

Arland Thornton, Dirgha J. Ghimire, and Colter Mitchell

**The Measurement and Prevalence of Developmental
Thinking about the Family: Evidence from Nepal**

PSC Research Report

Report No. 04-567

October 2004

PSC POPULATION STUDIES CENTER
AT THE INSTITUTE FOR SOCIAL RESEARCH

UNIVERSITY OF MICHIGAN

The Population Studies Center (PSC) at the University of Michigan is one of the oldest population centers in the United States. Established in 1961 with a grant from the Ford Foundation, the Center has a rich history as the main workplace for an interdisciplinary community of scholars in the field of population studies. Currently the Center is supported by a Population Research Infrastructure Program Grant (R24) from the National Institute of Child Health and Human Development, and by a Demography of Aging Center Grant (P30) from the National Institute on Aging, as well as by the University of Michigan, the Fogarty International Center, the William and Flora Hewlett Foundation, and the Andrew W. Mellon Foundation.

PSC Research Reports are prepublication working papers that report on current demographic research conducted by PSC-affiliated researchers. These papers are written for timely dissemination and are often later submitted for publication in scholarly journals. The PSC Research Report Series was begun in 1981. Copyrights for all Reports are held by the authors. Readers may quote from this work as long as they properly acknowledge the authors and the Series and do not alter the original work.

**The Measurement and Prevalence of Developmental Thinking about the Family:
Evidence from Nepal**

Arland Thornton

Dirgha J. Ghimire

Colter Mitchell

Population Studies Center,
Survey Research Center, and
Department of Sociology,
University of Michigan

Unpublished paper of the Family and Demography Program of the Population Studies Center and
Survey Research Center, University of Michigan
426 Thompson St. Ann Arbor, MI 48106-1248

Abstract

This paper evaluates the theory presented by Thornton (2001, forthcoming) that the interrelated ideas of societal development and modernity are understood and believed by ordinary people and has influence on their values and behavior. Using both qualitative and quantitative data collected in Nepal in 2003-2004 we examine the knowledge and beliefs of ordinary people, asking the extent to which they understand and believe the ideas of development and modernity and use these ideas in evaluating the world around them, including demographic and family behavior. An important outcome of this study is its confirmation of the ability to measure the complex concepts of development in a survey conducted with a broad spectrum of people in Nepal. There is also evidence supporting the contention that developmental thinking has been disseminated widely in Nepal, with large fractions of people understanding and endorsing developmental models. This evidence is consistent with the expectation that developmental thinking has been widely disseminated around the world and is related to people's beliefs and values about family life.

Introduction

The purpose of this paper is to evaluate the extent to which the interrelated ideas of societal development, progress, and modernity are understood and believed within the population of Nepal. The paper is motivated by the hypothesis that the ideas of societal development, progress, and modernity have been disseminated widely around the world and have affected the beliefs, values, motivations, and behavior of scholars, policy makers, and ordinary people. Our focus in this paper concerns the knowledge and beliefs of ordinary people, asking the extent to which they understand and believe the ideas of development, progress and modernity and use these ideas in evaluating the world around them, including demographic and family behavior. We address these questions using both qualitative and quantitative data collected in Nepal in 2003-2004.

There are many reasons to believe that the ideas of societal development, progress, and modernity have been widely disseminated. A substantial number of studies have shown that developmental—or modernization—models have dominated social science thinking for most of the past quarter millennium (Harris 1968; Nisbet 1969; Sanderson 1990; Mandelbaum 1971; Thornton 2001, forthcoming). It is only in the last several decades that the developmental or modernization paradigm has been strongly challenged—and even discredited—and many of the conclusions of the generations of scholars shown to be myths. It has also been documented that European travelers, colonial administrators, leaders of the feminist movement, and family planning advocates have relied heavily on developmental arguments. In addition, the role of developmental models has been demonstrated in the documents of the United Nations, numerous governments, including those of China and the United States, and international nongovernmental organizations (Nisbet 1980; Latham 2000; Meyer et al. 1997; United Nations 1948, 1962, 1979; UNDP 2001, 2002).

There are also data from ordinary people consistent with the idea that developmental thinking is both widespread and influential. Observers in such disparate locations as Africa, India, China, Nepal, and New Guinea have reported examples of ordinary people using the developmental or modernity framework in evaluating various attributes and behavior (Ahearn 2001; Amin 1989; Blaut 1993; Dahl and Rabo 1992; Pigg 1992; Caldwell et al. 1988; Wang 1999). In Nepal, for example Pigg (1992) and Ahearn (2001) use ethnographic data to show that in at least some rural areas of Nepal, people use developmental thinking to compare urban and rural life in Nepal and to think about marriage and other aspects of family life. In addition, social science analyses of surveys in several parts of the world reveal that attitudes and behavior consistent with developmental thinking are associated with access to and contact with the main avenues for the dissemination of developmental thought. For example, urban living, education, and contact with the mass media are strongly related to variation and trends in many aspects of family and demographic behavior (Cleland 2001; Jejeebhoy 1995; Ainsworth et al. 1996; Schultz 1993; Axinn and Yabiku 2001; Thornton and Lin 1994; Barber 1999; Ghimire et al. 2004; Axinn 1993, Bledsoe et al. 1999; Chesnais 1992; Cleland and Wilson 1987; Thornton 2001, forthcoming).

Although there are many reasons to believe that developmental models are both widely disseminated and influential, there are important gaps in the evidence supporting this thesis. Much of the evidence about the widespread distribution of developmental models comes from the writings of the social, economic, and political elites. In addition, the direct evidence from people in everyday life comes primarily from ethnographic evidence, with little survey data demonstrating the overall prevalence of developmental beliefs in the general population. We also have indirect evidence from observed

correlations between various family behaviors and attitudes and experience with urban living, education, and mass media exposure, but while this evidence is consistent with the thesis of the influential nature of developmental models on family behaviors and attitudes, it is also open to alternative structural rather than ideational explanations. Consequently, our understanding of the general population's knowledge and belief of developmental models is limited.

As we outline in the following section, the ideas of development and modernity are complex and sophisticated models of the world and the way it operates. Consequently, measurement of these ideas is a difficult task which we undertook using a combination of qualitative and quantitative methods. We began with informal discussions and in-depth interviews in Nepal to explicate how individuals think about social development or modernity in global terms. Then we broke the complex ideas of development down into their most simple and concrete components and asked people in a survey of their knowledge and beliefs concerning them. In addition, because the ideas of societal development require a basic understanding of the world, we asked respondents to compare circumstances in Nepal and the United States and to rate several countries on their levels of education and development.

We use several criteria to evaluate knowledge and beliefs concerning societal development and modernity in Nepal. These include the extent to which Nepalis are able to discuss societal development in in-depth interviews and focus groups and their willingness and ability to answer survey questions relevant to development. We also evaluate the knowledge that Nepalis have of the international community and their ability to use developmental concepts in evaluating various countries. We also investigate the extent to which respondent answers are consistent with the predictions made by developmental thinking. In this paper we report that the great majority of Nepalis have a remarkable understanding of societal developmental models as indicated by these criteria.

Developmental Models

In this section we highlight the basic beliefs and ideas underlying societal developmental models and explain how they provide important schema for understanding and dealing with the world, including dealing with family structure and relationships. A more comprehensive discussion of these central themes of developmental thinking is provided elsewhere (Thornton 2001, forthcoming).

We begin with the developmental paradigm, a model of social change that has dominated much of Western thinking from the Enlightenment of the 1600s and 1700s to the present. This paradigm suggests that all societies progress through the same natural, universal, and necessary stages of development (for detailed discussions, see Burrow 1981; Harris 1968; Stocking 1968, 1987; Nisbet 1969; Smith 1973; Sanderson 1990; Mandelbaum 1971). The speed of advancement was believed to vary so that at any one point in time societies at different developmental levels could be observed. Scholars using this paradigm believed that the most advanced societies were in northwest Europe and among the northwest European Diaspora, while other societies occupied less advanced positions of development. These scholars believed that they could use this cross-sectional variation to infer the nature of developmental trajectories across time. That is, they read history sideways from the cross-sectional data they observed by assuming that at some time in the past the most developed nations had been like their less developed contemporaries and that at some point in the future the least developed nations would become like their more advanced neighbors (for detailed discussions, see Gordon 1994; Manuel 1962; Sanderson 1990; Harris 1968; Carniero 1973; Berkhofer 1978; Sheehan 1980).

These scholars also observed that the family systems of northwest Europe were very different from those in many other parts of the world (see Millar 1979/1771; Home 1813/1774; Robertson 1980/1777; Montesquieu 1997/1748, 1993/1721; Alexander 1995/1779; Westermarck 1894/1891; Smith 1976/1759; Malthus 1986/1803; Morgan 1985/1877). Although there was considerable heterogeneity outside of northwestern Europe, scholars of the era observed that, compared to northwest Europe, other societies tended to be family-organized, to have considerable family solidarity, and to be extended. Marriage was frequently universal and often contracted at a young age. Again, compared to northwest Europe, these societies also had considerable authority in the hands of parents and the elders, arranged marriages, and little opportunity for affection before marriage. They also had gender relationships that the scholars of the day interpreted as reflecting the low status of women.

There were also family differences within northwest European societies, but in contrast to many family systems elsewhere, northwest European societies were observed to be less family organized, to be more individualistic, to have less parental authority, and to have weaker intergenerational support systems. They also had more nuclear households, less universal marriage, older marriage, and more affection and couple autonomy in the mate selection process. Scholars also perceived women's status as higher in northwest Europe.

With the developmental paradigm and the method of reading history sideways it was easy for generations of scholars to conclude that the process of development transformed family systems from the traditional patterns observed outside of northwest Europe to the developed patterns within northwest Europe (for examples, see Millar 1979/1771; Malthus 1986/1803; Le Play 1982/1855, 1982/1872; Smith 1976/1759, 1978/1762-63; Alexander 1995/1779; Morgan 1985/1877; Engels 1971/1884; Durkheim 1978/1892; Westermarck 1894/1891). They believed that sometime before they wrote in the 1700s and 1800s, there had been a great family transition that had changed European families from being like the world outside of northwest Europe which they labeled as traditional (or backward) to being like the families of northwest Europe that they labeled as developed or modern.

These scholars also observed that, in general, the social and economic systems of northwest Europe were different from those in many other parts of the world. They observed that northwest Europe was, on the whole, more industrial, urban, and educated than many other parts of the world; it also had higher levels of knowledge, consumption, geographic mobility, secularism, democracy, and religious pluralism. They also observed that there had been actual increases in many of these dimensions of northwest European social and economic life. They made the inference that the unique northwest European family system was causally connected to the northwest European social and economic system. Most saw this causation as being the influence of socioeconomic development on family change, but others hypothesized an effect of family change on socioeconomic development. These ideas and conclusions permeated the scholarly literature from the 1700s through the middle 1900s.¹

¹ In the second half of the 1900s studies that used the northwest European historical record to read history from the past to the present rather than from cross-sectional variation found no such historical transformation of family forms in northwest Europe (e.g., Laslett 1965; Laslett and Wall 1972; Macfarlane 1978, 1986; Hajnal 1965, 1982; Wrigley and Schofield 1981). This new scholarship revealed that the modern family systems of northwest Europe observed in the 1700s and 1800s had been in place for centuries. This discovery discredited the idea that societies progressed over time from the traditional family systems outside of northwest Europe to the modern family systems of northwest Europe. It also cast doubt on the idea that modern family systems were the products of modern socioeconomic systems. Although this information has been recognized among scholars specializing in family history, it has received little attention in other academic fields, and probably almost no attention in the larger world.

The developmental paradigm and reading history sideways were not just ideas and approaches used by several generations of scholars to interpret the world; rather, they were combined with the conclusions of social science to form a strong model—that we label developmental idealism—to guide and motivate subsequent social change. Within developmental idealism is a set of propositions that have had an enormous effect on family and demographic behavior during the past two centuries. This developmental idealism package includes a set of ideas identifying goals in life, a means for evaluating various forms of human organization, an explanatory framework identifying the causal influences between family and social and economic life, and statements about the fundamental rights of individual human beings. We argue that these ideas and beliefs have been especially powerful forces affecting family and demographic behavior around the world.

There are four main propositions of developmental idealism (Thornton 2001, forthcoming). The first is that modern society is good and attainable. By modern society we mean the dimensions of social and economic structures identified by generations of scholars as developed—including, for example, being industrialized, urbanized, highly educated, and highly knowledgeable. The second proposition of developmental idealism is that the modern family is good and attainable. By modern family we mean the aspects of family identified by generations of earlier scholars as modern, including the existence of many nonfamily institutions, individualism, nuclear households, intergenerational independence and autonomy, marriages arranged by mature couples, courtship preceding marriage, and a high valuation of women. The third proposition is that a modern family is a cause and an effect of a modern society. That is, a modern socioeconomic social system produces a modern family system and a modern family system produces a modern society. Finally, the fourth proposition of developmental idealism is that individuals have the right to be free and equal and have their social relationships based on consent. These four propositions provide a system of beliefs that can guide a broad array of family and demographic behaviors and relationships, and increases or decreases in their acceptance can lead to changes in family and demographic behavior.

There have been many mechanisms for the dissemination of the developmental paradigm, reading history sideways, the conclusions of social scientists, and the propositions of developmental idealism around the world (Ahearn 2001; Amin 1989; Blaut 1993; Comaroff and Comaroff 1997; Dahl and Rabo 1992; Kahn 2001; Kulick 1992; Latham 2000; Lee 1994; LiPuma 2000; Nisbet 1980; Pigg 1992; Robertson 1992; Samoff 1999; Sanderson 1990; Wallerstein 1979, 1991, Thornton 2001, forthcoming). The treatises of the scholars of the 1700s and 1800s were widely distributed both in Europe and elsewhere around the world. The dissemination of the developmental paradigm and developmental idealism was also assisted by the introduction and expansion of mass education worldwide. The mass media has also been a powerful mechanism for spreading many new ideas, including those of development and its associated models and conclusions. The flow of ideas, both internally within countries and externally across borders, has also been facilitated by industrialization and the urbanization of the population.

The ideas of the developmental paradigm and developmental idealism have also been spread actively through several social movements and organizations. Among these organizations have been the Christian Churches that have spread widely throughout many regions of the world, including Africa, the Americas, and parts of Asia. European exploration, conquest, and colonization affected much of the world from the 1500s through the 1900s, with Western domination providing impetus for the spread of various ideas about development and the superiority of Western ways. The movement for political democracy has influenced the world for at least a quarter century. Marxism and socialism have also been important

forces in the spread of certain aspects of developmental thinking, because they were fundamentally based on the ideas of the developmental paradigm and were committed to the creation of a new world characterized by a modern society and modern family (Nisbet 1980). The foreign policy programs of the United States have also served as mechanisms for the spread of developmental ideas as the United States and its social system were held up as the pinnacle of development, a position to be sought after by others (Latham 2000). The United Nations and other international government and nongovernmental organizations have also been important players in the dissemination of developmental models (Meyer et al. 1997; United Nations 1948, 1962, 1979; UNDP 2001, 2002). Finally, the women's movement and the international family planning program have been especially powerful in mobilizing national and international groups and agencies to spread belief in the developmental paradigm and development idealism.

As the ideas of the developmental paradigm, reading history sideways, and the propositions of developmental idealism have been disseminated and accepted by government agencies, social organizations, community leaders, families, and individuals, they have become powerful forces for social change for centuries. As argued elsewhere (Thornton 2001, forthcoming), the dissemination and acceptance of developmental models has had an important effect on family life in many parts of the world, both in the West and elsewhere. Of central importance in the West have been the substantial changes in marriage and divorce (Bumpass and Lu 2000; Phillips 1988; Waite et al. 2000; van de Kaa 1987; Axinn and Thornton 2000). The role of marriage as a fundamental organizer of social life has declined (Axinn and Thornton 2000). This is evident in the dramatic weakening of the norms against sex, cohabitation, childbearing, and childrearing outside of marriage, along with the increased incidence of nonmarital sexual expression, coresidence, and the bearing and rearing of children (Thornton 1989; Thornton and Young-DeMarco 2001). In addition, the norms against divorce have been weakened, divorce laws have been liberalized, and the incidence of divorce has increased. The roles of women and men have also changed dramatically with the increased participation of women in school, the labor force, and politics (Bianchi and Spain 1986; Casper and Bianchi 2002). Similarly, attitudes toward gender roles have become much more egalitarian (Thornton 1989; Thornton and Young-DeMarco 2001). Sexuality and childbearing have been transformed with the widespread availability and use of contraception, sterilization, and abortion. Fertility levels have declined dramatically, and the norms against voluntary childlessness among married couples have weakened substantially (Morgan 1996; Thornton and Young-DeMarco 2001).

Changes in non-Western countries have been equally dramatic, although often of a somewhat different nature because of long-standing cross-cultural differences both within the countries of the non-West and between the West and non-West (see, for example, Bongaarts and Watkins 1996; Burguière et al. 1986; Caldwell et al. 1988; Chesnais 1992; Thornton and Lin 1994). These include shifts from extended to nuclear households, from familism to individualism, and from parental control to youthful independence. They also include changes from arranged marriages to love matches, from a young age at marriage to an older age at marriage, and from universal marriage to the potential for extensive non-marriage. Also relevant is the dramatic movement from natural fertility to the control of childbearing and from large families to small families. Also important is the rise of feminism, with its emphasis on gender egalitarianism and the rights of women both in families and the public arena. An array of social science research in Nepal suggests that many of these changes have been widespread in Nepal (Ahearn 2001;

Axinn and Yabiku 2001; Axinn and Barber 2001; Ghimire et al. 2004; Fricke 1997; Fricke et al. 1998; Fricke et al. 1991).

There are many explanations of these family changes around the world, including both structural and ideational ones. It is not the purpose of this paper to choose between ideational or structural explanations of these changes. Rather, our goal is to evaluate the extent to which one particular source of change—developmental models and motivations—has been disseminated in one country, Nepal. Discovery of widespread support for developmental models in Nepal would give added support to the hypothesis that these models are an important source of family change in this country.

Nepal as a Research Site

There are several considerations that make Nepal an especially appropriate location for the study of knowledge and beliefs concerning developmental models.

Nepal has never been colonized by any foreign power. The King Prithivi Narayan Saha, who unified Nepal into a single country in 1768, adopted a closed state policy to protect the country from the penetration of the rapidly expanding British Empire. This unification was followed by the emergence of an autocratic family ruling group, the Rana family regime, which continued the closed state policy and kept Nepal in virtually complete isolation from rest of the world for more than a century (1846 to 1950) (Adhikari 1998; Maskey 1996; Rana 1998). The Rana regime was overthrown in the 1950s and was followed by a brief period of multiparty political democracy, which was replaced by a party-less Panchayat democracy under direct leadership of the King in 1961. During the Panchayat period, the country slowly and cautiously established bilateral relations with other countries in Asia, Europe, and America and people were given limited public rights. In the 1990s the Nepalese people were able to restore the multiparty democracy and introduced a new constitution that promised a constitutional monarchy, sovereignty to the people, and social justice for all irrespective of ethnic background, religion, gender, and social class.

Although Nepalese history evolved between two great civilizations, the Chinese and the Indian, Nepal has its unique independent history that dates back as far as the ninth century before the Christian era (Rana 1998). The historical records show that Nepal was inhabited and politically controlled by a Tibeto-Burman group of Mongolian ancestry up until 1000 AD (Dastider 1995; Rana 1998). As the Muslim invasion became widespread in India around the early 13th century, a number of orthodox Hindus and Buddhists fled to Nepal to protect themselves and their religion (Harris et al. 1973; Adhikari 1998; Vaidya, Manandhar, and Joshi 1993). By the end of the 13th century the Indo-Aryan group from India had taken over socio-political power of the then divided Nepal.

The difficult terrain, the historical isolation, extreme exploitation by the ruling elite, and the Hinduization of the non-Hindu population have had an enduring influence on many aspects of Nepali life. Nepal currently ranks as one of the poorest countries in the world. Over 85 percent of the population still lives in rural areas, and more than half of the population is still illiterate. In addition, several attributes of the family that are labeled by developmental idealism as traditional have historically characterized Nepal and are still common. These include extended households, early age at marriage, arranged marriage, parental control over children, and low status of women. One of the leading scholars from Nepal even claims that the fatalistic worldview associated with Hinduism is one of the biggest obstacles in Nepal's effort to improve its economy and standard of living (Bista 1994).

Our research was conducted in one region of Nepal, the Chitwan Valley. Chitwan lies in the south central part of Nepal. Before the 1950s, Chitwan was covered with dense tropical forest and world famous flora and fauna, including the one horned rhino, Bengal tiger, many species of highly poisonous snakes such as the king cobra, different species of birds, trees, shrubs, and grasses. Because of the deadly disease malaria, Chitwan was known then as Death Valley. Nepali prisoners who were on death row were sent to Chitwan for punishment. There were only a few tribal communities such as Chepang in the hills and Tharus, Majhis, and Botes along the riverside, who earned their livelihood through hunting, fishing, and gathering forest products in Chitwan.

In 1955, the Nepalese government opened this valley for settlement. The government distributed land parcels to people coming from adjoining districts of the country. In 1956, the government, in collaboration with the United States government (International Cooperation Assistance [ICA]), implemented a malaria eradication program. Chitwan, once a “Death Valley,” soon became a “melting pot,” receiving migrants from all over the country.

Although, up until the 1970s, the Chitwan Valley was very isolated from the rest of the country, since the late 1970s, the valley has undergone rapid changes in terms of both physical and socioeconomic conditions (Shivakoti et al., 1997). The valley has become connected to the rest of the country by all-weather roads making it the business hub of the country. Thus, most people who travel to the capital city, Kathmandu, from India pass through this valley. Furthermore, there has been a massive expansion of schools, health services, markets, bus services, cooperatives, and employment centers in Chitwan (Axinn & Yabiku, 2001). This transformation, from an isolated valley to a busy business center and fast-growing valley, has had a tremendous impact on the daily social life of communities and individuals.

At the individual level, the massive expansion of services such as schools, health services, bus services, market, employment centers, cinema halls and communication facilities, resulted in more young people going to school, working outside the family, and interacting with mass media. Previous work in Chitwan shows that there has been a sharp increase in school enrollment, visits to health clinics, employment outside of the home, and exposure to different sources of mass media in recent birth cohorts (Axinn & Barber, 2001; Axinn & Yabiku, 2001; Ghimire et al., 2004; Axinn & Yabiku, 2001).

Data and Methods

Qualitative Data

The developmental paradigm and developmental idealism are very complex concepts, which led us to use a multi-method approach in our study. One of the coauthors of this paper, who is also a Nepalese citizen and a long time resident of Chitwan spent several weeks in the study area holding informal discussions with people in Chitwan. The insights he gained from those informal discussions in individuals' back yards, teashops, and chautars (resting places) during early morning and evening hours were crucial to guide our detailed investigations. In addition, the input from a dozen local research staff representing all the major ethnic/castes (Tharu, Gurung, Magar, Sarki, Newar, Chhetri and Bhramin) residing in the valley were invaluable in shaping our study.

Guided by the insights we gained from the informal discussions we conducted a total of 12 in-depth interviews of 2-4 hours length with individuals representing different ethnic groups, genders and ages. Although these interviews were unstructured and informal, they were focused on the issues of developmental idealism and family life. In addition, because these in-depth interviews were conducted on

an individual basis, it was possible to probe and clarify several issues that were ambiguous during informal discussion in larger groups. Similarly, we conducted ten focus groups concerning developmental models, with five groups consisting of women, four groups consisting of men, and one group including both women and men. Each of the groups of women and men individually consisted of one major ethnic group in the valley: Hill Tibeto-Burmese, Terai Tibeto-Burmese, High Caste Hindus, and Low Caste Hindus. These individual ethnic group discussions were purposefully designed to understand the ethnic variations in conceptualizing developmental idealism and family life. These in-depth interviews and focus groups were very useful in providing information about the ways Nepalis think about development, families, socioeconomic structures, and causal relationships between families and socioeconomic change.

Survey Questions

We used the information from our conceptual understanding of developmental models and the insights we gained from the in-depth interviews and focus groups to construct individual questionnaire items. One key strategy guiding our construction of questions was to break the complex propositions of developmental idealism into their component parts using concepts and language that were understandable by ordinary Nepalis. Thus, most of the questions we constructed did not include the general abstract concepts of development or modernity (or their Nepali equivalents). Instead, we focused most of our attention on family matters that were very familiar to Nepalis such as marriage, living arrangements, parent-child relations, childbearing, and contraception. Similarly, we focused our questions about socioeconomic structures on such familiar concepts as education, employment, wealth, residence, and mortality. For a few questions we asked directly about development (“bikas” in Nepali) because we wanted to ascertain the extent to which Nepalis were familiar with the concept

Following the construction of our initial survey questionnaire, we conducted two pretests with a modest number of respondents. Each pretest provided information about questions that were ambiguous or difficult to understand. This provided the necessary information to refine the questions, leading to the questionnaire that we used in our survey.

Sample Design

The survey was conducted with 537 people aged 17 and above living in the Western Chitwan Valley. These people were chosen using the following strategy. First, based on the distance from the primary urban center within the Chitwan Valley, the study area was divided into five distinct strata. Second, a sample was selected of 2-4 neighborhoods, consisting of 4-25 households from each stratum. Finally, all the individuals age 17 and above residing in selected neighborhoods were interviewed. This sampling procedure resulted in slightly more than 100 individuals being selected from each of the five strata. These people were interviewed in face-to-face interviews in the Nepali language using paper and pencil format. Three respondents who could not be interviewed in Nepali were excluded from our analysis. The field period lasted for six weeks and resulted in a 97 percent response rate.

Measures

The survey questionnaire included 26 sections asking about many dimensions of the developmental paradigm and developmental idealism. However, in this paper we focus our attention only on the six sections of questions (from 5-20 questions in each section) most relevant for investigating

knowledge and belief in the developmental paradigm and its application in concrete situations. These are questions that measure knowledge of several countries of the world, knowledge of the developmental hierarchy, and the ability to rank countries in the developmental hierarchy.

More specifically, four of the sections in the survey presented a characteristic (e.g. marrying at older ages) and then asked if this characteristic is more common in different places or types of societies. The location comparisons in the four sections were: 1) U.S. versus Nepal; 2) rich versus poor places; 3) developed versus traditional places; and 4) educated versus uneducated places. The respondents could specify that a characteristic was more common in one location (e.g. the U.S.) or in the other location (e.g. Nepal) or that it was equally common in both. “Don’t know” was not given as a response, but such answers were accepted after a follow up probe asking the respondent to give their best guess or estimate.

Another set of questions began with the following introduction: “Now we would like you to consider how educated different places in the world are. Here is a scale of education—with the least educated place in the world being here at number 0 and the most educated place in the world being here at number 10. And, moderately educated places here in the middle at number 5.” The respondents were then asked to rate Nepal, Japan, India, U.S., Somalia, China, England and Brazil on the scale. If respondents reported that they did not know the score, the interviewer responded, “Even if you don't know exactly, what would be your best guess for (the country)?” If the respondent indicated again that they did not know, we accepted that as their final answer. Later in the survey we asked similar questions about the development of the same countries.

In order to have an external criterion to compare with the answers of Nepali respondents about the ratings of countries by education and development we used the indices of education and development created by the United Nations for the same eight countries² (United Nations Development Program 2001, 2003). Both indices come from the 2003 Human Development Report (UNDP 2003), which contains the 2001 calculations of the Human Development and Education Indices. The international education index is comprised of measures of national adult literacy (% of population over age 15 who are literate) and the combined primary, secondary and tertiary gross enrollment ratio. The human development index is calculated using the education index, life expectancy at birth, and the GDP per capita of the country. The scores for both indices can theoretically range from 0 to 1, but actually range from .16 to .99 for education and .275 to .94 for development.

Analysis Strategies

We utilize several criteria for evaluating whether people in the Chitwan Valley understand and believe the ideas of the developmental paradigm. Our first criterion focuses on people’s ability to use and apply developmental concepts in their discussions. This was evaluated qualitatively using the in-depth interviews and focus group interviews. In addition, we hypothesized that lack of understanding and knowledge of developmental thinking in the survey would be revealed in respondents becoming frustrated, terminating the survey early, refusing to answer questions, responding that they do not know the answers, and providing answers that do not appear to be related to the questions. Thus, we consider

² Although all the relevant information for Somalia (i.e. GDP per Capita, education information, life expectancy) is available through the UNDP, their education and human development scores were not calculated by UNDP for Somalia. Using the data from the other countries and the information from Somalia we imputed the missing scores on both education and development.

the comments of the interviewers and respondents concerning the interview and examine the amount and type of item missing data, including terminating the survey early. Having positive comments and little missing data provides some evidence respondents understand the concepts being measured.

Second, we checked for patterns of acquiescence in the data. Just because there are no item-missing data or survey terminations, does not necessarily mean that the concepts are being understood and measured. For example if respondents learn that for each “don’t know” answer provided there is a probe, they may begin to respond without really listening to and thinking about the questions. This may be reflected in respondents saying that every attribute is more common in the United States than in Nepal or in rich places versus poor places. We checked for this kind of acquiescence by including items that were actually more common in one place and items that were more common in the other place. By doing so, we could examine whether respondents distinguished between items that were more common in one place and items that were more common in the different place.³

Third, we compared the answers of our survey respondents with external criteria provided by knowledge of actual country comparisons (Nepal versus the United States), the comparison between rich and poor places, and between educated and uneducated places as specified by the developmental literature, and by comparing respondent ratings of countries on education and development with the United Nation’s ratings of the same countries on education and development. We posit that a high level of international knowledge and understanding of developmental models and concepts will be reflected in a high degree of correspondence between respondent answers and these external criteria.

More specifically, we believe that respondents who can correctly identify the attributes of developed and traditional places in correspondence with developmental knowledge must be familiar with the developmental model and its application. Similarly, respondents who can correctly compare Nepal with the United States, rich versus poor places, and educated versus uneducated places must have considerable international knowledge—in the first instance information about a particular place, the United States and in the second and third instances general information about rich, poor, educated, and uneducated places. Or alternatively, the correct answers in these comparisons of places could be the result of respondents having a knowledge of developmental thinking, an understanding of where Nepal, the United States, rich and poor places, and educated and uneducated places fit within the developmental hierarchy, and knowledge of which attributes the developmental model associates with various positions on the developmental scale. In either case, the correspondence of respondent answers with external criteria would reflect considerable international knowledge and/or sophistication in developmental thinking.

Similarly, respondents who rate the development levels of countries similarly to the United Nations development ratings must both have considerable knowledge of the eight countries and understanding of developmental models. The correspondence of respondent ratings of educational levels in countries could reflect a high level of knowledge of the educational systems of different countries. Alternatively, respondents may rate educational levels of countries similarly to the United Nations if they both have a general development score for each country and also understand the relationship of education and development. Another necessary requirement for correspondence of answers with the U.N. is that the respondents be able to understand and use our crude measurement scale (0-least educated/developed, 10-most educated/developed).

3 See Converse and Presser 1986 and Schwarz 1999 for more general discussions of acquiescence.

We evaluate the correspondence between Nepali respondents and the external criteria by estimating the fraction of Nepali respondents who provide the predicted answers about the comparisons of Nepal and the United States on a series of social, economic, and family relationships. Similarly, we estimate the fraction of respondents who believe that levels of education, wealth, and development in societies are associated with a range of family attributes. We also document knowledge and application of the developmental paradigm through our questions asking respondents to rate a series of countries on their levels of education and development. Here we compare both the individual and aggregate ratings of Nepalis concerning the education and development levels of countries with the ratings of these two socioeconomic dimensions provided by the United Nations, with the presumption that a distribution of answers similar to the ratings of the United Nations indicates great knowledge of the countries of the world and great ability to apply the concepts of development in everyday life.

Results

Respondent Understanding and Rapport

We begin our analysis with the observation that the participants in the in-depth interviews and focus groups were able to discuss the concepts of development and their application in everyday life with vigor and articulateness. These discussions suggest a high degree of understanding of developmental concepts and ability to use them in conversation. The few participants who did not speak Nepali expressed the most difficulty with the concept of development. We believe that this difficulty was both a result of translation difficulties and the fact that the concept of development (as understood in this paper) did not seem to exist in the language of particular non-Nepali speakers.

Further evidence of respondent understanding is provided by the survey data. Most people in Nepal were very willing to be interviewed. This is evident by the 97% response rate of the survey. In addition no one terminated the interview early. This high level of respondent cooperation was true despite the interview not being an easy one. The survey was relatively long (an average length of about 70 minutes) and intensive. It required a great deal of thought as over 90% of the questions were about knowledge, beliefs, and attitudes, with many being about relatively complex, abstract ideas. Nevertheless, both respondents and interviewers provided positive comments about the interview experience.

Further evidence of the sophistication of the respondents is the relatively low level of missing data. As seen in Table 1, item non-response for the questions asking respondents to compare attributes in various places rarely exceeded 3 percent of the responses, and often remained at or below 1%. It is also important to note that the missing data are mostly the result of respondents reporting that they don't know. Only twice was an uncodeable answer given, and there were no refusals. In fact, for the 40 attitudinal questions reported in Table 1 87% did not have any item missing data (i.e. no "don't knows", refusals, or uncodeable answers), and 98% had 7 or fewer item missing data.

The top panel of table 2 provides information about the missing data for the ratings of countries on development and education. Recall that for these questions we asked respondents to rate each of the countries listed and for respondents who did not answer on the first query, we probed with a similar question. The data in the top panel of Table 2 indicate the percentage of respondents giving a rating on the first question, the percentage giving a rating on the second question, and those providing no rating after two queries.

With the exception of Somalia, more than 90 percent of respondents were able to report a country rating for education and more than 95 percent were able to report a development rating. After the probe, the percentage giving a rating for education and development rose to at least 96 percent for each country for both education and development (including Somalia). Thus, with the probe the rate of missing data for each rating was at 4 percent or less and frequently at 2 percent or less. As we will show later, the probed responses have less correspondence to the U.N. scores, but there is still considerable correspondence, reflecting extensive knowledge even among individuals who initially claimed that they did not know.

Clearly Somalia is the country where people are most likely to report that they do not know its level of education or development. Some of these respondents said they had not heard of the country, a fact that should not be surprising since Somalia is a small country without large-scale international recognition. What is more surprising is the willingness of such a large percentage of respondents to rate this country.

Note that there is a much smaller incidence of missing data for the development ratings compared to the education ratings. This could be due to two factors. First, the education questions came earlier in the survey than the development questions, and respondents could have learned from their experience with the education questions and been more willing and efficient in answering the development questions. Second, it is possible that some respondents were able to crystallize their thinking about development more clearly and saliently than their ideas about educational distributions. In any event, the overall lack of missing data suggests a high degree of understanding of the concepts of education and development and their distributions across countries.

Acquiescence

The examination of acquiescence provides even further evidence that the questions we asked are understandable and the answers meaningful. The low amount of missing data for the various questions may simply be due to respondents being agreeable to every question asked, without wondering if they could really answer the question. However, this pattern of acquiescence seems unlikely because we asked several similar questions in different directions to see if the respondents gave the same answers to questions measured in the opposite direction; and the results indicate that they distinguish between the oppositely worded questions. For example, in the US/Nepal comparison and in the developed/traditional society comparison respondents were asked in which location it was more common to have marriages arranged by parents, while the Rich/Poor and Uneducated/Educated comparisons asked in which locations it is more common for young people to choose. Despite the directional difference of the question wording, a majority of respondents still chose the predicted outcome of linking young people control to the U.S. and living in developed, rich, and educated places. A similar result can be seen with the two age at marriage questions. Although the Nepal/U.S. comparison asked about the prevalence of child marriage and the other three questions asked about people marrying at older ages, all distributions suggest that age at marriage is positively associated with the U.S. and living in developed, rich, and educated places.

Another possible problem may be that respondents may only hear the first question in a series of questions and then respond with the same answer to each remaining question in that section. For example, a respondent might simply say that everything is more common in the United States than Nepal or that everything is more common in developed than traditional places. A review of the Nepal/U.S. and traditional/developed questions reveals that this did not happen for these series of questions. Instead, a

substantial fraction of people reported that some things were more common in Nepal than in the U.S. while reporting that other things were more common in the U.S. The same is true for the traditional/developed comparisons. As we discuss more fully below, instead of indicating an unthinking response set, these response distributions generally follow the predicted direction (signified by the **bold**). It is important to note that the Traditional/Developed comparison was asked in the middle of the survey and the Nepal/US comparison was asked at the end of the survey, so there appears to be very little acquiescence even after the respondents had spent 40-60 minutes answering questions.

Correspondence with External Criteria

We now turn to the criteria of correspondence to external criteria, with the external criteria being set by either objective knowledge or by the results of developmental models. In Table 1 we report the results of answers asking respondents to report whether certain attributes are more common in some places than in others. We have indicated in **bold** the responses that we believe most closely correspond to the external criteria.

Turning first to the set of questions asking respondents to compare basic elements of social, economic, and family life in Nepal and the United States, we find a striking correspondence between the understandings of Nepalis and the objective reality indicated empirically by the relative distribution of actual attributes in Nepal and the United States. The data in Table 1 suggest that most Nepali respondents know a substantial amount about the United States and how it compares with Nepal. The vast majority can properly evaluate the differences between the socioeconomic circumstances in Nepal and the United States. More specifically, between 84 and 95 percent report that cities, education, high incomes, and paid employment are higher in the United States while child mortality and farm employment are higher in Nepal.

Many of these Nepali respondents can also report very accurately about several dimensions of family life in Nepal and the United States. For example, 88 percent or more can report that polygamous families, activities organized around the family, marriages arranged by parents, and large families with many children are more common in Nepal than in the United States. Somewhat smaller percentages, but still between 74 and 84 percent, report that married sons living with their parents and child marriage are more common in Nepal while between 69 and 80 percent believe that personal freedom, women who never marry, and women having a high degree of respect are more common in the United States. Several, but not all, of the other family comparisons are in the predicted direction, but not as overwhelmingly split as those just mentioned.

Thus, this body of data suggests that most Nepalis have a substantial amount of information about the United States and can properly compare it with Nepal. They know that the two countries vary dramatically in terms of wealth, education, health, and wage employment. They also know that the two family systems differ dramatically. Another interpretation of these data is that they do not reflect objective knowledge of the U.S. compared to Nepal, but that Nepalis understand that the U.S. is more developed than Nepal and that certain social, economic, and family attributes are associated with development.

One additional result in Table 1 merits comment, comparisons of Nepal and the United States on their overall quality of life—a purely subjective comparison with no objective metric for evaluation.

Despite the potential pressures of ethnocentrism, 87 percent of Nepali respondents rated a good quality of life as more common in the United States than Nepal.

The data in the other three sections confirm that the vast majority of Nepalis explicitly understand the correlation between family matters and various indicators of socioeconomic position, including wealth, development, and education. Between 64 and 93 percent of Nepalis report that people marrying at older ages, women getting treated with respect, married couples using contraception, and children living away from their older parents are more common in rich, developed, and educated places than in poor, traditional, and uneducated places. The 90 plus percent reporting a positive correlation between education and women's status, spouse choice, and the use of contraception is quite remarkable.

Note, however, that the respondents are split on the correlation between divorce and wealth and education. Approximately half of them believe that the correlation is positive and half that it is negative.⁴

Another interesting result is that although respondents could have reported⁵ that the characteristics were equally common in either location, they rarely did so. In fact for most questions only around 1% reported that the characteristic was not more common in either location. This suggests that although people may disagree about where things are more common, there is a belief that there are differences between the locations.

We now turn to the second panel of Table 2 where we report the mean education and development scores for each of the countries rated. Note that we do so separately for respondents who answered the first question and respondents who answered only after a probe. Also listed in Table 2 are the education and development scores of the United Nations (multiplied by ten to create a similar metric), an organization expending considerable resources to assess the education and development of the world's countries. The United Nations scores are listed here because they provide a criterion against which to compare the results of our survey.

Perusal of the middle panel of Table 2 reveals that the average scores for Nepalis are remarkably similar to the United Nations scores on both education and development. Because most respondents gave an answer without being probed, the first mean is roughly equal to the overall mean. The second mean for education and especially for development are very unstable, mostly due to the small cell size. Nevertheless, the results clearly show that the respondents as a group do an impressive job of rating these countries on development and education, on average, rating them very similarly to the United Nations.

One interesting side note is that Brazil is very high on the education index provided by the UN and only moderate on the development index—but respondents, on average, gave Brazil similar scores for education and development. This may suggest that the Nepali respondents see education and development as highly related and may be rating Brazil's educational level more on their understanding of Brazil's level of development rather than on any precise knowledge of Brazil's education system.

As a summary measure of the correspondence of survey reported and UN reported development and education scores, we calculated Pearson correlation coefficients between the United Nations scores and the mean scores for the respondents. These correlations are reported separately in the bottom panel of Table 2 for those who responded without a probe and those that required a probe. The top row

4 Interpretation of this result is beyond the scope of this paper

5 Interviewers were instructed to accept the answer that the characteristic was equally likely to be found in either country, but interviewers were not to suggest it as a response option.

correlations are calculated using all 8 countries asked about in the survey, and the bottom row reports the correlations with Somalia removed from the analysis.

These results provide powerful evidence of the understanding of the developmental hierarchy. The correlation for all 8 countries for those who did not require a probe is .80 for education and .77 for development. When Somalia is removed, these correlations increase to .88 for education and nearly .90 for development. Clearly, as a group, the respondents matched the UN estimates of education and development quite well.

As expected, the respondents who said that they could not rate a particular country on education or development did not match the U.N. distributions as well as those who reported ratings after the first question. Nevertheless, even these respondents had substantial correlations with the U.N. ratings, with those correlations being particularly high for development when Somalia is removed. This indicated that even when respondents profess ignorance of a country, their knowledge still bears some correspondence to the overall criteria provided by the U.N.

Just as Pearson correlation coefficients can be computed between the aggregate scores of respondents and the United Nations, correlations can be computed between the scores of an individual and the scores of the United Nations. That is, one can calculate 537 correlations between each individual's score on country education and the United Nations education index. Another 537 correlations can be calculated between an individual's score on development and the UN development index.

We summarize the distributions of these correlations in Table 3 by showing the quartile breaks for the various correlations. Again, we have created splits much like the last panel in table 2 where we look at the correlations both with and without Somalia included and if the respondent needed a probe on any of the countries versus all respondents independent of needs for probes. It is interesting that although there is some variation around the estimates, they are all quite similar, with removing Somalia and using only those who never required a probe on any of the countries both slightly increasing the correlations. Because of the similarities we focus our attention primarily on the correlations without Somalia and for those who were not probed on any country.

Looking first at the individual correlations between Nepali respondents and the United Nations on education, we see that 25 percent of the respondents had correlations below 0.12, indicating a relatively low level of agreement of individuals with the UN. This low individual-level correlation is consistent with the fact that a significant number of Nepalis, 15 percent, gave Nepal a score of 10 on the education scale.⁶ Having such a rating for Nepal virtually guarantees a low overall correlation with the UN. It is not clear whether these respondents misunderstood the question or were using a different criterion of education than the UN. Despite the fact that many Nepalis had only a low correlation with the UN, many displayed a relatively high correlation. That is, over half had an education correlation with the UN greater than .57, and 25 percent had correlations of .8 or greater.

Note that the individual correlations between the Nepali scores on development and the relevant UN scores were generally higher than those for education. There are fewer very low correlations and more high correlations on development than on education. This suggests the possibility that the concept of development—and the distribution of countries on this scale—may be more salient in Nepal than is the concept of education for these particular countries.

6 12 percent of respondents gave Nepal a 10 on the development scale.

The ability of most respondents in Nepal to perform relatively well on this evaluation task suggests at least three things. First, they were able to utilize our crude measurement devices rather reliably. Second, they have a fairly sophisticated understanding and conception of development and education, which, despite language differences, match those of the UN, since they are able to utilize the constructs in very much the same way as the UN. And, third, they have an understanding of some of the major countries of the world and are able to evaluate their levels of education and development. The simultaneous existence of all three of these characteristics is necessary to obtain such high correlations among so many of the respondents. Of course there is a group of respondents who fail on at least one of these characteristics. Identification of these people and why they are unable to replicate UN ratings is a task for further investigation—to expand both our methodological capabilities and to understand the substantive implications.

Conclusions

As we noted in the beginning of the paper, family change has been a common occurrence in many places around the world. Social scientists have accumulated a wide array of structural and ideational explanations of this worldwide family change. In this paper we have focused our attention on one particular ideational force for changing family life—that of developmental idealism. We have suggested that it has been disseminated widely around the world, where it has had enormous influence on family behavior, beliefs, and values.

One of the most important outcomes of this study is its confirmation of our ability to measure the complex concepts of development in a survey conducted with a broad spectrum of people in Nepal. In addition to a very high response rate of 97 percent, most of the respondents eagerly participated in the study, and there were almost no refusals on individual survey items. Furthermore, the respondents displayed a remarkable ability to answer the questions measuring knowledge and acceptance of developmental models. This is reflected in the fact that most Nepalis have considerable knowledge of the world, and understand development models and related concepts, and are able to provide information concerning their knowledge and beliefs. For example, most respondents answered can answer questions about the correlation between family matters and various indicators of socioeconomic position, including wealth, development, and education.

This new evidence from Nepal supports our contention that developmental thinking has been disseminated widely around the world. As suggested by the ethnographic work of Pigg (1992) and Ahearn (2001), most people in our study are familiar with the ideas of development and use them extensively in their understanding of the world. Most ordinary people have considerable knowledge of the ideas of development, substantial knowledge about the major countries of the world, can rate countries on their levels of education and development, and believe that there is an association between socioeconomic development and family structure. As we have argued earlier in the paper, we believe that the spread of developmental models, particularly developmental idealism, has dramatic implications for family change. It is likely that as these ideas have spread, they have become causal factors in facilitating change. It is too early to draw conclusions about the sources of these ideas in Nepal or about their implications for family change. Further data analysis will be required for answering those questions.

References

- Adhikari, Di Pi. 1998. *The History of Nepalese Nationalism*. Nayabazar, Kathmandu: Jeewan Printing Support Press.
- Ahearn, Laura M. 2001. *Invitations to Love: Literacy, Love Letters, and Social Change in Nepal*. Ann Arbor, MI: The University of Michigan Press.
- Ainsworth, Martha, Kathleen Beegle, and Andrew Nyamete. 1996. "The Impact of Women's Schooling on Fertility and Contraceptive Use: A Study of Fourteen Sub-Saharan African Countries." *The World Bank Economic Review* 10(1):85-122.
- Alexander, William. [1779] 1995. *The History of Women From the Earliest Antiquity to the Present Time*. Bristol: Thoemmes Press.
- Amin, Samir. 1989. *Eurocentrism*. New York: Monthly Review Press.
- Axinn, William G. 1993. "The Effects of Children's Schooling on Fertility Limitation." *Population Studies* 47(3):481-493.
- Axinn, William G. and Jennifer S. Barber. 2001. "Mass Education and Fertility Transition." *American Sociological Review* 66(4):481-505.
- Axinn, William G. and Arland Thornton. 2000. "The Transformation in the Meaning of Marriage." In Linda Waite, Christine Bachrach, Michelle Hindin, Elizabeth Thomson, and Arland Thornton (eds.) *Ties That Bind: Perspectives on Marriage and Cohabitation*, pp. 147-65. Hawthorne, New York: Aldine de Gruyter.
- Axinn, William G. and Scott T. Yabiku. 2001. "Social Change, the Social Organization of Families, and Fertility Limitation." *American Journal of Sociology* 106(5):1219-1261.
- Barber, Jennifer S. 1999. "Communities and Attitudes: The Influence of Nonfamily Institutions and Experiences on Dispositions Toward Marriage." Paper presented at the annual meetings of the American Sociological Association, August 6-10, Chicago, IL.
- Berkhofer, Robert F. 1978. *The White Man's Indian: Images of the American Indian From Columbus to the Present*. New York: Knopf.
- Bianchi, Suzanne M. and Daphne Spain. 1986. *American Women in Transition*. New York: Russell Sage Foundation.
- Bista, Dor Bahadur 1994. *Fatalism and Development: Nepal's Struggle for Modernization*. Calcutta, India: Orient Longman..
- Blaut, James M. 1993. *The Colonizer's Model of the World: Geographical Diffusionism and Eurocentric History*. New York: The Guilford Press.
- Bledsoe, Caroline H., John B. Casterline, Jennifer A. Johnson-Kuhn, and John G. Haaga (eds.) 1999. *Critical Perspectives on Schooling and Fertility in the Developing World*. Washington, DC: National Academy Press.
- Bongaarts, John and Susan C. Watkins. 1996. "Social Interactions and Contemporary Fertility Transitions." *Population and Development Review* 22(4):639-682.
- Bumpass, Larry and Hsien-Hen Lu. 2000. "Trends in Cohabitation and Implications for Children's Family Contexts in the U.S." *Population Studies* 54(1):29-42.
- Burguière, Andrè, Christiane Klapisch-Zuber, Martine Segalen, and Françoise Zonabend (eds.) [1986] 1996. *A History of the Family*. Harvard: Harvard University Press.
- Burrow, John W. 1981. *Evolution and Society*. Cambridge: Cambridge University Press.
- Caldwell, John C. 1982. *Theory of Fertility Decline*. London: Academic Press.
- Caldwell, John C., Palli Hanumantha Reddy, and Pat Caldwell. 1988. *The Causes of Demographic Change: Experimental Research in South India*. Madison, WI: The University of Wisconsin Press.

- Carneiro, Robert L. 1973. "Classical Evolution." In Raoul Naroll and Frada Naroll (eds.) *Main Currents in Cultural Anthropology*, pp. 57-121. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Casper, Lynne M. and Suzanne M. Bianchi. 2002. *Continuity and Change in the American Family*. Thousand Oaks, CA: Sage Publications.
- Chesnais, Jean-Claude. 1992. *The Demographic Transition: Stages, Patterns, and Economic Implications*. Oxford: Oxford University Press.
- Cleland, John. 2001. "The Effects of Improved Survival on Fertility: A Reassessment." In John B. Casterline and Rodolfo Bulatao (eds.) *Global Fertility Transition*, pp. 60-92. Supplement to Volume 27 of *Population and Development Review*.
- Cleland, John and Christopher Wilson. 1987. "Demand Theories of the Fertility Transition: An Iconoclastic View." *Population Studies* 41(1):5-30.
- Comaroff, Jean and John L. Comaroff. 1997. *Of Revelation and Revolution: The Dialectics of Modernity on a South African Frontier*. Chicago: University of Chicago Press.
- Converse, J. and S. Presser. 1986. *Survey Questions* Newbury Park: SAGE. Volume 63.
- Dahl, Gudrun and Annika Rabo (eds.) 1992. *Kam-Ap or Take-Off: Local Notions of Development*. Stockholm: Stockholm Studies in Social Anthropology.
- Dastider, Mollica. 1995. *Religious Minorities in Nepal*. New Delhi: Nirala Publications
- Durkheim, Emile. [1892] 1978. "The Conjugal Family." In Mark Traugott (ed.) *Emile Durkheim on Institutional Analysis*, pp. 229-239. Chicago: The University of Chicago Press.
- Engels, Friedrich. [1884] 1971. *The Origin of the Family, Private Property, and the State*. New York: International Publishers.
- Fricke, Thomas E. 1997. "Marriage Change As Moral Change: Culture, Virtue, and Demographic Transition." In Gavin W. Jones, Robert M. Douglas, Jack C. Caldwell, and Rennie M. D'Souza (eds.) *The Continuing Demographic Transition*, pp. 183-212. Oxford: Oxford University Press.
- Fricke, Thomas E., Dilli R. Dahal, Arland Thornton, William G. Axinn, and Krishna P. Rimal. 1991. "Tamang Family Research Project: Summary Report on Ethnographic and Survey Research Conducted in the Budhanilkantha Area, Kathmandu Valley and Tipling Gaon Panchayat in the Upper Ankhu Khola Valley March 1987-January 1988." Report to Center for Nepal and Asian Studies, 1-111. Kirtipur, Nepal: Tribhuvan University.
- Fricke, Thomas, Arland Thornton, and Dilli R. Dahal. 1998. "Netting in Nepal: Social Change, the Life Course, and Brideservice in Sangila." *Human Ecology* 26(2):213-237.
- Ghimire, Dirgha J. 2004. "The Social Context of First Birth Timing in Nepal." Presented at the annual meeting of the Population Association of America, April 1-3 (2004), Boston, MA.
- Ghimire, Dirgha J., William G. Axinn, Scott T. Yabiku, and Arland Thornton. 2004. "Social Change, Premarital Non-family Experience and Spouse Choice in an Arranged Marriage Society." Revise and resubmit to *American Journal of Sociology*.
- Gordon, Daniel. 1994. *Citizens Without Sovereignty*. Princeton, NJ: Princeton University Press.
- Hajnal, John. 1965. "European Marriage Patterns in Perspective." In David V. Glass and D. E. C. Eversley (eds.) *Population in History*, pp.101-143. Chicago: Aldine Publishing Company.
- Hajnal, John. 1982. "Two Kinds of Preindustrial Household Formation System." *Population and Development Review* 8(3):449-94.
- Harris, Marvin. 1968. *The Rise of Anthropological Theory*. New York: Thomas Y. Crowell Company.
- Harris, G. L., J. A. Giddens, Thomas E. Lux, F. M. Bunge, F. C. Rintz, and H. H. Smith. 1973. *Area Handbook for Nepal, Bhutan, and Sikkim*. Washington, DC: Government Printing Press.
- Home, Henry K. [1774] 1813. *Sketches of the History of Man In Two Volumes*. Edinburgh: printed for W. Creech, Edinburgh; and for W. Strahan, and T. Cadell, London.

- Jejeebhoy, Shireen J. 1995. *Women's Education, Autonomy, and Reproductive Behaviour: Experience From Developing Countries*. Oxford: Clarendon Press.
- Kahn, Joel S. 2001. "Anthropology and Modernity." *Current Anthropology* 42(5):651-680.
- Kobrin, Frances E. 1976. "The Fall of Household Size and the Rise of the Primary Individual in the United States." *Demography* 13(1):127-138.
- Kulick, Don. 1992. "'Coming Up' in Gapun: Conceptions of Development and Their Effect on Language in a Papua New Guinean Village." In Gudrun Dahl and Annika Rabo(eds.) *Kam-Ap or Take-Off: Local Notions of Development*, pp. 10-34. Stockholm: Stockholm Series in Social Anthropology.
- Laslett, Peter. 1965. *The World We Have Lost: England Before the Industrial Age*. New York: Charles Scribner's Sons.
- Laslett, Peter and Richard Wall (eds.) 1972. *Household and Family in Past Time*. London: Cambridge University Press.
- Latham, Michael E. 2000. *Modernization As Ideology*. Chapel Hill, NC: University of North Carolina Press.
- Le Play, Frederic. [1855] 1982. "Les Ouvriers Europeens." In Catherine Bodard Silver (ed.) *Frederick Le Play on Family, Work and Social Change*, pp. 9-12, 16-18, 286-287, 281-282. Chicago: The University of Chicago Press.
- Le Play, Frederic. [1872] 1982. "La Reforme Sociale." In Catherine Bodard Silver (ed.) *Frederick Le Play on Family, Work and Social Change*, pp. 352-358. Chicago: The University of Chicago Press.
- Lee, Raymond L. M. 1994. "Modernization, Postmodernism and the Third World." *Journal of the International Sociological Association* 42(2):1-66.
- LiPuma, Edward. 2000. *Encompassing Others: The Magic of Modernity in Melanesia*. Ann Arbor, MI: The University of Michigan Press.
- Macfarlane, Alan. 1978. "Modes of Reproduction." In Geoffrey Hawthorn (ed.) *Population and Development*, pp. 100-120. London: Frank Cass & Co. Ltd.
- Macfarlane, Alan. 1986. *Marriage and Love in England: Modes of Reproduction, 1300-1840*. Oxford: Basil Blackford.
- Malthus, Thomas R. [1803] 1986. "An Essay on the Principle of Population." In E. A. Wrigley and David Souden (eds.) *The Works of Thomas Robert Malthus, Vols. 2-3*. London: William Pickering.
- Mandelbaum, Maurice. 1971. *History, Man, and Reason: A Study in Nineteenth-Century Thought*. Baltimore: The John Hopkins Press.
- Manuel, Frank E. 1962. *The Prophets of Paris*. Cambridge, MA: Harvard University Press.
- Maskey, Govinda. 1996. *Social Life of Nepal: From Tradition to Modernity 1001-1925*. New Delhi: Anmol Publications Pvt. Ltd.
- Meyer, John W., John Boli, George M. Thomas, and Francisco O. Ramirez. 1997. "World Society and the Nation-State." *American Journal of Sociology* 103(1):144-181.
- Millar, John. [1771] 1979. "The Origin of the Distinction of Ranks." William C. Lehmann (ed.) New York: Arno Press.
- Montesquieu, Charles-Louis de Secondat. [1721] 1993. *Persian Letters*. C.J. Betts. (ed.) Harmondsworth, U.K.: Penguin Books Ltd.
- Montesquieu, Charles-Louis de Secondat. [1748] 1997. *The Spirit of the Laws*. Cambridge: Cambridge University Press.
- Morgan, Lewis H. [1877] 1985. *Ancient Society*. Tucson, AZ: The University of Arizona Press.
- Morgan, S. Phillip. 1996. "Characteristic Features of Modern American Fertility." in John B. Casterline, Ronald D. Lee and Karen A. Foote (Eds.) *Fertility in the United States: New Patterns, New Theories*, pp. 19-67. A supplement to *Population and Development Review* v.22 New York: Population Council.
- Nisbet, Robert A. 1969. *Social Change and History*. New York: Oxford University Press.

- Nisbet, Robert A. 1980. *History of the Idea of Progress*. New York: Basic Books.
- Phillips, Roderick. 1988. *Putting Asunder: A History of Divorce in Western Society*. Cambridge: Cambridge University Press.
- Pigg, Stacy L. 1992. "Inventing Social Categories Through Place: Social Representations and Development in Nepal." *Comparative Studies in Society and History* 34(3):491-513.
- Rana, Pashupati S. 1998. "The History of Nepal." In Pashupati Shumshere J.B. Rana and Dwarika Nath Dhungel (eds.) *Contemporary Nepal*. New Delhi, India: Vikas Publishing House Pvt. Ltd.
- Robertson, Robert. 1992. *Globalization: Social Theory and Global Culture*. London: Sage Publications.
- Robertson, William. [1777] 1980. *The History of America By William Robertson*. Dublin: printed for Messrs. Price, Whitestone, W. Watson, Corcoran, R. Cross and 41 others in Dublin.
- Samoff, Joel. 1999. "Institutionalizing International Influence." In Robert F. Arnove and Carlos Alberto Torres (eds.) *Comparative Education: The Dialectic of the Global and the Local*, pp. 51-89. Lanham, MD: Rowman and Littlefield Publishers, Inc.
- Sanderson, Stephen K. 1990. *Social Evolutionism. A Critical History*. Oxford: Basil Blackwell.
- Schultz, T. P. 1993. "Returns to Women's Education." In Elizabeth M. King and M. Anne Hill (eds.) *Women's Education in Developing Countries: Barriers, Benefits, and Policies*, pp. 51-99. Baltimore, MD: The Johns Hopkins University Press.
- Schwarz, N. 1999. Self-reports: How the questions shape the answers. *American Psychologist*, 54, 93-105.
- Sheehan, Bernard W. 1980. *Savagism and Civility: Indians and Englishmen in Colonial Virginia*. New York: Cambridge University Press.
- Shivakoti, G., W. G. Axinn, P. Bhandari, and N. Chhetri. 1997. "The impact of Community Context on Land Use in an Agriculture Society." *Population and Environment*. 20(3):191-213.
- Community Context on Land Use in an Agriculture Society." *Population and Environment*. 20(3):191-213.
- Smith, Adam. [1759] 1976. *The Theory of Moral Sentiments*. David Daiches Raphael and Alec L. Macfie (eds.). Oxford, England: Clarendon Press.
- Smith, Adam. [1762-3] 1978. *Lectures on Jurisprudence*. Oxford: Oxford University Press.
- Smith, Anthony D. 1973. *The Concept of Social Change*. London: Routledge & Kegan Paul.
- Stocking, George W. Jr. 1968. *Race, Culture, and Evolution*. New York: The Free Press.
- Stocking, George W. Jr. 1987. *Victorian Anthropology*. New York: The Free Press.
- Thornton, Arland. 1985. "Reciprocal Influences of Family and Religion in a Changing World." *Journal of Marriage and the Family* 47(2):381-394.
- Thornton, Arland. 1989. "Changing Attitudes Toward Family Issues in the United States." *Journal of Marriage and the Family* 51(4):873-893.
- Thornton, Arland. 2001. "The Developmental Paradigm, Reading History Sideways, and Family Change." *Demography* 38(4):449-465.
- Thornton, Arland. Forthcoming. *Reading History Sideways: The Fallacy and Enduring Impact of the Developmental Paradigm on Family Life*. Chicago: University of Chicago Press.
- Thornton, Arland, and Hui-Sheng Lin. 1994. *Social Change and the Family in Taiwan*. Chicago: University of Chicago Press.
- Thornton, Arland, and Linda Young-DeMarco. 2001. "Four Decades of Trends in Attitudes Toward Family Issues in the United States: The 1960s Through the 1990s." *Journal of Marriage and the Family* 63(4):1009-1037.
- United Nations. 1948. "Universal Declaration of Human Rights." General Assembly Resolution 217 A (III).
- United Nations. 1962. "Convention on Consent to Marriage, Minimum Age for Marriage and Registration of Marriages." General Assembly Resolution 1763 A (XVII).

- United Nations. 1979. "Convention on the Elimination of All Forms of Discrimination Against Women." General Assembly Resolution 34/180.
- UNDP (United Nations Development Programme). 2001. Human Development Report 2001: Making Technology Work for Human Development. New York: Oxford Press.
- UNDP (United Nations Development Programme). 2002. Human Development Report 2002: Deepening Democracy in a Fragmented World. New York: Oxford Press.
- UNDP (United Nations Development Programme). 2003. Human Development Report 2003: Millennium Development Goals: A Compact Among Nations to End Human Poverty. New York: Oxford Press.
- Vaidya, R. V., T. R. Manandhar, and S. L. Joshi. 1993. Social History of Nepal. New Delhi: Anmol Publishing Pvt. Ltd.
- van de Kaa, Dirk J. 1987. "Europe's Second Demographic Transition." *Population Bulletin* 42(1):1-59.
- Waite, Linda, Christine Bachrach, Michelle Hinden, Elizabeth Thomson, and Arland Thornton, (Eds.) 2000. *Ties That Bind: Perspectives on Marriage and Cohabitation*. Hawthorne, NY: Aldine de Gruyter.
- Wallerstein, Immanuel. [1979] 1997. *The Capitalist World-Economy: Essays by Immanuel Wallerstein*. Cambridge, UK: Cambridge University Press.
- Wallerstein, Immanuel. 1991. *Unthinking Social Science: The Limits of Nineteenth-Century Paradigms*. Cambridge, UK: Polity Press.
- Wang, Zheng. 1999. *Women in the Chinese Enlightenment: Oral and Textual Histories*. Berkeley, CA: University of California Press.
- Westermarck, Edward A. [1891] 1894. *The History of Human Marriage*. London: Macmillan and Co.
- Wrigley, Edward A. and Roger S. Schofield. 1981. *The Population History of England 1541-1871: A Reconstruction*. Cambridge, MA: Harvard University Press.

Table 1
Nepali Perceptions of Whether Certain Family, Social and Economic Attributes Are More Common in Nepal or the U.S., in Traditional or Developed Places, in Rich or Poor Places and in Educated or Uneducated Places.

	Nepal	U.S.	Same	Miss- ing	Tradi- tional	Devel- oped	Same	Miss- ing	Poor	Rich	Same	Miss- ing	Uned- ucated	Edu- cated	Same	Miss- ing
Child marriage	82.3	15.3	0.6	1.9												
People marrying at older ages					19.0	80.3	0.2	0.6	24.2	73.2	1.5	1.1	18.4	80.1	0.6	0.9
Marriages arranged by parents ¹	90.7	7.3	0.4	1.7	67.2	30.9	1.1	0.7								
Young people choosing their spouse									26.4	66.1	6.3	1.1	8.4	89.4	1.1	1.1
Women having a high degree of respect ²	18.6	78.0	1.3	2.0	19.0	79.1	0.9	0.9	16.9	79.7	2.8	0.6	8.4	89.9	0.9	0.7
Divorce	52.1	42.6	1.1	4.1	32.0	63.9	2.6	1.5	42.1	51.0	4.7	2.2	54.4	41.3	2.6	1.7
Married couples using contraception					7.4	91.6	0.6	0.4	14.9	81.4	2.6	1.1	6.3	92.2	0.7	0.7
Women who never marry ³	27.4	65.4	1.9	5.4	33.0	60.0	6.0	1.1								
Large families with many children	87.9	10.4	0.6	1.1	74.7	24.6	0.4	0.4								
Polygamous families	84.9	10.8	0.7	3.5	61.8	35.2	2.0	0.9								
Parental control over earnings of adult children	57.4	38.2	1.3	3.2												
Adult children having more control over their earnings					13.8	84.2	1.3	0.7								
Working for pay ⁴	13.0	84.7	0.7	1.5	19.2	78.2	1.9	0.6								
People living in cities	13.2	84.4	0.4	2.0												
Married sons living with parents	72.1	24.4	0.6	3.0												
Children dying before first birthday	87.0	9.3	1.1	2.6												
Family solidarity	48.4	47.5	1.5	2.6												
Personal freedom	27.6	69.5	0.9	2.0												
High incomes	9.5	88.8	0.2	1.5												
Equality	35.6	60.3	1.5	2.6												
High education	6.0	91.8	.7	1.5												
Good quality of life	11.7	85.5	1.1	1.7												
Activities organized around the family	90.9	6.7	0.9	1.5												
People working on farms	93.7	4.8	0.2	1.3												

Bold-the response we believe most closely matches that provided by external criteria of objective reality and developmental thinking

¹ The traditional/developed comparison used the wording “Parents controlling who their children marry.”

² This wording only used for US/Nepal comparison. Other comparisons used “Women getting treated with respect.”

³ Traditional/Developed comparison used the wording “People deciding not to get married.”

⁴ Developed/Traditional comparison used the wording “People working away from their family for pay.”

Table 2
Mean Country Scores on Education and Development as Reported by the United Nations and Nepali Respondents

Countries	Education			Development		
	% Responding to First Question	% Responding to Probe ¹	% No Response After Probe	% Responding to First Question	% Responding to Probe ¹	% No Response After Probe
England	96.6	1.1	2.2	97.2	0.9	1.9
United States	96.5	1.7	1.9	98.1	0.1	1.7
Japan	92.2	5.4	2.4	97.6	0.9	1.5
Brazil	94.8	2.8	2.4	96.5	1.3	2.2
China	96.8	1.3	1.9	97.8	0.4	1.9
India	95.9	1.9	2.2	98.0	0.7	1.3
Nepal	93.5	4.8	1.7	98.5	0.7	0.7
Somalia	88.3	8.4	3.4	94.2	3.2	2.6
Countries	United Nations Education Index (x10) ²	Mean for Respondents of First Question	Mean for Respondents of Probe ¹	United Nations Human Development Index (x10) ³	Mean for Respondents of First Question	Mean for Respondents of Probe ¹
England	9.9	7.29	6.17	9.3	7.52	5.40
United States	9.7	8.36	6.56	9.37	8.40	8.00
Japan	9.4	7.33	4.83	9.32	7.51	4.40
Brazil	9	6.49	4.67	7.77	6.40	4.71
China	7.9	6.91	7.71	7.21	7.34	4.00
India	5.7	6.03	4.90	5.9	5.90	4.00
Nepal	5	4.84	4.15	4.99	3.82	1.00
Somalia ⁴	1.6	5.59	5.44	2.9	5.81	4.76
Correlation between UN and Nepal respondent's scores		.80*	.30			.53
Correlation between UN and Nepal respondents' scores without Somalia		.88**	.43			.81*

* p< .05 **p<.01 ***p<.001

¹ Total number of respondents is 537. Those who responded that they couldn't give a rating were probed "Even if you don't know exactly, what would be your best guess for...?"

² 2003 Human Development Report, Education Index. The Education Index is composed of the literacy rate and school enrollment percentages of the country. (www.undp.org/hrd2003)

³ 2003 Human Development Report, Human Development Index. The Human Development index is composed of GNP per Capita, life expectancy and the Education Index. (www.undp.org/hdr2003).

⁴ United Nations scores were imputed.

Table 3
Bivariate Correlations Between *Individual* Respondent's Ratings of Education and Development and United Nations' Ratings of Education and Development¹

Gave Answer Without Probe

Percentiles	All countries		Without Somalia	
	Education	Development	Education	Development
25 th	0.10	0.15	0.12	0.30
50 th	0.43	0.44	0.57	0.64
75 th	0.70	0.71	0.80	0.83
N	419	491	453	503

Gave Answer

Percentiles	All countries		Without Somalia	
	Education	Development	Education	Development
25 th	0.07	0.15	0.09	0.30
50 th	0.41	0.44	0.55	0.62
75 th	0.69	0.71	0.78	0.82
N	512	521	517	522

¹ These correlations are computed at the individual respondent level. They represent the Pearson correlation coefficient between the country scores given by an individual for education (or development) with the United Nations scores for the same countries on education (or development). The possible range is from -1 to 1.