon, as it may have been in the past, but is seen as having been largely achieved in other places.

We also found substantial consistencies in rating some countries low on development. With the exception of South Africa, the countries of Sub-Saharan Africa—the Central African Republic, the Congo, Malawi, Nigeria, and Zimbabwe—were consistently rated at or near the bottom. The scores for these five African countries ranged from only 2.6 to 5.9. The South Asian countries of India, Nepal, and Pakistan also consistently received average scores at or near the bottom. The average ratings for India ranged from 3.4 to 6.2, the averages for Pakistan ranged from 2.9 to 5.6, and the two Nepal averages were 3.3 and 3.4.

Other countries that received very low average ratings were Albania, Bulgaria, Cambodia, Kyrgyzstan, and Yemen. Most of these countries were rated in only 1–3 surveys, giving us little insight into their ratings in the larger world community.

These data thus provide substantial evidence that the overall mental constructions of developmental hierarchies are similar across the 15 surveys. Such consistency suggests that, there must be substantial similarities in the ways development is viewed in different places, at least as indicated by the ways people rate countries on a development scale.

However, there are also interesting country-specific idiosyncrasies in rating countries that we expect are related to specific experiences and perceptions in certain countries. One example is that Japan was rated highly in all surveys, but the lowest average rating of 7.2 for Japan was registered in our Chinese sample. This probably reflects the tensions and conflicts between Japan and China extending back at least to World War II.

Another example of this occurs for the low ratings of China among college students in Taiwan, who gave China an average rating of 5.1 in contrast to the range of average scores from 6.9 to 8.9 for China in other surveys. The low score of 5.1 that Taiwanese students gave to China also contrasts with the scores Taiwanese students gave to other countries: 8.8 for Japan, 9.2 for the United States, and 7.0 for Taiwan itself. This low rating of China by Taiwanese students probably reflects Taiwanese

understanding that China has large areas with low incomes and educations, as well as the more internationally-visible high income places. It was also probably exacerbated by the political tensions existing between China and Taiwan, with China seen as a threat by many Taiwanese.

Although the ratings for China were especially low for Taiwanese raters, the ratings for China were especially high in most of the Middle East surveys. One possible explanation for this is that the respondents in the Middle East recognized China's recent enormous economic successes, without also recognizing that China continues to have large numbers of people with low levels of education and income.

4.3. Hypothesis Three and comparisons of constructions of respondents and international elites

We now turn to Hypothesis Three and the similarity of the social constructions of respondents and the UN HDI. The data in Table 3 are generally consistent with Hypothesis Three in showing that when the different scale metrics are taken into account, the developmental hierarchies in the minds of ordinary people are very similar to the developmental constructions of the United Nations.

We noted earlier that Japan and the United States were rated at the top of the developmental hierarchies in our surveys and that China and the United Arab Emirates were rated highly but not at the top. The UN HDI scores also are very high for Japan and the US and moderately high for China and the Emirates. We also noted that our respondents rated quite low the five Sub-Saharan African countries of the Central African Republic, the Congo, Malawi, Nigeria, and Zimbabwe, the three South Asian countries of India, Nepal, and Pakistan, and Cambodia and Yemen. Here, we note that the UN experts also rated these latter countries in the lower part of the distribution. Although we do not know what criteria survey respondents used in rating countries, this high correspondence between survey and UN ratings probably comes from ordinary people and the UN using similar criteria. At a minimum, the high correspondence suggests that the criteria of the UN and ordinary people around the world are higly correlated.

The Pearson correlations between the average survey ratings and the UN scores provide an overall summary of the extent to which the average scores of country ratings match the UN scores (bottom of Table 3). All the correlations are very high, ranging from a low of .75 in Bulgaria and Lebanon to a high of .97 in Iran. This indicates that, on average, survey participants provided ratings of countries that are very similar to the UN HDI ratings.

We tested whether these high correlations were mainly the result of including well known countries such as the United States, by replicating the analyses excluding the US as a rated country (not shown in tables). The correlations between the average survey ratings excluding the United States as a rated country and the UN scores are very similar to the correlations when the US is included. The only substantial difference is observed for Lebanon, where the aggregate correlation decreased from .75 to .62 when the US was excluded. In Egypt (youth survey), Albania, and Nepal the correlation was reduced by .04–.06 points. In the rest of the countries, the correlations are the same or differ by .02 points or less.

The correlations between the average respondent scores and each of the components of the UN HDI—education, income, and life expectancy—are very high (not shown in tables). There is no consistent pattern for one component of the HDI to have the highest correlation with respondent averages. The only substantial differences among the correlations for the respective components of the HDI and respondent ratings are in the Albanian and Bulgarian surveys. In these surveys the correlation between GDP per capita and average respondent ratings is substantially higher than the correlations between respondent scores and education and life expectancy. This result suggests that, in these two Southeast European countries, people use a more strictly economic than a more general definition of development, as in the HDI. This may account for some of the relatively low correlation between Bulgarian respondent ratings and the UN HDI.

Another factor that may have contributed to the relatively low correlations between average respondent ratings and the UN HDI scores in Bulgaria—and Lebanon as well—was the countries rated in these surveys. Several Eastern European and Central Asian countries were rated in the Bulgarian survey, and the relative positions of these countries were substantially lower in the Bulgarian respondent hierarchy than in the UN hierarchy. Lebanese respondents rated several Middle Eastern countries, and they consistently rated these countries quite low whereas the UN did not. It is possible that if Bulgarians and Lebanese had been asked to rate a more representative set of countries, as in other surveys, their correlations with the UN HDI would have been higher. Of course, a correlation of .75 between HDI scores and average respondent scores is very high.

The dependence of the correlations of average respondent ratings and the ratings of the UN on the countries rated is seen most clearly in the US data where somewhat different countries were rated in the two surveys. The correlation for the 2006 survey is .95, while the correlation for the 2007 survey is .84. However, when we calculated the correlations for the two surveys using only the common set of seven countries, the two correlations are even more similar (.97 and .95 for the 2006 and 2007 surveys). This result is true because the US respondents placed Egypt, Russia, and Saudi Arabia lower in their developmental hierarchies than did the UN, thus lowering the overall correlation in the 2007 survey that included ratings for these countries.

Although we hypothesized that there would be close correlations between UN and survey ratings, we also expected that respondent ratings would sometime be at least somewhat different from the ratings of the UN. One important example of this departure is that several countries of Western Europe, including Austria, France, Italy, Sweden, and the United Kingdom, were rated between .94 and .96 by the United Nations, almost exactly equal to the UN scores of .95 for Japan and the US, whereas, as noted earlier, survey respondents rated these Western European countries a bit lower than Japan and the US. The three countries of Southeast Europe—Albania, Bulgaria, and Croatia—were rated quite low by survey respondents

(5 or less), whereas the UN ratings for these three countries were quite high, ranging from .80 to. 85 in the UN metric. India and Nepal were also consistently rated lower in the survey distributions than in the UN distribution. So were Argentina, Brazil, Lebanon, and Syria.

The discrepancies between the relative positions of these countries in the survey and UN ratings could reflect several factors: respondents may have used slightly different criteria than the UN in their ratings of these countries; respondents may have underweighted the scores of these particular countries on certain criteria; or respondents may have lacked sufficient knowledge of these countries. Respondents may have rated the countries of Western Europe relatively lower than did the UN because those countries are less visible in terms of technology, science, and the world market than are Japan and the United States.

The lack of visibility may also be playing a factor in the low ratings of many of the other countries with relatively low respondent ratings, including Albania, Argentina, Brazil, Bulgaria, Croatia, Lebanon, Nepal, and Syria. India, on the other hand, is probably quite visible, but probably more for its high levels of poverty among portions of the population than for its movie industry, computer expertise, and nuclear proficiencies.

Ignorance and misperceptions cannot, however, be the entire reason why many countries are rated relatively lower on development by survey respondents than by the UN. This is because many of the survey ratings for countries that were rated low by survey respondents relative to the UN scores came from people living in those countries. For example, Albanians gave Albania an average score of 3.1 (UN gave .80), Bulgarians gave Bulgaria a score of 3.6 (UN gave .82), Nepalis gave Nepal a score of 3.3 (UN gave .53), and Argentinians gave Argentina a score of 5.6 (UN gave .87).

These low ratings for one's own country in these cases is not the result of the UN and survey respondents using different scales. This was confirmed by converting the average scores of these countries into standardized scores that adjusted for the overall mean and standard deviation of the array of scores provided by the survey raters in that country and comparing these standardized scores with similar standardized scores for that country from the UN distribution. The standardized scores for the countries discussed in the previous paragraph are consistently much lower when rated by residents of that country than when rated by the UN. These standardized score differences are between 1.1 and 1.2 in Albania, Bulgaria, and Nepal, .8 in Argentina, and about .4 in the Egypt youth, Lebanese, Saudi Arabian, and Taiwanese surveys (not shown in tables).

These observations raise the question of why people place their own country substantially lower in the developmental hierarchy than does the UN. Some of the above explanations may be relevant, but other factors may also be at play. Specifically, low own-country ratings may be related to issues of national identity and national pride, as people in some countries may tend to downplay their own accomplishments. Similarly, people in a country are probably the most cognizant of that country's own negative circumstances, which they may translate into low levels of development. Country elites also may emphasize the low level of a country's development in order to mobilize people for certain policies and programs. Low scores for one's own country may also be a reflection of large-scale dissatisfaction with the country's government.

Interestingly, people in three countries placed their own country relatively higher in the developmental hierarchy than did the UN. That is, the standardized score for a country by people living in that country was higher than the standardized score of the UN for that country. This occurred for China, Iran, and the United States. Such high self-rating in these countries could be related to issues of national identity and national pride, as people in these countries may emphasize their own accomplishments.

We now shift to the correlations of the scores of individual respondents with the HDI scores. As we discussed earlier, the procedure at the individual level was identical with the procedure at the aggregate or average level, with the only difference being that n correlations were calculated for each n individuals in a survey. These correlations provide an overall summary of the extent that individual respondent scores matched those of the HDI, with the different scale metrics taken into account. We summarized the distribution of the n correlations in each survey by arraying them from low to high and dividing that distribution into deciles. The decile breaks are summarized in Table 4 for each of the surveyed countries, where we also list the percentage of respondents with correlations above .50 and above .70.

The great bulk of individual correlations are positive and substantial. This can be seen by looking at the correlation that divides the various samples in half—the 50th percentile. We see from Table 4 that the 50th percentile ranged from .57 to .92. This means that at least half of each sample has correlations of .57 or higher and for many distributions the median correlation is much higher—reaching .92 among college students in Taiwan. Among surveys with more general populations, the 2006 US survey has the highest median correlation, which is .85.

Another way of describing the distributions of individual correlations is the percentage of respondents having correlations of .50 or higher. The percentages having such correlations is quite high, ranging from 59% to 98%. Between 30% and 95% had correlations of .70 or higher. Again, the highest correlations came from the college students of Taiwan, but 81% of the general population of young adults in Saudi Arabia had correlations of .70 or greater.

Furthermore, a substantial fraction of respondents had very high correlations. For example, 20% or more (the 80th percentile and above) have correlations that range from .74 in Bulgaria to .93 in the US to .95 among the college students in Taiwan.

This pattern suggests that a substantial percentage of individual respondents construct developmental hierarchies that are very similar to the hierarchies constructed by the UN. At the same time, a substantial number of individuals had low correlations, as evidenced by the fact that 10% or more had correlations below .30 in seven surveys: China, Egypt (both surveys), Iraq, Lebanon, Malawi, and Nepal. In Malawi 10% or more had correlations below .10.

As we discussed in the methods section, there are several possible explanations of these low correlations between the country ratings of individuals and those of the UN HDI. Such low correlations may mean that respondents have no conceptions

of societal development or their definitions are very different than those of the HDI. The low correlations may also result from people's inability to use our measurement scale reliably or people having little understanding of the countries rated. Either the lack of knowledge or inability to use the rating scale reliably would drive the observed correlations toward zero, even if respondents had conceptions of development that matched those of the HDI.

These considerations also heighten the impressiveness of the many high correlations between individual respondent ratings and the UN HDI scores. For those high correlations to occur, respondents must not only have a conception of societal development, with that conceptualization matching closely the UN's conception, but they must also reliably use our rating scale and have at least a rudimentary understanding of the countries they rated.

5. Conclusions

This paper was motivated by the idea that a world culture is increasingly being disseminated internationally. Previous research has shown that basic elements of this world culture have been disseminated to governments and organizations around the world. Our research took this idea of world culture further by hypothesizing that the ideas of development and developmental hierarchies have been disseminated beyond governmental and non-governmental organizations to the world's lay people in everyday life. We evaluated empirically the extent to which the key element of developmental hierarchies has been disseminated to ordinary people around the world using survey data from 15 regional or national surveys in 13 countries.

We empirically evaluated three hypotheses, and the data are generally consistent with each of them. Hypothesis One—that the social construction of developmental hierarchies has been widely disseminated internationally among ordinary people—is supported by the fact that almost all respondents could rate their own country on development, and the great majority could rate the United States on development. Although somewhat smaller percentages could rate other countries on development, the completion levels were very high in almost all instances. These results suggest the existence of developmental hierarchies in the minds of most people. In addition, at the aggregate level, different countries receive differential development ratings, indicating that there are perceived hierarchies of countries on development.

Hypothesis Two—that the general structure of the models of developmental hierarchies held by ordinary people are similar across geographical and social settings—is supported by the substantial similarities in the developmental ratings that are obtained in the 13 countries. Japan and the United States are consistently rated very high, dominating the ratings. Also rated high in most surveys are China and the countries of Western Europe. At the other end of the distribution are the countries of Sub Saharan Africa and South Asia, as well as Cambodia and Yemen that consistently receive very low average ratings. These data indicate that very different countries produce remarkably similar distributions of country development ratings.

Hypothesis Three—that the developmental constructions held by ordinary people generally match constructions that international organizations commonly use—is supported by the fact that the developmental ratings of countries by survey respondents rather closely follow the ratings of the UN HDI. At the aggregate levels, the correlations between respondent ratings and HDI ratings range from .75 to .97, remarkably high correlations between the social constructions of ordinary people with the social constructions of a central elite international organization. The data also show that most individuals have conceptions of developmental hierarchies that fairly closely match the HDI.

Our data suggest that the social constructs of development and developmental hierarchies have become so widely disseminated and engrained within many people's worldviews that they are accepted as taken-for-granted aspects of the world. In fact, some may see the constructs of development and developmental hierarchies as concrete physical attributes of countries rather than social constructions. However, the fact that development and developmental hierarchies are social constructions is apparent in the fact that there are no direct indicators of development, and observers must reflect development levels through indirect indicators. For example, as we discussed earlier, some observers construct development as technology, standard of living, education, health, or some other dimension, or, as in the case of the UN, define development as a combination of indicators such as per capita income, education, and life expectancy. Yet, such things as income, education, and life expectancy are concrete physical things in that they indicate the average amount of money people receive, the average number of years of school people complete, or the average expected years of life to be lived. There may be different definitions of these things, different ways of measuring them, and errors of measurement, but each of them measures concrete physical attributes of a country's population. Development, on the other hand, is a much more abstract social construct that does not have the same concrete presence in the physical world, yet is a well-recognized social construct.

The striking nature of this widespread understanding and use of the construct of developmental hierarchies is evident in the fact that ordinary people in such widely diverse places as Albania, China, Egypt, Malawi, Nepal, and the US generally rate Japan and the US around an 8, 9, or 10 and generally rate Nigeria and the Central African Republic around a 2, 3, 4, 5, or 6. This leads one to wonder how many physical facts about the Central African Republic, Japan, Nigeria, or the US that the people of Albania, China, Egypt, Malawi, Nepal, and the US could identify. How many people in the latter countries could, for example, find the Central African Republic, Japan, Nigeria, and the US on a map, name the capitals of these countries, or identify the dominant religion in them. We expect that the number would be relatively small, yet vast majorities agree roughly about levels of development in them and do so in ways that generally match the views of people in the UN.

This finding of widespread understanding of developmental hierarchies is consistent with an emerging body of research showing that a related set of constructs, developmental idealism, has been disseminated widely to ordinary people in multiple settings around the world. Developmental idealism is a belief and value system that, like the idea of developmental hierarchies, emerged from models of development and views societal and family development as occurring together and

suggests that modern families are causes and consequences of societal development. Research from Argentina, Iran, and Nepal indicates that many of these ideas of developmental idealism are broadly acknowledged by people in these three countries (Abbasi-Shavazi et al., 2012; Thornton et al., 2008). In addition, research from Argentina, China, Egypt, Iran, Nepal, and the US indicates that developmental idealism as it relates to fertility is widely endorsed in these six countries (Thornton et al., 2012).

These findings raise the question about how people in so many places could have gained their knowledge of development, developmental hierarchies, and developmental idealism. Unfortunately, our available data cannot answer this important and challenging question, suggesting the need for more research to establish the mechanisms of dissemination and the factors supporting the spread of these developmentally-related constructions. Additional research is needed concerning factors such as education, labor force activity, mass media, and government policies and programs that affect the developmental constructs held by individuals. It also is important to begin to understand the consequences of such ideas for family, demographic, political, economic, education, and health beliefs and outcomes.

However, within the overarching general framework of developmental hierarchies, there is, as expected, room for different conceptions to emerge and persist. There is, for example, a tendency in many countries for people to place some countries considerably lower or higher in the developmental hierarchy than does the United Nations. This suggests that there is important variation in how development hierarchies are constructed and perceived differently from the UN in some countries. We advocate for further research into how such alternative constructions of developmental hierarchies arise and evolve.

It is also intriguing that people in some countries placed their own country substantially lower or higher in the developmental hierarchy than does the UN. It is likely that such low or high own-country ratings may be related to issues of national identity and pride, as people in some countries may tend to downplay or accentuate their own country's accomplishments. Similarly, people in a country are probably the most cognizant of that country's own negative circumstances which they may translate into perceptions of low levels of development. There may also be tendencies in some countries for elites to emphasize how lowly or highly developed their country is in order to mobilize people for programs or to gather support in elections and public opinion. Unusually low or high scores for one's own country may also be a reflection of large-scale dissatisfaction or satisfaction with the country's government. Investigating the sources of these own-country high and low developmental ratings would be a fruitful avenue for future research.

Our results also raise interesting methodological and substantive questions for future research about how people make their country ratings in an interview situation. How do they move from their abstract and sometimes fuzzy perspectives about development and specific countries to assign a precise score for a country? What precisely are people thinking about when they rate a series of countries on development? These, and related, questions should be on the agenda for future research.

We noted in the introduction that most government and nongovernment organizations around the world generally enthusiastically endorse the idea of development. The research we have reported in this paper demonstrates that the idea of development is widely understood by many ordinary people, but it does not tell us how ordinary people evaluate development. Although we expect that large fractions of the populations of many countries endorse development—or at least many aspects of it—we anticipate that many others evaluate development—or at least certain aspects of it—negatively. In fact, recent research suggests that certain elements sometimes associated with development are seen negatively in certain places (Thornton et al., 2010; Yount et al., 2010). This perspective can lead to different definitions of suitable or appropriate modernity (Deeb, 2006; Liechty, 2003; Thornton et al., 2010; Yount et al., 2010). Many of these studies, however, are based on either small, geographically concentrated samples (e.g., Yount et al., 2010) or specific regions of the world (e.g., Thornton et al., 2010). These provocative findings and concurrent gaps suggest the need for further research concerning how people at the grassroots evaluate development.

Our 13 countries are neither a random sample of countries, nor a representative sample of the world's population. This fact makes it impossible for us to generalize our findings to the larger world. Nevertheless, the settings surveyed are diverse and widely distributed around the world. The existence of the ideas of developmental hierarchies in these settings suggests that the ideas have been widely disseminated. We advocate for additional research in other settings to evaluate this expectation.

We close with the observation that our research has been successful in multiple respects. One is that we have successfully moved examination of world culture influences below the governmental or organizational level to the grassroots of ordinary people. Through the use of population-based surveys, we have documented that many ordinary people in 13 countries understand developmental hierarchies and do so in ways that are mostly consistent with the UN. This survey approach opens up many other opportunities for investigating the international dissemination of many other aspects of world culture to ordinary people in everyday life. It also opens additional fruitful paths of inquiry about ordinary people's views of development and the causes and consequences of those views.

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Appendix A. Question wording

The question used in Argentina, Bulgaria, China, Iran, Nepal, the US, and the adult Egypt survey reads as follows:

"We would like you to think about development in different countries around the world today. We'll be talking about countries as varied as England and Mongolia. Think of a development scale that rates countries from <u>zero</u> to <u>ten</u>. The <u>least</u> developed places in the world are rated <u>zero</u> and the <u>most</u> developed places in the world are rated <u>ten</u>. You can use both of those numbers for rating countries plus all of the numbers in between. Using this development scale, where would you put [Country X]?"

Some respondents indicated that they did not know where to rate Country X. For them, we asked the following probe: "Even if you don't know exactly, about where would you put Country X?" The original question and probe were repeated as necessary for all of the countries rated. We used the same approach in Albania, but with somewhat different wording, without example countries, and without specific probes being indicated:

"Now we would like you to consider how developed different places in the world are. Here is a scale of development—with the least developed place in the world being here (at number 0) and the most developed place in the world being (at number 10). And, moderately developed places here in the middle (at number 5)."

The same approach was used in Iraq, Lebanon, and the youth surveys in Egypt and Saudi Arabia, but with somewhat different wording (and without probes specified). The wording in these surveys was as follows:

"Now we would like you to consider how developed different places in the world are. Here is a scale of development—with the least developed places in the world marked 1 at the left and the most developed places in the world marked ten at the right. And, moderately developed places marked 5 in the middle. I will read to you a list of countries that includes Saudi Arabia, China, Yemen, and the United States and ask you to rate the level of development in each country."²

The students in Taiwan provided information about the ratings of countries through self-administered questionnaires. The wording of the question is as follows:

"Now we want to know your view about the developmental levels in some of the areas in the world, including Taiwan, Japan, India, China, Nigeria, Cambodia, the United States, and Nepal. If we rate the developmental levels from 0 to 10, 0 representing the lowest development, 10 representing the highest development, and 5 representing the development of moderate level (as shown in the figure below), what do you think the developmental scores of these countries are? (If you do not know this country, you can write down the answer based on any information you currently have.)"

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¹ The introduction in the first US survey mentioned "France and Mongolia" rather than "England and Mongolia". The Bulgaria survey mentioned "Japan and Mongolia". In Argentina the sentence "We'll be talking about countries as varied as England and Mongolia" was excluded from the introduction. In the Nepal study, the sentence telling respondents that they could use both zero and ten and all numbers in between was omitted.

² In the Iraq survey the country of Iraq was inserted as the first country listed in the introduction. We have not listed Iraq in Table 4 as a country asked about because we have no UN HDI score for it.

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