

Human development as a general theory of social change: a multi-level and cross-cultural perspective

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**Human Development as a
General Theory of Social Change:
A Multi-Level and Cross-Cultural Perspective**

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Human Development as a General Theory of Social Change: A Multi-Level and Cross-Cultural Perspective

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Zusammenfassung

Das vorliegende Papier zeigt, dass sozio-ökonomische Entwicklung, kulturelle Modernisierung und demokratische Regimeperformanz ein kohärentes Syndrom sozialen Wandels bilden – ein Syndrom, dessen integrierender Kern von der klassischen Modernisierungstheorie nicht hinreichend spezifiziert wurde. Wir spezifizieren diesen Kern mit dem Konzept der Humanentwicklung. Wir argumentieren, dass die drei Komponenten der Humanentwicklung dahingehend zusammenwirken, dass sie die individuelle Optionsvielfalt steigern. Sozio-ökonomische Entwicklung erweitert Optionen, indem sie den Individuen mehr *Ressourcen* verleiht; kulturelle Modernisierung mobilisiert *Ansprüche*, die die Individuen nach Optionsvielfalt streben lassen; und Demokratie sichert Optionen durch rechtliche *Garantien*. Eine Analyse der Weltwertestudien zeigt, dass es (1) einen universellen Nexus aus Ressourcen, Ansprüchen und Garantien gibt, der sich auf der individuellen, nationalen und supra-nationalen Ebene über 80 Gesellschaften und 8 Kulturzonen nachweisen lässt; (2) dass die *endogene* Genese dieses Syndroms der Humanentwicklung durch kausale Effekte von Ressourcen und Ansprüchen auf Garantien zustande kommt; und (3) dass regelkonformes Elitenverhalten eine *exogene* Determinante dieses Syndroms insgesamt ist.

Abstract

This paper demonstrates that socioeconomic development, cultural modernization, and democratic regime performance constitute a coherent syndrome of social change—a syndrome whose common focus has not properly been specified by standard modernization theory. We specify this syndrome as Human Development, arguing that its three components have a common focus on individual choice. Socioeconomic development broadens individual choice by giving people more *resources*; cultural modernization gives rise to *aspirations* that lead people to seek for individual choice; and democracy extends individual choice by codifying legal *opportunities*. Analysis of data from 80 societies demonstrates: (1) that a universal *resource-aspiration-opportunity* syndrome is present at the individual, national and supra-national levels across 80 nations and 8 cultural zones; (2) that this Human Development syndrome is *endogenously* shaped by a causal effect from resources and aspirations on opportunities; and (3) that *elite integrity* or “good governance” is a strong *exogenous* determinant of the Human Development syndrome as a whole.

Christian Welzel, Ronald Inglehart, and Hans-Dieter Klingemann

Human Development as a General Theory of Social Change: A Multi-Level and Cross-Cultural Perspective

Introduction

Students of social change have focused on three major processes. The most fundamental one, *socioeconomic development*, has been described innumerable times (among many others see Lewis 1955; Rustow 1963; Bell 1973; Chirot 1986; Perkin 1996; Rowen 1996; Estes 1998; Hughes 1999). Most scholars agree that socioeconomic development reflects a set of closely linked changes including productivity growth, improving quality of life in terms of health and life expectancy, increasing material prosperity, expanding education and communication, and increasing social diversification.

The second process, *cultural modernization*, is assumed to co-evolve with socioeconomic development when rationalized market relations and expanding horizontal networks disburden people from hierarchical and parochial clientelistic ties that restrict human autonomy (Weber 1958; Banfield 1958; Eckstein 1988; Coleman 1988). Cultural modernization, if it occurs, reshapes a society's prevailing attitudes in ways that have been described in various terms, such as the emergence of "democratic personalities" (Lasswell 1958; Sniderman 1975), "civic cultural attitudes" (Almond and Verba 1963), "individual modernity" (Inkeles and Smith 1974; Inkeles 1983), "postmaterialist values" (Inglehart 1977, 1990), "liberal attitudes" (Brint 1984; Nevitte 1996), or "social capital" (Coleman 1988; Putnam 1993; Fukuyama 1995). Cultural modernization is present to the degree that traditional-deferential orientations, which subordinate the individual to the community, give way to more ambitious aspirations which emphasize the value of the individual and which include increasing self-respect, more self-determined forms of civic engagement, less personalized and more generalized forms of social trust as well as growing tolerance of human diversity (cf. Eckstein 1988; Nevitte 1996; Inglehart 1997).

The third major process occurs in a society's political institutions. The most notable development in this field has been a profound tendency to improving the democratic performance of political regimes during the past three decades. This happened in two ways. Most obviously, numerous authoritarian regimes have adopted representative democratic institutions through the "Third Wave of Democratization" (Huntington 1991; Sørensen 1993; Linz and Stepan 1996; Kurzman 1998; Nagle and Mahr 1999; Dorenspleet 2000).

On the other hand, there seems to be a more subliminal trend in established representative democracies. Since the late 1970s, most of them have implemented or extended direct democratic institutions (Cronin 1998; Scarrow 1999) and they have experienced more direct democratic forms of civic participation (Barnes, Kaase, et al. 1979; Budge 1996; Dalton 1996). Some scholars interpret these changes as an acceleration of a more enduring historical trend towards the “growth of democracy” (Gurr, Jagers, and Moore 1990; Diamond 1993; Modelski and Perry 1993; Jagers and Gurr 1995).

As often as the processes of socioeconomic development, cultural modernization and democratization have been described (for a recent affirmation see Pye 1990 and Diamond 1992), they have been suspected and even refuted (see Randall and Theobald 1998 for a discussion of revisionism and modernization). It has been debated, for instance, whether these processes manifest irreversible linear trends or follow cyclical patterns with major setbacks; whether they are uniformly global or culture-specific in a way that prescribes an inherently Western model; and even whether they are desirable or not.

One point, however, can hardly be denied: if socioeconomic development, cultural modernization and democratization occur, they tend to do so on *coincidentally* low or high levels. Societies that are economically less advanced, most obviously those in Sub-Saharan Africa, tend to be dominated by traditional belief systems and usually have political regimes whose democratic performance is poor. Most of the OECD-countries, by contrast, are economically advanced and characterized by modern mass cultures. Usually their regimes show a strong democratic performance (see Inglehart and Baker 2000 for statistical evidence of this global pattern). On a smaller scale, the same pattern characterizes the postcommunist world: economically more advanced countries, like the Czech Republic, Hungary, or Poland, show more modernized cultures and have better consolidated democracies than economically less advanced ones, such as Romania, Belarus, or Ukraine (see Rose 2001). In any case, there seems to be a strong coincidence between nations’ socioeconomic development, cultural modernity and democratic performance.

This insight is not new. In fact, it is conventional wisdom of classical modernization theory (see Lerner 1958; Lipset 1959; Coleman 1968; Pye 1990; Diamond 1992). What is new, is the empirical evidence that has been added in recent years: thanks to the World Values Surveys this applies in particular to the role of cultural modernization (Inglehart 1990, 1997; Inglehart and Baker 2000). Yet, we lack an *integrated theory of social change*. Modernization theorists have argued for close relations between socioeconomic development, cultural modernization and democratic performance, but they did not properly specify the common focus of these three phenomena. Either they used modernization as an umbrella term which has been defined by enumerating its concrete components but not by what integrates them (Lerner 1968: 385); or they restricted modernization to the socioeco-

nomie field which let them view democracy as a consequence rather than an integral part of modernization (Huntington 1991: 69); or they specified modernization in formalistic terms, such as “functional differentiation” (Mouzelis 1999), which provides no evident criteria to distinguish what is and what is not an element of modernization. Hence, there is no general definition of modernization that clarifies in which common principle its various components converge.

Empirical studies reflect this lack of theoretical integration. Most of them focus on only one of the three relationships within the syndrome of socioeconomic development, cultural modernization and democratic regime performance. These studies pay little or no attention to the fact that they capture only one facet of a more comprehensive syndrome. Thus, existing explanations of this syndrome’s internal linkages are disintegrated. They do not refer to a common principle and are therefore only loosely related to each other. Arguments about causal effects are based on isolated bivariate logics. Even the few studies that deal with all three processes dissolve the whole complex into single pairs of relations, each of which is discussed in separation (cf. Muller and Seligson 1994; Inglehart 1997; Sides 1999; Inglehart and Baker 2000). As a consequence, the debate is fragmented and puzzling. Indeed, the literature entails six contradicting hypotheses, one for each causal relationship that is logically possible.

Following Lipset (1959), numerous authors claimed that socioeconomic development leads political regimes to improve or sustain their democratic performance (among others Cutright 1963; Bollen and Jackman 1985; Lipset, Seong, and Torres 1993; Burkhart and Lewis-Beck 1994; Barro 1997; Vanhanen 1997; Gasiorowski and Power 1998), while others argue that “effective democracy” promotes political stability, provides better economic policies and thus improves life quality and as a consequence also socioeconomic development (Ersson and Lane 1996; Rowen 1996; Leblang 1997; Yi Feng 1997; Frey and Al-Roumi 1999; Olson, Sarna, and Swamy 2000). Some observers postulate that socioeconomic development leads to cultural modernization (Inkeles and Smith 1974; Inkeles 1983; Inglehart 1997; Inglehart and Baker 2000), but others hypothesize that cultural modernity accelerates socioeconomic development (Putnam 1993; Fukuyama 1995; Knack and Keefer 1997; Landes 1998). And while some analysts suggest that “effective democracy” favors the emergence of modern pro-democratic cultures (Rustow 1970; Muller and Seligson 1994; Jackman and Miller 1998), others argue the opposite flow of causation: cultural modernization puts political regimes under popular pressure to improve or sustain their democratic performance (Almond and Verba 1963; Inglehart 1997).

To summarize these contradictions we cite Dahl (1997: 35) who notes that “the exact nature of the relationship among socioeconomic modernization [‘development’ in our

words], democratization, and the creation of a democratic culture [or ‘modern culture’] is almost as puzzling today as it was a quarter-century ago.”

The source of this puzzle is that no one, as far as we know, starts with the fundamental question: what is the common denominator in which socioeconomic development, cultural modernization, and democracy converge? This question is posed vigorously by the striking coincidence of these three processes. We start from this question and elaborate on the syndrome as such *before* we dissolve the whole complex into separate relations. Specifying the principle that unifies socioeconomic development, cultural modernization and democratic regime performance has important implications. It lets us better understand which specific part the three subprocesses play within the whole theme; and this in turn sheds more light on the logical connections between these subprocesses.

We unfold a concept based on the principle of “human choice.” This principle is implicit in modernization theory (Lewis 1955: 9-19), but its capacity to integrate related changes in socioeconomic structure, political culture and regime institutions has not yet been fully exploited. The following section introduces the concept of Human Development as an integrating framework. Anand (1993), Sen (2000) and Anand and Sen (2000) have brought the term Human Development to prominence. They have established the notion that “human choice,” or the capability of human beings to choose the life they want, should be used as the ultimate norm to judge the benefits and problems of social change. Normatively, this is consistent with the anthropological view that “self-actualization” is the leading end in human motivation (Maslow 1970) and with the notion that the “liberation of life,” or the gain of options, represents a guiding principle in biological and social evolution (Birch and Cobb 1981). We agree that Human Development is a normatively preferable concept. But we unfold this concept more systematically. We specify its distinct components and their logical relationships more precisely in a way that is *empirically* useful to analyze social change across nations and cultural zones. And we use this framework to examine data from the World Values Surveys together with socioeconomic data from Vanhanen (1997) and scores for civil liberties and political rights from Freedom House. Subsequent sections demonstrate (1) that the syndrome of Human Development is present at the individual, cross-national and cross-cultural levels; (2) that this syndrome is *endogenously* shaped by a process in which socioeconomic development and cultural modernization lead regimes to improve their democratic performance; and (3) that *elite integrity*, or “good governance,” is a strong *exogenous* determinant of the Human Development syndrome as a whole.

1 Theory

1.1 *The Three Components of Human Development*

In contrast to more sophisticated conceptions of modernization, our proposition makes it easier to understand socioeconomic development, cultural modernization and democratic regime performance as distinct but interrelated facets of the same principle. We argue that socioeconomic development, cultural modernization, and democratic regime performance work together in promoting *individual choice*.

Socioeconomic development expands individual choice in two ways. It gives people more *autonomy* over their resources in that it substitutes horizontal market relations for parochial clientelistic ties. Moreover, socioeconomic development gives people *more* physical and cognitive resources by improving basic life conditions as well as incomes, skills and information facilities. Socioeconomic development provides the objective means that enable people to pursue self-determination. This view is as old as Aristotle and has been continued from Marx to Lewis (1955) and Sen (2000). We conclude that socioeconomic development contributes *autonomy resources* to individual choice. And we label the process which makes socioeconomic development relevant to individual choice as *resource allocation*.

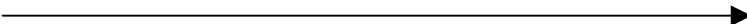
Cultural modernization is the second subprocess which is relevant to individual choice. Cultural modernization mobilizes human motivations to higher levels of ambitions. It leads people to place increasingly high priority on individual choice. Cultural modernization contributes *liberty aspirations* to individual choice. This is consistent with the notion that individual choice is not only a matter of one's means but also of one's mind (cf. Rokeach 1960). What makes cultural modernization relevant to individual choice is *aspiration mobilization*.

Democracy is the third element of individual choice, providing an institutional structure that codifies civil and political freedom. Improving a political regime's democratic performance contributes *freedom opportunities* to individual choice. This notion, too, goes far back to Mill and Dewey who saw opportunities for "individual self-development" (Macpherson 1977: 44-76) as an inherent value of democracy. Democratization is relevant to individual choice through *opportunity codification*.

Autonomy resources, *liberty aspirations* and *freedom opportunities* are the three components of Human Development. And *resource allocation*, *aspiration mobilization* and *opportunity codification* are the three subprocesses through which these components emerge. In the Human Development perspective, resource allocation, aspiration mobilization and opportunity codification are the functional equivalents of socioeconomic devel-

opment, cultural modernization and democratization, respectively. Table 1 gives a summarizing picture of our conception and terminology.

Table 1: The Concept of Human Development

COMPONENTS' CHARACTERISTICS	COMPONENTS OF HUMAN DEVELOPMENT		
	Economic Component	Ethical Component	Institutional Component
Substance of Components	Autonomy Resources	<i>Liberty Aspirations</i>	<i>Freedom Opportunities</i>
Underlying Processes	<i>Resource Allocation</i> (socioecon. development)	<i>Aspiration Mobilization</i> (cultural modernization)	<i>Opportunity Codification</i> (regime democratization)
Spheres where components emerge	<i>Realm of Means</i> (socioeconomic structure)	Realm of Values (political culture)	<i>Realm of Rules</i> (regime institutions)
Causal Direction			
Point of Convergence	Individual Choice on a Mass-Level, i.e., Human Development of Societies		

The three components and subprocesses of Human Development coincide in their focus on individual choice. Progress in any of these aspects widens the human leverage in societies, giving people larger *resources*, stronger *aspirations* and wider *opportunities* to make use of their individual talents. Human Development of societies means growing individual choice on a mass level.

Human Development is not a teleological concept. It does not imply that its three subprocesses necessarily proceed in a linear upwards direction. Human Development only implies that *resource allocation*, *aspiration mobilization*, and *opportunity codification* show a strong tendency for coincidence. This tendency can move either in a regressive or progressive direction. There is no iron law of linear progress but rather a probabilistic tendency for coincidence to either narrow or widen the range of human choice within societies.

The concept of Human Development goes beyond standard modernization theory in being both more comprehensive and more specific. Usually, theories cannot maximize comprehensiveness and specificity at the same time, but the concept of Human Development does. On one hand, it is comprehensive in that it integrates major changes in socioeconomic structure, political culture, and regime institutions. On the other hand, this con-

cept is specific because it concentrates on one theme: the expansion or recession of human choice.

1.2 *The Two Linkages of Human Development*

Individual choice is the common principle which integrates the three components of Human Development. Since choice refers to individuals, the linkages between these components should be deduced from patterns of individual behavior and additional assumptions how these patterns translate from the individual to the societal level. Basic behavioral assumptions suggest that the Human Development syndrome is shaped by two linkages: (1) a *resource-aspiration linkage* in which aspirations adjust to given resources; and (2) an *aspiration-opportunity linkage* in which opportunities get suited to prevailing aspirations. We outline briefly why these are the most logical linkages.

The Resource-Aspiration Linkage: If avoiding the psychological costs of frustration is a rational human behavior, then it is irrational for people to evolve aspirations for goals that are beyond the reach of their means or resources. When this happens, it is a rare aberration from a behavioral pattern that is known in social psychology as “aspiration adjustment” (Costa, McCrae, and Zonderman 1987; Cummins 1995; Eckersley 2000). Studies conducted in countries with very different cultural backgrounds, ranging from the U.S., to Mexico, Nigeria, and China, have found that individuals in less secure economic positions and with lower education, show relatively weak aspirations for political participation (Inkeles and Smith 1975; Verba, Nie, and Kim 1978; Barnes, Kaase, et al. 1979; Dalton 1996). Effective participation is beyond these peoples’ resources. Conversely, more ambitious aspirations, such as those reflected in postmaterialism, have been shown to be most prevalent among people with a relatively secure economic status and higher education (Brint 1984; Scarbrough 1995). We will show that *liberty aspirations*, which include postmaterialism, also tend to be more prevalent among people with more *autonomy resources*. This reflects a basic mechanism due to which people adjust their aspirations to their resources. Growing *autonomy resources* therefore give rise to stronger *liberty aspirations*.

The Aspiration-Opportunity Linkage: Mass aspirations that prevail within a community contain which opportunities are demanded by that community. Hence, aspirations put adjustment pressure on opportunities. On the other hand, opportunities cannot create corresponding aspirations, unless the resources that support these aspirations are present. For example, consider India: though offering its citizens relatively wide *freedom opportunities* during 50 years of democracy, Indian society did not evolve correspondingly strong *liberty*

aspirations (see India's location on Figure 1). Conversely, former Czechoslovakia provided its citizens narrow *freedom opportunities* during four decades of communist rule, but the Czechs (and to a lesser degree also the Slovaks) developed much stronger *liberty aspirations* than most of the Indians did—in keeping with their larger *autonomy resources* that derived from a higher level of socioeconomic development (see Figure 1). This does not mean that *freedom opportunities* cannot exist without corresponding *liberty aspirations*. Actually they can, as the Indian example shows. But if so, *freedom opportunities* are ineffective (which explains why India is such an exceptional case). To be used effectively, *freedom opportunities* need corresponding *liberty aspirations* but cannot create them. *Liberty aspirations*, on the other hand, are inherently directed towards *freedom opportunities*. Hence, if adjustment pressure is at work, it works from *liberty aspirations* on *freedom opportunities* rather than the reverse.

1.3 The Dynamics of the Human Development Linkages

The resource-aspiration linkage and the aspiration-opportunity linkage are shaped in different ways. *Resource allocation* and *aspiration mobilization* are processes that originate at the individual level and translate to the societal level through mass-accumulation. Thus, *autonomy resources* and *liberty aspirations* are connected through a co-evolutionary link. This makes large discrepancies between societies' *autonomy resources* and *liberty aspirations* unlikely.

By contrast, *freedom opportunities* do not evolve from the individual level. *Freedom opportunities* are codified at the societal level. Elites can codify or nullify *freedom opportunities* almost over night, as it happens when autocracies are turned into democracies, or the reverse. Hence, there is no such co-evolutionary link between *aspiration mobilization* and *opportunity codification*. Large discrepancies between societies' *liberty aspirations* and *freedom opportunities* can therefore occur. Publics may develop strong *liberty aspirations*, but authoritarian elites can suppress them.

In the long run, however, rising *liberty aspirations* make “aspiration suppression” increasingly costly, especially when these aspirations are nourished by corresponding *autonomy resources*. Then it is more likely that *liberty aspirations* overcome—under additional circumstances¹—the mobilization hurdles, which are typical of authoritarian regimes, giving way to powerful movements for democracy. Conversely, “aspiration sup-

¹ It is no room here to describe these ‘additional circumstances,’ but see Foweraker and Landman (1997: chapter 8).

pression” is less costly, if *liberty aspirations* are too weak to mobilize large segments of the population. This may explain why, in 1989, Chinese elites calculated relatively low risks of crushing the encapsulated and largely student-based pro-democracy demonstrations on T’iananmen square, while East German as well as Czech elites calculated the risks of using troops against their country’s massive, nation-wide demonstrations as too high.

We conclude that *autonomy resources* and *liberty aspirations* tend to coincide at any given point in time, while *liberty aspirations* and *freedom opportunities* may show larger discrepancies in a cross-sectional snapshot. Nevertheless, even *liberty aspirations* and *freedom opportunities* should tend to coincide in the long run. This coincidence should become increasingly evident as we extend our perspective over time.

2 Methodology: The Logics of Aggregation and Mass-Accumulation

The theory of Human Development uses behavioral assumptions in its reasoning why linkages at the societal level exist. Thus, it should be demonstrated that these assumptions hold at both the individual and societal levels. Moreover, if this is a general theory, it must hold across societies of different cultural zones. We test these requirements in a multi-level design that covers the individual, cross-national and cross-cultural levels. We analyze the extent to which the linkages of Human Development are present at each level of analysis.

The correlations which reflect the Human Development syndrome probably vary at different levels of analysis. The strength of correlations usually increases, sometimes dramatically, as one moves to higher levels of aggregation. For example, Robinson (1950) found that the correlation between illiteracy and being a black American was .95 at the regional level but shrunk to .21 when disaggregated to the individual level. Scholars have sometimes used this example to argue that aggregate level correlations are “spurious” if they greatly exceed the individual level correlation (cf. Przeworski and Teune 1970: 72).

However, what Robinson actually claimed, and proved mathematically, is that one cannot assume that an individual level correlation must have similar strength and direction to the aggregate level correlation. Scholars who make that assumption without testing it statistically fall victim to an “ecological fallacy.” But whether an aggregate level correlation is an artifact, or reflects a real relationship, is another question that is unaffected by the problem of cross-level variances.

There are basically two types of cross-level variances. One is that an effect operates in opposite directions at different levels of analysis. This is seen when a correlation changes its sign when considered at the aggregate level and the individual level. Though even this case does not invalidate the aggregate level correlation, it eliminates the applicability of a

general theory: mechanisms that work in opposite directions cannot be explained by the same theory. The second possibility is that a correlation does not change its sign but only its magnitude with different levels of analysis. Indeed, it is very usual that correlations increase with higher levels of aggregation. This, however, has little relevance to the applicability of a general theory. We briefly explain why.

A correlation between two variables must be stronger at the aggregate level, if the underlying process sweeps rather uniformly through entire populations but to degrees that vary largely between populations. Processes of this kind shift the mean-level of a population variable in a way that may have relatively little impact on the within-population variance. But if such mean-level shifts occur to different degrees between populations, they increase the between-population variance. For instance, 200 years ago the income ratio of the richest to the poorest nations was approximately 5:1. But uneven economic growth has dramatically risen this ratio up to 400:1, while within nations, regional income differences rarely exceed ratios of 5:1 (Landes 1998: xx). Hence, economic growth, or *resource allocation* in general, sweeps relatively uniformly through nations, while it creates much greater differences between them. As a consequence, any effect connected to *resource allocation*, such as *aspiration mobilization*, must be more pronounced between than within nations.

Social change creates larger variances and covariances between than within nations. This reflects that nations have some homogenizing effect on the citizens that are socialized within them. Population variables show intra-national homogeneity to the degree that individuals are clustered around the national mean. If this is so for a pair of related variables x and y , large parts of a population are bound within a range where x may have no effect on y , which necessarily results in a weak or insignificant individual level correlation within nations.²

The second reason why aggregate level correlations tend to be stronger than those at the individual level is that survey data contain a large component of measurement error: many respondents give erratic answers that reflect “non-attitudes,” producing much random noise in representative survey data (Converse 1970). As Yule and Kendall (1950) and Blalock (1961) pointed out, the variation of a variable consists of a *systematic* and a *random* element. Hence, the correlation between two variables x and y , too, consists of a systematic term and a random term which diminishes the systematic correlation (“attenuation effect”). But when x and y are averaged across social units, the random elements counterweigh each other: negative and positive deviations from the mean, which are random, cancel each other

2 If the variance/covariance of two variables is larger between than within nations, the correlation is stronger and more significant at the *pooled* individual level *across* nations than at the individual level *within* nations. An example is mentioned in fn. 6.

out (Page and Shapiro 1993: 40). Following the law of large numbers, this “reduction of error” becomes more pronounced as the number of individuals being aggregated rises. Consequently, the random term becomes smaller, and the systematic correlation larger, with higher levels of aggregation. When this is the case, aggregation does not obscure but *reveals* the “real” correlation.

It is at the heart of aggregation—and of mass accumulation as a “real” process—that irregularities of millions of individuals are bound within the regularities of the social units in which these individuals are socialized (Converse 1970, Page and Shapiro 1993: 39-41). The creation of regularity is the very principle of the socialization process. Regular relationships therefore become more visible when whole units of socialization are compared.

A deeper insight into the problem can be provided by multi-level regression analysis, which indicates level-specific relations when intercepts or slopes vary for the level of analysis. Our analyses will test whether the Human Development linkages show varying intercepts or slopes at the individual, cross-national and cross-cultural levels.

3 Analyses

3.1 Data Sources and Variables

In order to test the theory of Human Development we need representative survey data, which measure *liberty aspirations* for as many countries as possible. We will use the largest available database, the World Values Surveys (WVS), which cover 63 countries representing almost 80 per cent of the world’s population.

Table 2 gives an overview of how we measured the components of Human Development at different levels (description of scale construction and data sources are in the footnotes of this table). The resource-component is measured by individuals’ financial income (*material resources*), education attainment level (*cognitive resources*), and the interaction of both (*mat-cog resources*). Since incomes are measured in national currency deciles and since education levels are not equivalent between nations, it makes no sense to use these variables in cross-national comparisons. We use them only for analyses at the individual level within nations. At the aggregate level, we measure resources by a composite index (*autonomy resources*) which is taken from Vanhanen (1997) and which combines measures for the nations’ distribution of material resources, cognitive resources, and social diversification. We use Vanhanen’s most recent measure of this index, which captures the early

1990s.³ This measure shows such a strong intertemporal correlation that it reflects long-term differences in nations' resource allocation.⁴

Table 2: Variables Measuring Human Development

LEVELS OF ANALYSIS	COMPONENTS OF HUMAN DEVELOPMENT		
	Resources	Aspirations	Opportunities
Individual Level	– Material Resources ¹ – Cognitive Resources ² – Mat-Cog Resources ³	– Liberty Aspirations ⁵	– <i>Support for Democracy</i> ⁶
Aggregate Levels	– Autonomy Resources ⁴	– Liberty Aspirations ⁵	– <i>Support for Democracy</i> ⁶ – Freedom Opportunities ⁷

- 1 Individual **financial income** in national currency deciles from V227 WVS.
- 2 **Education level** attained on 10-categorical ordinal scale from V217 WVS.
- 3 **Interaction** (product score) of income (v227) and education (V217) from WVS.
- 4 Vanhanen-index of economic resources. Subindex of **material resource distribution** generated from *share of family farms* in the agricultural sector (weighted for the agricultural sector's share in GDP) and the *deconcentration of non-agricultural resources* (measured by 100 minus the share in GDP generated by the state, foreign enterprises and large national trusts). Subindex of **cognitive resource distribution** is measured by the *number of students per 100,000 inhabitants* and the *literacy rate*. Subindex of **occupational diversification** produced from the *proportion of the urban population* and the *percentage of the non-agricultural work force*. All three subindices multiplied and standardized to 100 as the maximum. For a detailed description of scale construction and data sources, see Vanhanen (1997: 42-63).
- 5 Factor scores for the **modern libertarian value dimension** which summarizes *postmaterialism*, *tolerance* toward homosexuals, *signing petitions*, *generalized trust*, and *life satisfaction* (all from WVS; see Table 4 for a description).
- 6 Index developed by Klingemann (1999) from WVS. 4-point scale (1: very bad, 2: fairly bad, 3: fairly good, 4: very good) for "*Having a democratic system*" (V157) and 4-point scale (1: strongly disagree, 2: disagree, 3: agree, 4: strongly agree) for "*Democracy may have problems but it's better than any other form of government*" (V163) added to a 7-point **index of prodemocratic orientation**. Similarly, 4-point scales for "*Having a strong leader*" (V154) and "*Having the army rule*" (V156) added to a 7-point **index of antidemocratic orientation**. Then the index of anti-democratic orientation is subtracted from that for the prodemocratic orientation to create the **scale of support of democracy** ranging from -7 to +7.
- 7 Multiplied scores for **civil liberties** and **political rights** from Freedom House (ed.), *Freedom in the World*. Data can be downloaded from the web page: "<http://www.freedomhouse.org>."

The aspiration-component of Human Development is measured by a scale of factor scores summarizing several indicators of *liberty aspirations*. Most of these measures are taken from the 1990-WVS (N = 42). Where these measures were not available, those from the

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- 3 Vanhanen's measure does not only capture *levels* but also *distributions* of resources. The distributional perspective is inherent in democratic theory from Aristotle to Dahl (1973: chapter 4). Thus, it is no surprise that Vanhanen's measure is closer correlated with our measures of *liberty aspirations* ($r = .88$) and *freedom opportunities* (.84) than is per capita GDP (.80 and .82, respectively). Vanhanen's measure outperforms also the Human Development Index (.70, .78) which captures basic quality of life issues, like health, education and income. This is also not surprising, since societies are at variance in these issues when they move from an income level of ca. 1,000 to about 5,000 US-\$ per capita. Below and above that range, there is little variance in quality of life issues (Hughes 1999: 98).
 - 4 The correlation with the same measure from 1988 is $r = .96$ (N = 145) and $r = .90$ (N = 117) for 1970-79.

1995-98-WVS were used ($N = 21$). Much like *autonomy resources*, *liberty aspirations* reflect long-term differences between nations, which allows us to substitute the 1995-98 measures for the 1990-measures when the latter are missing.⁵

The opportunity-component of Human Development (*freedom opportunities*) is measured by the product of the scores for “civil liberties” and “political rights” published annually by Freedom House. To correct short-term fluctuations and measurement errors, we averaged these scores over the period 1989-2000. *Freedom opportunities* are codified at the societal level and have therefore no direct equivalent at the individual level. But something related to *freedom opportunities* at the individual level is peoples’ *support for democracy*: the more individuals support democracy and the more intensively they do, the stronger is the public pressure to sustain or establish *freedom opportunities*. Increasing *support for democracy* should be the mechanism through which the effect of *liberty aspirations* on *freedom opportunities* operates. To capture this mechanism we use a scale of *support for democracy* developed by Klingemann (1999). This continuous scale is constructed in a way that avoids capturing only lip service to democracy.

Table 3 displays the results of the factor analyses that generate scores indicating the strength of *liberty aspirations*. Using indicators analyzed by Inglehart and Baker (2000), we were searching for a relatively parsimonious solution that is robust at both the individual and the cross-national level; that provides a maximum “nomological validity” in predicting *freedom opportunities*; and that produces an intuitively understandable dimensional structure, in keeping with prevailing theories of value change.

The solution we found is one in which postmaterialist preferences for self-expression, interpersonal tolerance, spontaneous engagement, generalized trust and life satisfaction all tap the dimension of *modern ‘libertarian’ orientations*—as opposed to *traditional ‘communitarian’ orientations* which comprise religiousness, association membership and an emphasis on the familial community. *Modern ‘libertarian’ orientations* are “modern” because they increase with socioeconomic modernization.⁶ And they are “libertarian” because they value the autonomy of the individual more highly than the authority of the community. *Traditional ‘communitarian’ orientations* are “traditional” in that they prevail in economically less advanced societies. And they are “communitarian” in that they emphasize community authority more strongly than individual autonomy. Not surprisingly, modern ‘libertarian’ and traditional ‘communitarian’ orientations are not perfectly independent from each other: religiousness is negatively associated with *modern ‘libertarian’ orientations*, as are spontaneous engagement and generalized trust with *traditional ‘communitarian’ orientations*. This implies that the rise of *modern ‘libertarian’ orientations* is

5 For 28 cases both measures are available. The intertemporal correlation amounts to $r = .94$.

6 This is shown by Inglehart and Baker (2000) and can be seen in Figure 1 here.

linked with a decline in *traditional ‘communitarian’ orientations*, which is logical since individual autonomy and community authority cannot be maximized at the same time. We measure *liberty aspirations* using factor scores summarizing the dimension of modern ‘libertarian’ orientations.⁷

3.2 Data Imputation

In addition to the empirical data that we have, we impute missing data on *liberty aspirations* for another 17 nations. Data imputation is a strongly recommended procedure when missing data are *not random* (King, Tomz, and Wittenberg 2000). The missing data clearly are not random in the WVS, which over-represent European and American countries, and under-represent Islamic and Sub-Saharan ones—although we have empirical data for Ghana, Nigeria, and South Africa from the Sub-Saharan region; and for Azerbaijan, Bangladesh, Turkey, and Pakistan from the Islamic zone. These data provide a basis for imputing missing data on *liberty aspirations* for other countries in these regions.

The conditions for data imputation are favorable in this case, because the relationships in which we are interested show a strong “predictive validity” (Zeller and Carmines 1980). If we know the religious makeup of each society and its level of *autonomy resources*, we can explain fully 90 percent of the cross-national variance in the strength of *liberty aspirations*.⁸ The fact that *liberty aspirations* can be predicted with a very minor error is important. It implies that data imputation does not influence the effect of *liberty aspirations* on *freedom opportunities*. The residuals that we obtain by predicting *liberty aspirations* from *autonomy resources* are clearly within the range where *liberty aspirations* have no effect on *freedom opportunities*.⁹

7 Factor solutions normally are more strongly structured on the cross-national level than on the pooled individual level because individual level measurement error gets averaged out through aggregation. Postmaterialism, spontaneous engagement and interpersonal tolerance load on the *modern ‘libertarian’* dimension in 76 of 92 national surveys (83%), but generalized trust and life satisfaction are less likely to do so. Nevertheless, on the *pooled* individual level all of these attitudes are clearly linked with this dimension. This reflects that important features of a dimension may manifest themselves only when the between-nation variation is included—which is the case when one works with *pooled* individual data.

8 The equation is: LIBERTY ASPIRATIONS = -1.00 + .04*AUTONOMY RESOURCES + .007*PROTESTANTS - .009*ORTHODOX CHRISTIANS - .007*MUSLIMS - .06*CONFUCIANS + .005*NONRELIGIOUS PEOPLE + .25*EX-BRITISH. This equation results in an .90 adjusted R squared for 57 cases. Proportion of Buddhists, Catholics, Hindus and Animists and dummy for postcommunism excluded by backward deletion. Proportions of religious groups are taken from the country reports in Britannica Book of the Year 2000.

9 The range corresponds to the distance between Moldova and Mexico in Figure 2, a distance of 1.3 points on the -2 to +2.3 factor scale for *liberty aspirations*. The error in predicting *liberty aspirations* is clearly within this range: the largest residual we found is .49 in case of Turkey. This is only one third of the 1.3 points that must be exceeded, if prediction error should distort the effect of *liberty aspirations* on *freedom opportunities*.

Table 3: The Value-Dimension of Liberty Aspirations

VARIABLES	LEVELS OF ANALYSIS			
	Individual Level (pooled across nations)		National Level	
	Modern 'Libertarian' Orientations	Traditional 'Communitarian' Orientations	Modern 'Libertarian' Orientations	Traditional 'Communitarian' Orientations
Postmaterialism ¹	.64		.90	
Interpersonal Tolerance ²	.65		.88	.15
Spontaneous Engagement ³	.64		.83	-.17
Generalized Trust ⁴	.42		.73	-.20
Life Satisfaction ⁵	.48	.39	.84	.32
Religiousness ⁶	-.28	.74	-.35	.83
Association Membership ⁷	.25	.68	.11	.75
Familial Community ⁸		.30		.73
Explained variance	22%	16%	45%	25%
Kaiser-Meyer-Olkin-Measure	.65		.73	
N	152,768		57	

Notes: Entries are factor loadings. Explorative principal components analysis (extraction of factors with Eigenvalues above 1 advised), no rotation. Factor loadings below .10 suppressed.

- 1 Respondents' priorities for "giving people more say in important government decisions," "protecting freedom of speech," (V106-107) and "seeing that people have more say about how things are done at their jobs and in their communities" (V104-105) added to a six-point index, assigning 2 points for first priority, 1 point for second priority and 0 points for no priority on each of these items.
- 2 "Not mentioned" for "disliked neighbors" dichotomized as 1 against 0; scores added for neighbors with AIDS (V58) and homosexual neighbors (V60).
- 3 "Already done" for "signing petitions" (V118) coded "1" and dichotomized against "0."
- 4 Respondents believing "most people can be trusted" (V27) dichotomized as "1" against "0."
- 5 10-point rating scale for life satisfaction from WVS (V65).
- 6 "How important is God in your life?" (V190). 10-point scale (1: not at all, 10: very important).
- 7 "Active membership" dichotomized as "1" against "0" and added for "Religious Organizations" (V28) and "Charitable Organizations" (V35).
- 8 "Importance of family" (V4), "very important" dichotomized as "1" against "0."

Liberty aspirations are so strongly determined by *autonomy resources* and religious tradition that we could make reasonable predictions for any country in the world. But we do not intend to present a simulation study. We want to present an empirical study that is primarily based on real data, supplemented by some predictions for selected countries from underrepresented regions. We selected 17 countries that will be covered by the next wave of the WVS: Luxemburg, Greece, Egypt, Jordan, Iran, Cameroon, Tanzania, Uganda, Zimbabwe, Indonesia, Sri Lanka, Thailand, Vietnam, Costa Rica, Cuba, El Salvador. This offers a chance to test the validity of our analyses in the near future.

For methodological reasons, one should use data imputation if missing data are not random and if there are strong empirical relations in the real data from which reasonable predictions can be derived. Both preconditions are satisfied in case of the WVS: countries from certain cultural zones are underrepresented; and there is an extraordinarily strong relationship between *autonomy resources* and *liberty aspirations*. Nonetheless, we remain cautious in imputing missing data for *liberty aspirations*. Cases with imputed data represent only one fifth of our sample, and we down-weight these cases by 20 per cent whenever used in subsequent analyses (which is double the prediction error of 10%). We have checked whether the inclusion of imputed data does any change to our statistical results. We have found that it does not. Nevertheless, the inclusion of these data provides a more complete picture of the world. So we report the results with imputed data included—except where the effect of *autonomy resources* on *liberty aspirations* is estimated. To avoid tautological results, these estimations do not include imputed cases (inclusion/exclusion of imputed cases is noted in the tables).

3.3 Operationalizing Cultural Zones

Weber (1958), Eisenstadt (1986), Huntington (1996) and many others emphasized that nations cluster into larger units labeled “country families,” “cultural zones,” or “civilizations.” Nations belonging to a common cultural zone tend to share similar worldviews, institutional traditions and patterns of economic subsistence. Three variables determine these cultural zones: *religion*, *region*, and *imperial legacy*.

Since Weber, it has been widely accepted that societies’ religious traditions are prime carriers of popular belief systems. Such belief systems influence which economic activities are preferred and which political institutions are supported by the population. Regional proximity is a second factor. It facilitates the diffusion of ideologies, economic habits and institutions across nations (Kopstein and Reilly 2000). A third relevant factor is imperial legacy. There is evidence that a British colonial heritage is conducive to libertarian values and institutions, while communist rule contributed to an egalitarian and secular worldview (cf. Lipset, Seong, and Torres 1993).

Table 4 shows how we grouped the WVS-nations to cultural zones (nations with imputed data for *liberty aspirations* appear in bold letters). The first criterion is *religious tradition*, which we differentiated in a way that produces at least 8 cases in each category. Thus, we have 20 countries with a historically Protestant tradition or with Protestants as the largest religious group among their populations; 29 Catholic countries; 10 Christian Orthodox countries; 11 Islamic countries; and a residual category of 8 “Asian” countries, most of

Table 4: The Location of the WVS-Nations within Cultural Zones

REGION	RELIGION				
	Protestant	Catholic	Orthodox	Islamic	'Asian'
Western Europe	Germany Denmark Finland Iceland Norway Sweden Netherlands Great Britain	Austria Switzerland France Italy Portugal Spain Belgium Luxembourg Ireland			
Ex-British Overseas	Australia New Zealand Canada USA				
Eastern Europe	Estonia Latvia	Lithuania Czech Rep. Hungary Poland Slovakia Croatia Slovenia	Armenia Georgia Belarus Moldova Russia Ukraine Macedonia Yugoslavia Bulgaria Romania	Azerbaijan Bosnia-Herz. Albania Iran Turkey Egypt Jordan Bangladesh Pakistan Indonesia	
Middle East					
South Asia					India Sri Lanka
Far East					Japan South Korea Thailand Taiwan China Vietnam
Sub-Saharan	Ghana South Africa Tanzania Uganda Zimbabwe	Cameroon		Nigeria	
Latin America		Argentina Brazil Chile Peru Philippines Uruguay Venezuela Costa Rica Cuba Dominican R. El Salvador Mexico			

them representing a distinctive religious or ethical tradition (India: Hinduism; Japan: Shintoism; China, Taiwan and Vietnam: Confucianism; South Korea: Buddhism; Sri Lanka, Thailand: Hinayana Buddhism).

These five religious groups were subdivided for region, if such division produced at least 8 cases in each category. Thus, the Islamic and the 'Asian' group were not divided. Moreover, Estonia and Latvia, though having a Protestant tradition, were grouped with the Catholic Eastern European countries, with which they share the tradition of "Western Christianity" as opposed to Orthodox Eastern Christendom (Huntington 1996: 159). Finally, the Sub-Saharan countries have not been divided on the basis of religions, since the Christian and Islamic imprints that prevail in contemporary Africa have only in the colonial era been superimposed on indigenous animist traditions. The animist tradition and regional proximity justify classifying the Sub-Saharan countries as a group of their own.

These cultural zones include some important aspects of nations' imperial legacy. The division between Western and Eastern Europe does not follow a merely regional criterion but reflects the differentiation between postcommunist and non-postcommunist Europe. Similarly, Canada, the U.S., Australia and New Zealand are viewed as one cultural zone under the label "Ex-British Overseas," though geographically they are scattered around the world. This reflects their common heritage as English-speaking former British colonies of "white" settlers, many of whom have been religious dissidents.

This classification may seem crude, especially in view of the heterogeneous 'Asian' group. Yet, these 8 cultural zones capture 82%, 83% and 75% of the variance in *autonomy resources*, *liberty aspirations* and *freedom opportunities* across 80 nations. Thus, even this crude classification captures relatively homogeneous zones.¹⁰

In addition to this *continental* differentiation of cultural zones, we use a more fine-tuned classification based on 23 *sub-continental* regions, such as Scandinavia, the Baltics, Transcaucasia, Mediterranean Europe, the Caribbean and so forth (see Appendix for this classification). The sub-continental classification captures 91%, 88%, and 85% of the cross-national variance in *autonomy resources*, *liberty aspirations* and *freedom opportunities*. Though this classification is almost three times as differentiated as the continental one (having 23 instead of 8 categories), it explains only 5 to 9 per cent more of the cross-national variance. This finding confirms the adequacy of the cultural zones in Table 4.

10 We tested the robustness of these cultural zones by a discriminant analysis, using continuous variables for the proportions of Protestants, Catholics, Orthodox Christians, Muslims, Hindus, Buddhists, Confucianists, Shintoists, Animists and non-religious people; continuous variables for geographical location in the North-South and the East-West dimension (geographical longitude and latitude of the countries' capitals); as well as dummies for postcommunism and former British colonial status. This discriminant analysis did not arrange the countries of the 'Asian' group into different cultural zones. Although the countries of the 'Asian' group are heterogeneous, they are more similar to each other than to any other group.

3.4 The Human Development Linkages in the Multi-Level Perspective

Table 5 demonstrates that the linkages of Human Development are present at the individual level. In 96 per cent of the surveys—including such diverse countries as China, Russia, Japan, Turkey, Argentina or Sweden—people with more *material* and *cognitive resources* show significantly stronger *liberty aspirations*. Similarly, people with stronger *liberty aspirations* show significantly stronger *support for democracy* in 88 per cent of the surveys. There is considerable cross-national variation in the magnitude of these correlations but less so in their direction and significance. Considering the measurement error that is usually present at the individual level, the correlations are reasonably strong, virtually always in the expected direction and significant in 88 to 98 per cent of the surveys.

Table 6 shows with impressive clarity that the Human Development linkages do not substantially vary in either their intercepts or slopes for different levels of analysis. Whether at the individual-, national, sub-continental or continental level, intercepts and slopes remain almost constant. Figures 1 and 2 give an intuitively clearer picture of this finding. The upper plots show the linkages across nations, the lower plots across sub-continental and continental zones. In every case, the regression equations are almost identical.

A more integrated way to express these findings is to specify multi-level models in which we estimate *overall* intercepts and slopes that are constant across contextual units, together with the intercept- and slope-variation for contextual units. In this way we formulate the relation between *liberty aspirations* and *support for democracy* by a three-level model. The levels of variation are indicated with suffix “*i*” for the individual level, suffix “*j*” for the national level and suffix “*k*” for the cross-cultural level. The “random slopes and intercepts model” is written as follows:

$$\text{SUPPORT FOR DEMOCRACY}_{ijk} = \beta_{0jk} + \beta_{1jk} * \text{LIBERTY ASPIRATIONS}_{ijk} + e_{ijk}$$

We can express the composition of intercept and slope as follows:

$$\text{Intercept: } \beta_{0jk} = \beta_0 + v_{0k} + u_{0jk}$$

$$\text{Slope: } \beta_{1jk} = \beta_1 + v_{1k} + u_{1jk}$$

Intercept and slope are each composed of a *fixed part*, which is constant across different contexts (β_0, β_1) and two *variable parts*, which differ for *nations* (u_{0jk}, u_{1jk}) and for *continental zones* (v_{0k}, v_{1k}). In addition, there is an error term for individuals’ remaining variation in *support for democracy* (e_{ijk}). This *random* variation can neither be attributed to the overall effects of *liberty aspirations* (β_0, β_1) nor to their contextual variation (v_{0k}, u_{0jk}, v_{1k} ,

u_{ijk}). Estimating this model for 56,613 individuals within 53 nations within 8 continental zones provides the results in Table 7.¹¹

Table 5: The Linkages of Human Development at the Individual Level (Pearson's R's)

Type of Link	Correlated Variables	Pooled Correlation (N)	Mean Correlation across National Surveys	Standard Deviation of Mean Correlation	Number of Surveys with Significant Correlation and Expected Sign
RESOURCE-ASPIRATION Linkage	Material Resources with Liberty Aspirations	.19*** (83,155)	.20	.12	74 of 77 ¹ (96%)
	Cognitive Resources with Liberty Aspirations	.12*** (71,351)	.30	.12	61 of 62 ² (99%)
	Mat-Cog Resources with Liberty Aspirations	.20*** (56,370)	.29	.09	53 of 54 ³ (99%)
ASPIRATION-OPPORTUNITY Linkage	Liberty Aspirations with Support of Democracy	.28*** (57,978)	.19	.11	46 of 52 ⁴ (88%)

Significance Levels: * $p \leq .10$; ** $p \leq .01$; *** $p \leq .001$.

In the following, Roman figures indicate the respective wave of the WVS: I (1981), II (1990-91), III (1995-98).

1 Following surveys show significant correlations with expected sign: France II; Great Britain II; Germany (West) II, III; Italy II; Netherlands II; Denmark II; Belgium II; Spain II, III; Ireland II; Northern Ireland II; USA II; Canada II; Japan II; Mexico II; Hungary II; Australia III; Norway II, III; Sweden II, III; Tambov III; Argentina II, III; Finland II, III; Switzerland III; Puerto Rico III; Brazil II, III; Nigeria III; Chile II, III; Belarus II, III; India II, III; Germany (East) II, III; Slovenia II; Bulgaria II; Romania III; Taiwan III; Portugal III; Austria II; Turkey II, III; Moscow II; Lithuania III; Latvia II, III; Estonia III; Ukraine III; Russia II, III; Peru III; Venezuela III; Uruguay III; Moldova III; Georgia III; Armenia III; Azerbaijan III; Dominican Republic III; Bangladesh III; Basque III; Andalusia III; Galicia III; Valencia III; Serbia III; Montenegro III; Croatia III; Slovakia III; Bosnia III. Following surveys show either insignificant or negative correlations: *Mexico III*; *South Africa III*; *Hungary III*; *Nigeria II*; *Ghana III*.

2 *Philippines III* show an insignificant negative correlation.

3 *Ghana III* shows an insignificant .09 correlation.

4 *Mexico III*, *India III*, *Venezuela III*, *Philippines III*, *Azerbaijan III*, *Bangladesh III* show insignificant or negative correlations.

¹¹ We used the MLWin-software developed by Goldstein et. al. (1998). This program runs an iterative generalized least squares procedure.

Table 6: The Linkages of Human Development at Different Levels (Regression Analyses)

LEVELS	RESOURCE-ASPIRATION LINKAGE				ASPIRATION-OPPORTUNITY LINKAGE							
	Autonomy Resources (independent variable) Liberty Aspirations (dependent variable)				Liberty Aspirations (independent variable) Freedom Opportunities 1985-99 (dependent var.)				Liberty Aspirations (independent variable) Support of Democracy (dependent variable)			
	Intercept (Standard Error)	Slope (Standard Error)	Pearson's R	N	Intercept (Standard Error)	Slope (Standard Error)	Pearson's R	N	Intercept (Standard Error)	Slope (Standard Error)	Pearson's R	N
Individual									4.07*** (.01)	.85*** (.01)	.28	57,978
National	-1.23*** (.08)	.049*** (.003)	.89	63 ^a	361.45*** (11.50)	164.35*** (11.85)	.84	80 ^b	4.16*** (.15)	1.245*** (.24)	.60	52
Sub-Continental	-1.32*** (.11)	.053*** (.004)	.93	23	353.72*** (15.37)	176.95*** (15.59)	.92	23	4.08*** (.23)	.80** (.38)	.43	21
Continental	-1.27** (.20)	.052** (.008)	.94	8	359.99*** (24.11)	180.17** (27.69)	.94	8	4.07*** (.26)	.94* (.47)	.64	8

a Cases with "imputed data" for *liberty aspirations* excluded.

b Cases with "imputed data" for *liberty aspirations* weighted by .80.

Using the DFFITs statistic, no unusual cases have been identified.

Significance Levels: *** $p < .001$; ** $p < .01$; * $p < .10$

Figure 1: The Resource-Aspiration Linkage across Nations and Cultural Zones

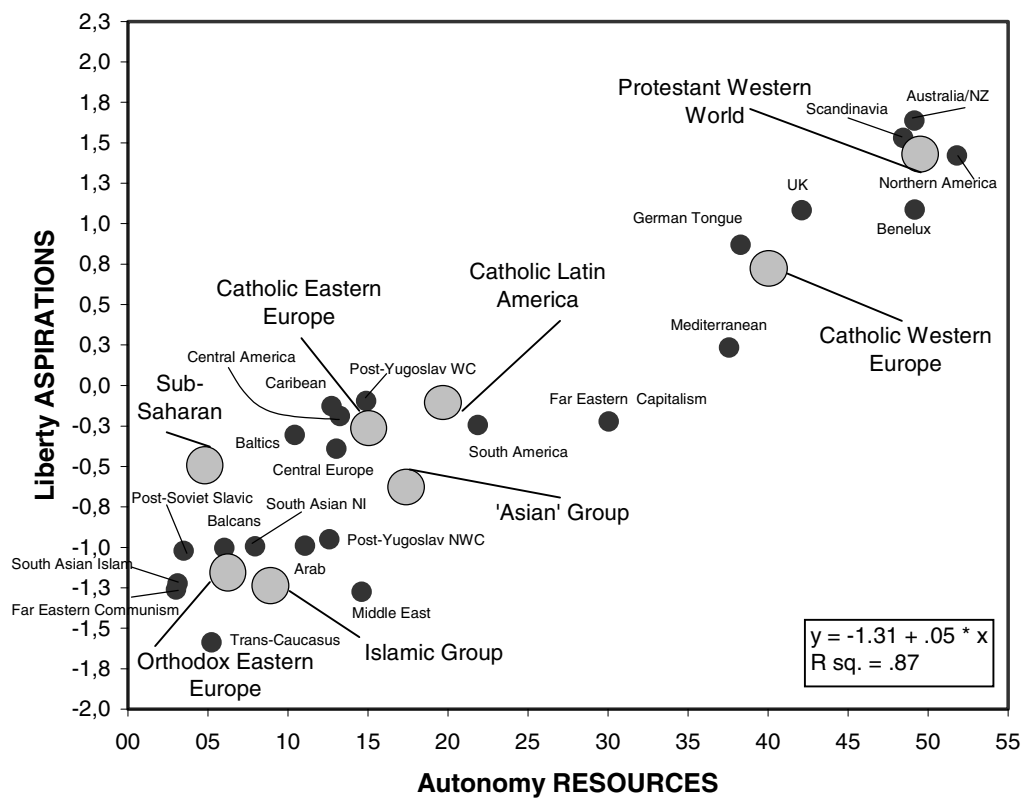
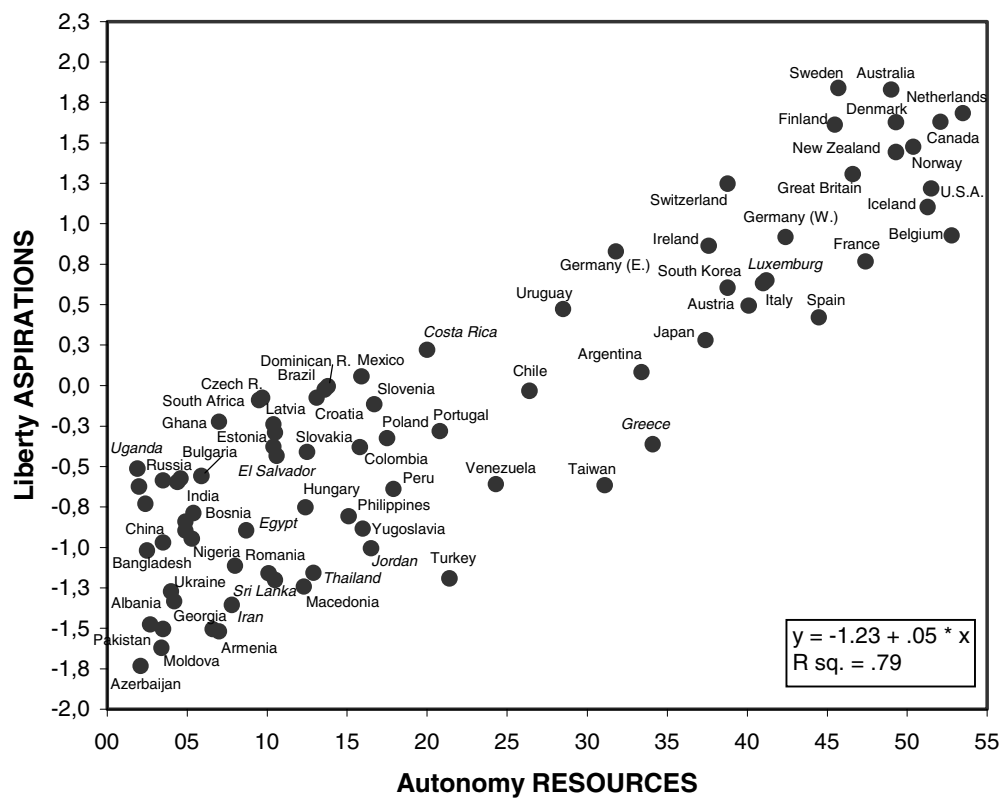


Figure 2: The Aspiration-Opportunity Linkage across Nations and Cultural Zones

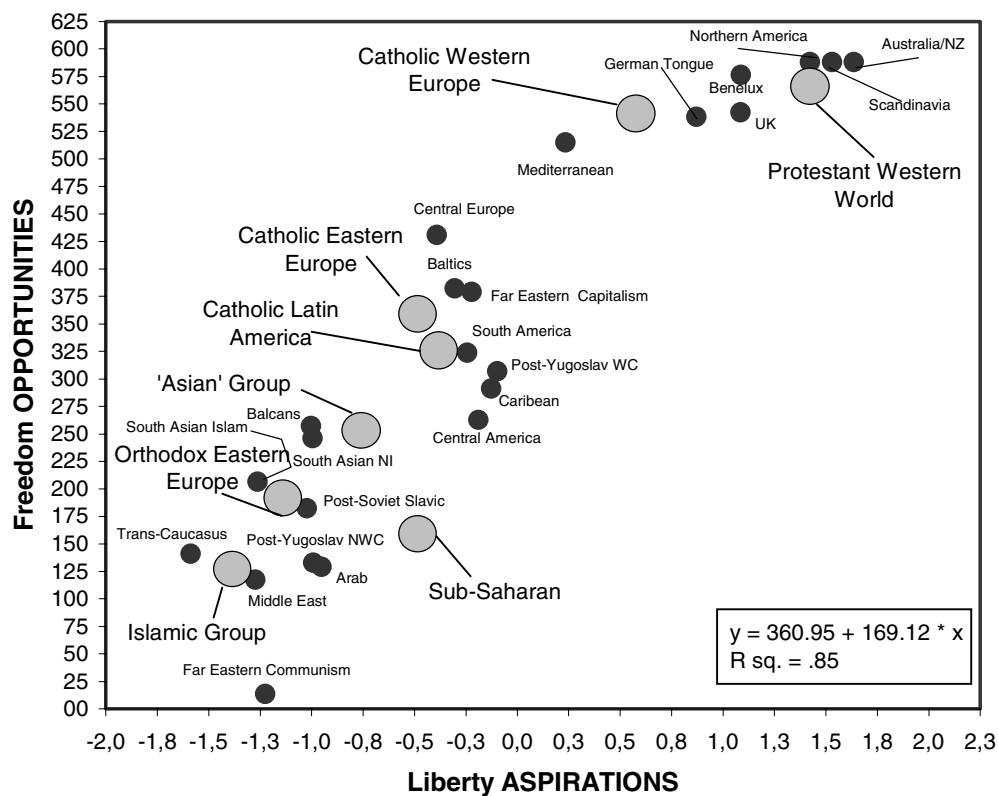
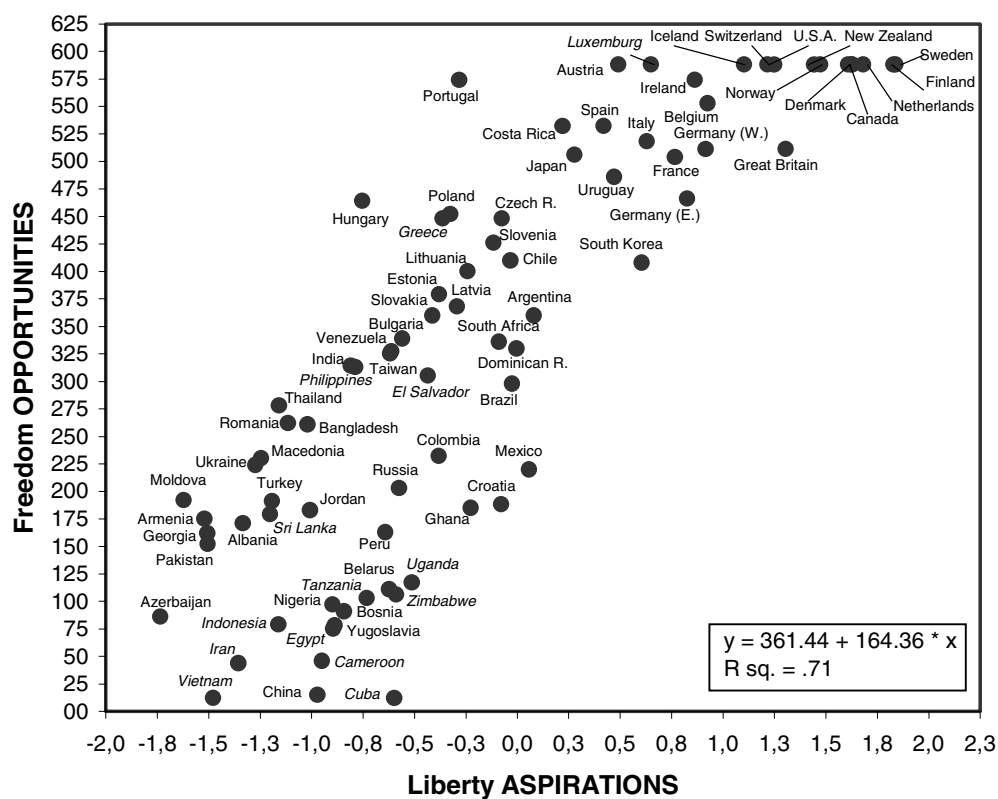


Table 7: Human Development in Integrated Multi-Level Models
(Standard Errors in Parentheses)

COMPONENTS		MODELS		
		SUPPORT FOR DEMOCRACY _{ijk} = $\beta_{0jk} + \beta_{1jk} * \text{LIBERTY ASPIRATIONS}_{ijk} + e_{ijk}$	LIBERTY ASPIRATIONS _{jk} = $\beta_{0k} + \beta_{1k} * \text{AUTONOMY RESOURCES}_{jk} + e_{jk}$	FREEDOM OPPORTUNITIES _{jk} = $\beta_{0k} + \beta_{1k} * \text{LIBERTY ASPIRATIONS}_{jk} + e_{jk}$
Intercept, fixed component	β_0	2.66 (.19)	-1.25 (.08)	359.68 (11.36)
Intercept-variance for Cultural Zones	v_{0k}	.46 (.37)	.10 (.04)	100.05 (2635.76)
Intercept-variance for Nations	u_{0jk}	1.16 (.36)	—	—
Slope, fixed component	β_1	1.14 (.11)	.05 (.003)	164.74 (11.63)
Slope-variance for Cultural Zones	v_{1k}	.09 (.11)	.00 (.00)	.00 (.00)
Slope-variance for Nations	u_{1jk}	.38 (.13)	—	—
Random Variance	e_{ijk} / e_{jk}	7.10 (.04)	.10 (.04)	9741.83 (3049.38)
Intercept-slope Covariance		-.43 (.10)	.00 (.00)	.00 (.00)

Symbols:

β Fixed components
 v Variance for cultural zones
 u Variance for nations
 e Random variation

Suffixes:

0 Intercept
1 Slope
i Individual level
j National level
k Cross-cultural level (continental)

These estimates indicate that *liberty aspirations* have a significant overall effect on *support for democracy*—an effect that is independent of contextual variation. There is no significant variation of intercept or slope for continental units, while significant variation for national units does exist. In addition, the multi-level analysis displays a significant covariance between intercept and slope that amounts to -.43, implying an intercept-slope correlation of -.66.¹² The negative sign indicates that slopes become smaller with growing intercepts. This reflects a ceiling effect, in which it becomes more difficult to obtain additional increases in *support for democracy* with increasing mean-levels of *support for democracy*.

12 The correlation is calculated dividing the intercept-slope covariance by the product between the standard deviations of intercept and slope: $r = -.43 / (\sqrt{1.16} * \sqrt{.38}) = -.43 / .66 = -.66$.

The following equations specify the resource-aspiration linkage and the aspiration-opportunity linkage over two aggregate levels. We estimate overall intercepts and slopes across nations, which are then allowed to vary for continental units. These two-level models are written as follows:

$$\begin{aligned}\text{LIBERTY ASPIRATIONS}_{jk} &= \beta_{0k} + \beta_{1k} * \text{AUTONOMY RESOURCES}_{jk} + e_{jk} \\ \text{FREEDOM OPPORTUNITIES}_{jk} &= \beta_{0k} + \beta_{1k} * \text{LIBERTY ASPIRATIONS}_{jk} + e_{jk}\end{aligned}$$

According to Table 7, the overall effects of both linkages are highly significant. In addition, there is some intercept variance for continental zones. But there is no continental slope variation of any significance: if a continental slope deviates from the overall one, it is insignificant.¹³

Cultural zones represent “real” units that have a substantial equalizing effect on the nations belonging to them. Since cultural homogeneity affects societies’ resources, aspirations and opportunities *coincidentally*, the Human Development syndrome is strikingly evident at the cross-cultural level. It is present there exactly to the degree that cultural zones equalize nations: cultural zones capture ca. 80 per cent of the cross-*national* variance in each component of Human Development, while the linkages between these components explain ca. 80 per cent of the cross-*cultural* variation. Thus, the concept of Human Development is perfectly suited to describe the differences between cultures: those scoring high (or low) in *autonomy resources* also score high (or low) on *liberty aspirations* and *freedom opportunities*. These components tend to go together at both the cross-national level and even more on the cross-cultural level.

The multi-level evidence of the Human Development syndrome leaves us with the question of its genesis. The genetical question has two facets, one *endogenous* and another *exogenous*: (1) how is the syndrome of Human Development *endogenously* shaped, or which of its three components is caused by which? (2) Which *exogenous* factor determines this syndrome as a whole?

3.5 The Endogenous Generation of Human Development

Autonomy resources and *liberty aspirations* co-evolve from the individual level to the societal level. This co-evolutionary link narrows the time-gap in the manifestation of *autonomy resources* and *liberty aspirations*. And it does so in a way that makes it difficult

¹³ Slopes are insignificant among countries of the “Western Protestant World,” “Catholic Latin America,” the “Islamic Group,” “Catholic Eastern Europe,” and “Sub-Saharan Africa.” These cultural zones are so homogenous that the intra-zone variance is within the range where no effect occurs. Only the between-zone variance exceeds this range.

to test for a time-sequence in the emergence of these components (even if we had sufficient time-series data). On the other hand, there is no such co-evolutionary link between *liberty aspirations* and *freedom opportunities*. In contrast to *liberty aspirations*, *freedom opportunities* do not evolve from the individual level. They are codified at the societal level. Hence, there can be large time-gaps in the emergence of *liberty aspirations* and *freedom opportunities*. But time-gaps between two related variables get closed when the lagged variable suddenly spurts to levels of the one ahead. Such a sudden spurt actually happened when *freedom opportunities* increased massively during the “global explosion of democracy” between 1985 and 1995 (Dorenspleet 2000). In this short period, an exceptionally large number of nations switched from autocracy to democracy and, thus, codified *freedom opportunities* that have not existed before.

This rapid expansion of *freedom opportunities* provides a sharp “before” and “after” watershed which is perfectly suitable for a causal test: We test (1) whether *liberty aspirations* (ca. 1990) derived from prior *freedom opportunities* that were present *before* the “explosion of democracy” (1980-85), or (2) whether there is a stronger effect of *liberty aspirations* on subsequent *freedom opportunities* that occurred thereafter (1995-00). This analysis will give a strong indication of which variable has causal priority. However, to demonstrate causality requires more than temporal priority. One must also show that the effect is not an artifact of a third variable, so we include *autonomy resources* as a control variable in both models.

The results in Table 8 are clear: controlling for *autonomy resources*, prior levels of *freedom opportunities* have no significant effect on *liberty aspirations*; but conversely, *liberty aspirations* do have a significant impact on subsequent levels of *freedom opportunities*, even controlling for *autonomy resources*.¹⁴ This finding is perfectly in line with Human Development theory’s causal interpretation of the aspiration-opportunity linkage.

The time-sequence in the manifestation of Human Development is obvious when one uses short-term measures of *freedom opportunities*. Over the long run, however, the three components of Human Development appear to be more closely linked—so closely, in fact, that it is reasonable to consider them as representing one common syndrome. Indeed, in a principal components analysis they are tightly clustered on one factor, with loadings of .96 (*autonomy resources*), .95 (*liberty aspirations*) and .94 (*freedom opportunities*).¹⁵ This dimension—which we call Human Development—captures 91 per cent of the variance on all three variables (Kaiser-Meyer-Olkin measure: .77). The fact that Human Development manifests itself as a closed syndrome in a long-term perspective, leaves us with another

14 We checked the Variance Inflation Factors in order to test whether this finding is adulterated by multicollinearity. It turned out that it is not.

15 Here we operate with a long-term measure of *freedom opportunities* that averages scores over the years from 1989 to 2000.

important question: which exogenous factors determine the syndrome of Human Development as a whole, or more precisely: which leverage do collective actors have to pursue Human Development in any of its components?

Table 8: The Causal Direction of the Aspiration-Opportunity Link

LIBERTY ASPIRATIONS (CA. 1990) → FREEDOM OPPORTUNITIES (1995-00)						
EFFECTS	Regression Coefficient B	Standard Error	Standardized Beta	T-Value	Significance	Variance Inflation Factor
Constant	24.24***	3.42		7.09	.000	
Autonomy Resources	.29*	.14	.31	2.16	.034	4.65
Liberty Aspirations	8.54**	2.41	.52	3.55	.001	4.65
N = 63; adj. R sq.: .64						
FREEDOM OPPORTUNITIES (1980-85) → LIBERTY ASPIRATIONS (CA. 1990)						
EFFECTS	Regression Coefficient B	Standard Error	Standardized B	T-Value	Significance	Variance Inflation Factor
Constant	-1.24***	.080		-15.41	.000	
Autonomy Resources	.045***	.005	.80	8.57	.000	3.16
Freedom Opportunities	.0009	.001	.11	1.14	.257	3.16
N = 63; adj. R sq.: .78						

Cases with “imputed data” for *liberty aspirations* excluded.

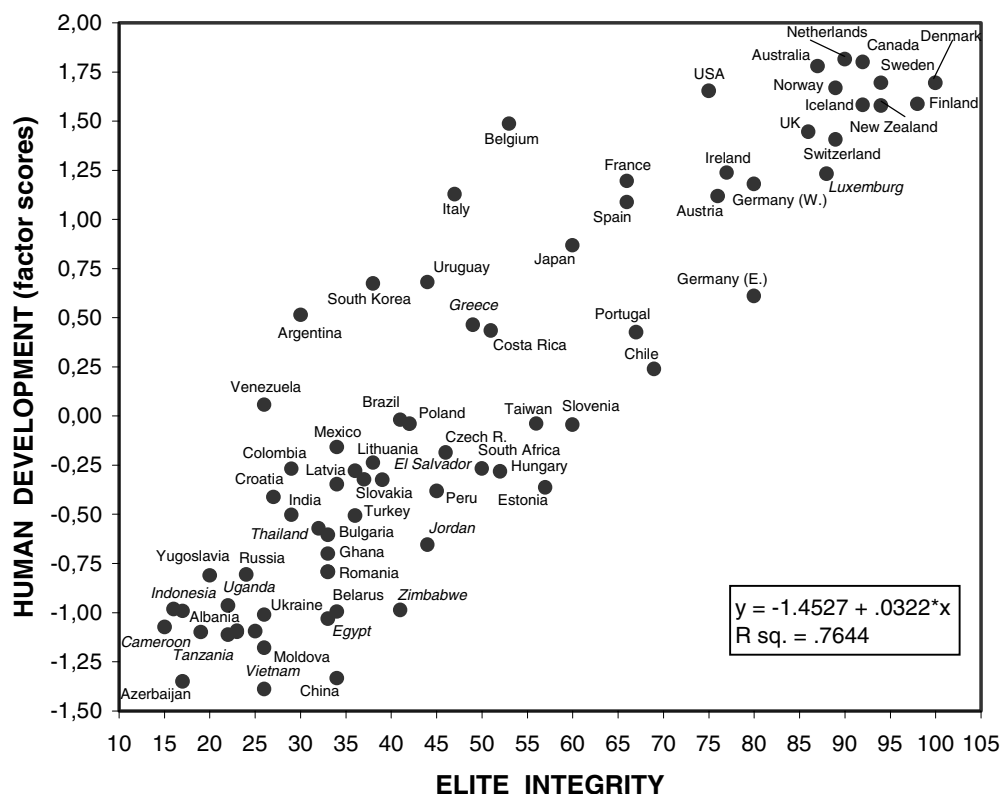
Significance Levels: *** $p < .001$ M; ** $p < .01$; * $p < .10$

3.6 The Leverage of Collective Actors in Promoting Human Development

Despite the clear evidence of enduring cultural differences that we have just seen, collective actors do have a choice, and can act to encourage Human Development. Figure 3 demonstrates this point, showing the impact of *elite integrity* on Human Development. We measured elite integrity using the inverse of the corruption scores published by Transparency International (calculated as 100 minus the corruption score, which ranges from 0 to 100). As is obvious, *elite integrity* has a profound impact on Human Development (meas-

ured by factor scores summarizing its three components). This finding suggests that pursuing policies designed to minimize elite corruption may be an effective way to promote Human Development in any of its components. A rational administrative and managerial class seems conducive to the entire syndrome of *autonomy resources*, *liberty aspirations* and *freedom opportunities* (the correlation between each of these components and elite integrity is about .84).

Figure 3: Elite Integrity and Human Development



We do not want to over-simplify. What we have is only a correlation (although a strong one). We lack sufficient time-series data to prove the causal direction of this correlation. This offers room for speculation. Elites might not have *completely* free choice between corrupt and law-abiding behavior; elite behavior may also follow societal pressure that derives from important aspects of Human Development. We think the most plausible interpretation is that increasing *liberty aspirations* among citizens put pressure on elites to democratize institutions, to behave responsible, and to reduce corruption. Reduced corruption then leads to a more efficient allocation of public resources (a finding supported by Olson, Sarna and Swamy 2000). This will promote the growth of *autonomy resources* among the citizens that again gives rise to even stronger *liberty aspirations*. Then the cycle

starts anew. Alternatively, let the cycle start with *elite integrity*. Then this initiates the co-evolution of *resource allocation* and *aspiration mobilization*, which in turn strengthens the pressure for more *elite integrity*. In short, *elite integrity* initiates its own reproduction.

This interpretation is confirmed by a cross-sectional path analysis of our variables (only significant path coefficients reported): *elite integrity* promotes *resource allocation* by .82, which then gives rise to *aspiration mobilization* by .66. In turn *aspiration mobilization* favors *opportunity codification* by .70 from which it obtains a positive feedback by .31. Finally, *aspiration mobilization* and *opportunity codification* strengthen *elite integrity* by .62 and .34, respectively. Hence, *elite integrity* and Human Development seem to interact in a self-reinforcing cycle of social progress, or regress.

Summary

We have demonstrated that socioeconomic development, cultural modernization, and gradations of democracy constitute one coherent syndrome of social change. Modernization theorists did not reflect this syndrome as such and thus failed to integrate its components into a coherent concept. The concept of Human Development, as introduced by Anand and Sen, has the potential of an integrated theory, but this has not been fully exploited, since the concept did not capture political culture so far. Thus, we described Human Development as an integrated syndrome, arguing that the underlying theme of its three components is individual choice: socioeconomic development widens individual choice by giving people more *autonomy resources*; cultural modernization releases *liberty aspirations* which lead people to seek for individual choice; and an improvement of a regime's democratic performance extends individual choice by the codification of *freedom opportunities*. The theory of Human Development is both comprehensive and specific in that it integrates changes in socioeconomic structure, political culture and regime institutions into one central theme: human choice.

We have shown that the linkages that constitute Human Development are present at the individual, cross-national and cross-cultural levels, without little evidence of level-specific mechanisms. Since cultural zones have a strong homogenizing effect on nations, Human Development is particularly evident at the cross-cultural level. Indeed, cross-cultural differences can be adequately described as differences in Human Development. We have also shown that the syndrome of Human Development is *endogenously* shaped by a causal priority of *resource allocation* and *aspiration mobilization* over *opportunity codification*: *autonomy resources* give rise to *liberty aspirations* which then determine *freedom opportunities* more than the reverse. On the other hand, the three components of Human Development

opment represent a closed syndrome when one considers them in a long-term perspective. The magnitude of this syndrome is significantly linked with cultural zones, but *elite integrity* has an even more decisive impact. The causal mechanism is probably more complicated than a simple correlation can show. But this does not invalidate the conclusion that a reduction of elite corruption, or “good governance,” is an important contribution to Human Development, especially to *resource allocation* as its most basic subprocess.

The theory of Human Development provides an integrated framework to analyze the interplay of socioeconomic development, cultural modernization and democratization, in relation to the leverage that collective actors have in pursuing these processes.

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Appendix

This list shows how we arranged countries to 23 sub-continental cultural zones:

“German Language”: Austria, Germany, Switzerland; *“Scandinavia”*: Denmark, Finland, Iceland, Norway, Sweden; *“Benelux”*: Belgium, Luxemburg, Netherlands; *“Mediterranean”*: France, Italy, Portugal, Spain, Greece; *“Australia/New Zealand”*; *“North America”*: Canada, U.S.A.; *“Central Europe”*: Czech Republic, Hungary, Poland, Slovakia; *“Post-Yugoslav WC”* (Western Christian): Croatia, Slovenia; *“Post-Yugoslav NWC”* (Non-Western Christian): Macedonia, Yugoslavia, Bosnia; *“Balkans NPY”* (Non Post-Yugoslav): Bulgaria, Romania, Albania; *“Post-Soviet Slavic”*: Belarus, Moldova, Russia, Ukraine; *“Baltics”*: Estonia, Latvia, Lithuania; *“Trans-Caucasus”*: Armenia, Georgia, Azerbaijan; *“Middle East”*: Iran, Turkey; *“Arab”*: Egypt, Jordan; *“South Asian Islamic”*: Bangladesh, Pakistan, Indonesia; *“South Asian NP”* (Non-Islamic): India, Sri Lanka; *“Far Eastern Capitalism”*: Japan, South Korea, Taiwan, Thailand; *“Far Eastern Communism”*: China, Vietnam; *“Sub-Saharan”*: Ghana, South Africa, Tanzania, Uganda, Zimbabwe, Cameroon, Nigeria; *“South America”*: Argentina, Brazil, Chile, Peru, Philippines, Uruguay, Venezuela; *“Caribbean”*: Costa Rica, Cuba, Dominican Republic; *“Central America”*: El Salvador, Mexico.

Forschungsschwerpunkt III "Sozialer Wandel, Institutionen und Vermittlungsprozesse"

Auswahl der Arbeitspapiere (Stand: Mai 2001)

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- FS III 96-301 The Mass Media and Modern Government
Kenneth Newton
- FS III 96-302 Das intermediäre System der Politik als Orientierungssystem der Bürger
Dieter Fuchs, Edeltraud Roller, Dieter Rucht und Bernhard Weßels

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