

*Center for the Study of  
Democracy*  
(University of California, Irvine)

---

*Year 2002*

*Paper 02'01*

---

The Theory of Human Development: A  
Cross-Cultural Analysis

Christian Welzel  
University of Bremen

Ronald Inglehart  
University of Michigan

Hans-Dieter Klingemann  
Wissenschaftszentrum Berlin

# The Theory of Human Development: A Cross-Cultural Analysis

## **Abstract**

This article demonstrates that socioeconomic development, cultural change and democratization constitute a coherent syndrome of social progress- a syndrome whose common focus has not been properly specified by classical modernization theory. We specify this syndrome as Human Development, arguing that its three components have a common focus on broadening human choice. Socioeconomic development broadens peoples' choice by increasing their individual resources; cultural change gives rise to self-expression values that let people seek for broader choice; and democratization institutionalizes effective rights, giving human choice a legal basis. Analysis of data from the World Values Surveys demonstrates: (1) that the syndrome of individual resources, self-expression values and effective rights is universal in its presence across nations, regions and cultural zones; (2) that this Human Development syndrome is shaped by a causal effect from individual resources and self-expression values on effective rights; and (3) that this effect operates through its impact on elite integrity, as the factor which makes given rights effective.

# CSD Center for the Study of Democracy

An Organized Research Unit  
University of California, Irvine  
[www.democ.uci.edu](http://www.democ.uci.edu)

## Abstract

This article demonstrates that socioeconomic development, cultural change and democratization constitute a coherent syndrome of social progress— a syndrome whose common focus has not been properly specified by classical modernization theory. We specify this syndrome as Human Development, arguing that its three components have a common focus on broadening human choice. Socioeconomic development broadens peoples' choice by increasing their *individual resources*; cultural change gives rise to *self-expression values* that let people seek for broader choice; and democratization institutionalizes *effective rights*, giving human choice a legal basis. Analysis of data from the World Values Surveys demonstrates: (1) that the syndrome of individual resources, self-expression values and effective rights is universal in its presence across nations, regions and cultural zones; (2) that this Human Development syndrome is shaped by a causal effect from individual resources and self-expression values on effective rights; and (3) that this effect operates through its impact on *elite integrity*, as the factor which makes given rights effective.

## Introduction

Students of social change have identified three major processes. The most fundamental one, socioeconomic development, has been described extensively (among many others see Lewis 1955; Rostow 1961; Bell 1973; Chirot 1986; Perkin 1996; Rowen 1996; Barro 1997; Estes 1998; Rodrik 1998; Hughes 1999; Sen 2000). There is broad consensus that socioeconomic development reflects a set of closely linked changes including productivity growth, improving health and life expectancy, increasing material prosperity, expanding education and communication, and increasing social complexity.

The second process, value change, comes along with socioeconomic development when expanding markets and social mobilization increase human interactions and horizontal networks

among societies. This process tends to transform authority relations into bargaining relations, emancipating people from rigidly hierarchical ties that restrict human autonomy (Weber 1958; Banfield 1958; Eckstein 1988; Coleman 1988). If this happens, peoples' prevailing value orientations tend to be reshaped in ways that have been described in various terms, such as the emergence of "civic culture." values (Almond and Verba 1963), "individual modernity" (Inkeles and Smith 1974; Inkeles 1983), "postmaterialist values" (Inglehart 1977; 1990), "liberal values" (Brint 1984; Flanagan 1987; Nevitte 1996), "anthropocentric values" (Bürklin, Klein and Ruß 1996), and "emancipatory values" (Clark 1998; Welzel 2002). Whatever the terminology, most theories of value change coincide in the notion that traditional-deferential orientations, which subordinate individual freedom to community discipline, tend to give way to more libertarian orientations that emphasize human choice. Following Inglehart and Baker (2000), we characterize this process as a shift from survival values to self-expression values.

A third major process involves a society's political institutions. The most notable development in this field has been a massive rise in societies' democratic performance. This happened in two ways during the past three decades. Most obviously, many previously authoritarian regimes changed into constitutional democracies by adopting basic democratic rules in the "Third Wave of Democratization" (Huntington 1991; Sørensen 1993; Kurzman 1998; Nagle and Mahr 1999; Dorenspleet 2000). At the same time, a more subtle change has taken place in established democracies. Since the late 1970s, most of them have implemented or extended direct democratic institutions (Butler and Ranney 1994; Cronin 1998; Scarrow 2000) and they have experienced rising levels of direct civic participation (Barnes and Kaase et al. 1979; Budge 1996; Dalton 2001). Some scholars see these changes as an acceleration of a more enduring historical trend towards the "growth of democracy" (Gurr, Jagers and Moore 1990; Modelski and Perry 1991; Diamond 1993; Jagers and Gurr 1995).

As often as the processes of socioeconomic development, value change and democratization have been described, they have been called into question (see Randall and Theobald 1998: chs. 1-2). 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 change and democratization occur, they tend to go together. Impoverished societies, whose citizens suffer from scarce resources, most obviously in Sub-Saharan Africa, tend to be dominated by survival values that reflect restrictions on human autonomy. These societies are usually governed by authoritarian regimes. And even if they are constituted as "formal democracies", these regimes hardly operate effectively. At the other end of the continuum, the citizens of OECD-societies profit from an affluence of individual resources and their prevailing values are characterized by a stronger emphasis on human self-expression. These citizens are usually governed by democratic regimes that function rather effectively. Overall, societal levels of individual resources, self-expression values and effective democracy tend to correspond to each other, as is shown in Figures 1 and 2 (below).

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 value change (Inglehart 1997; Inglehart and Baker 2000). Nevertheless, we still lack an integrated theory of social change. Modernization theorists have argued that there are close relations between socioeconomic development, value change and degrees of democracy, but they did not sharpen the common focus of these three phenomena. Modernization was either used as an umbrella term that was defined by enumerating its components but not by what integrates them (for example Lerner 1968:385); or modernization

was specified in abstract terms, such as “functional differentiation” (Mouzelis 1999), that provide no clear 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 analyses focus on only one of the three relationships between socioeconomic development, cultural change and democracy. 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 (Muller and Seligson 1994; Inglehart 1997; Sides 1999; Inglehart and Baker 2000). As a result, the debate is fragmented into three separate strings.

First, following Lipset (1959), various authors claimed that socioeconomic development helps to establish or sustain democracy (among others Cutright 1963; Bollen and Jackman 1985; Lipset, Seong and Torres 1993; Helliwell 1993; Burkhart and Lewis-Beck 1994; Barro 1997; Vanhanen 1997; Gasiorowski and Power 1998), while others argue that democracy promotes political stability, provides better economic policies and thus is conducive to socioeconomic development (Ersson and Lane 1996; Rowen 1996; Leblang 1997; Yi Feng 1997; Frey and Al-Roumi 1999; Olson, Sarna and Swamy 2000). Second, some observers maintain that socioeconomic development gives rise to “modern” values (Inkeles and Smith 1974; Inkeles 1983; Flanagan 1987; Inglehart and Baker 2000), but others insist that “modern” values accelerate socioeconomic development (Putnam 1993; Fukuyama 1995; Knack and Keefer 1997; Landes 1998). Third, while some analysts suggest that democracy helps to produce “civic” values (Rustow 1970; Muller and Seligson 1994; Jackman and Miller 1998), others emphasize the opposite flow of causation: emerging “civic” values put political elites under popular pressure to institutionalize democratic rules and to keep these rules effective (Gibson and Duch 1994; Inglehart 1997:chapter 5; Welzel and Inglehart 2001; Welzel 2002).

Summarizing these contradictions, Dahl (1998:35) concluded “the exact nature of the relationship among socioeconomic modernization, democratization, and the creation of a democratic culture is almost as puzzling today as it was a quarter-century ago.”

It remains puzzling because no one, as far as we know, started from the most fundamental question: “What is the common denominator underlying socioeconomic development, changing values and democracy?” This question is made all the more pressing by the striking coincidence of these three processes, as we will demonstrate. We start from this fundamental question and elaborate on the syndrome as such before we dissolve the whole complex into separate relations. Specifying the common theme that underlies socioeconomic development, value change and democratization has important implications. It helps to better understand the specific role played by each of the three subprocesses 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 developed. The following section unfolds the concept of Human Development as an integrating framework. Anand and Sen (1998) introduced the term Human Development, arguing that “human choice,” or the capability of human beings to choose the lives they want, should be the ultimate measure of social progress. We share this humanistic approach. But we unfold the concept of Human Development more comprehensively in a way that includes political culture. Using this framework, we analyze data from the World Values Surveys together with socioeconomic data from Vanhanen (1997), civil and political rights ratings from Freedom House and estimates on elite corruption from Transparency International. Subsequent sections demonstrate (1) that the syndrome of Human Development operates across nations, regions and cultural zones; (2) that

this syndrome is shaped by a process in which socioeconomic development and emerging self-expression values lead to rising levels of effective democracy; and (3) that the effect of self-expression values on effective democracy operates through their impact on elite integrity. Indeed, elite integrity (i.e., the reverse of elite corruption) is the factor that makes constitutional democracy effective.

## Theory

### The Three Components of Human Development

In contrast to more sophisticated conceptions of modernization, our proposition makes it easier to understand socioeconomic development, changing values and democracy as distinct but interrelated facets of the same principle. We argue that socioeconomic development, changing values and democracy work together in promoting human choice.

Socioeconomic development includes a bundle of processes, such as urbanization, social mobilization and occupational differentiation, which increase social complexity and multiply social transactions between human beings (Bendix 1974; Durkheim 1988; Simmel 1984; Blau 1994). These tendencies help to emancipate people from closed in-group discipline and to replace clientelistic authority relations by rationalized bargaining relations, giving people greater autonomy over their resources. Moreover, socioeconomic development does not only individualize available resources, it also enlarges the amount of these resources: rising incomes, skills and information facilities increase peoples' physical and intellectual resources. Socioeconomic development diminishes the most concrete and most pressing restrictions on human choice by increasing *individual resources*. In short, socioeconomic development contributes the *means*-component to human choice. This view is as old as Aristotle and has been argued from Adam Smith and Karl Marx to Sen (2001).

Cultural change is the second subprocess relevant to human choice. When growing individual resources widen the scope of human activities and heighten the level of possible achievements, the striving for self-expression finds greater leverage, which fuels growing public emphasis on human choice. Thus, by giving self-expression values greater weight, cultural change contributes the *motives*-component to human choice. This is consistent with the notion that choice is not only a matter of one's means but also of one's mind and motivation (Rokeach 1960).

Democracy represents the institutional component of human choice, providing a legal structure that establishes a set of fundamental citizen rights. Democracy gives human choice a legal basis in that it institutionalizes guarantees of choice in the citizens' private life and public activity. Democracy contributes *effective rights* to human choice and thus represents its *rules*-component. This notion can be traced back to Mill and Dewey who saw legal guarantees for "individual self-development" (Macpherson 1977:44-76) as the core value of democracy.

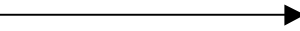
Individual resources, self-expression values and effective rights are the three components of Human Development and represent its means-, motives- and rules-components. These components are provided by socioeconomic development, cultural change and democratization, respectively. Table 1 summarizes this conception of Human Development.

The three components of Human Development all coincide in their focus on human choice. Progress in any of these components improves a society's "conditio humana," giving people larger means, stronger motivations and wider guarantees to make use of their personal potential and to unfold individual creativity. Human Development of societies means growing human 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 upward direction. Societies can move in either

direction, progressing or regressing. But our theory does imply that the citizens' means, motivations and rights tend to develop coincidentally, either narrowing or widening the range of human choice.

**Table 1. The Concept of Human Development**

	<b>Human Development:</b>		
	Economic Dimension	Cultural Dimension	Institutional Dimension
Components	Individual Resources	Self-Expression Values	Effective Rights
Generating Processes	Socioeconomic Development	Cultural Change	Democratization
Societal Spheres	Sphere of Means (social structure)	Sphere of Motives (political culture)	Sphere of Rules (regime institutions)
Prevailing Causal Direction			
Underlying Theme	<b>Human Choice on a Mass-Level</b>		

The concept of Human Development goes beyond standard modernization theory in having both a wider scope and a sharper focus. Usually, theories cannot maximize scope and focus at the same time, but the concept of Human Development does. On one hand, its scope is comprehensive, integrating major changes in socioeconomic structure, political culture, and regime institutions. On the other hand, this concept is sharply focused on one theme: the growth (or decline) of human choice.

### **The Two Linkages of Human Development**

We suggest that the Human Development syndrome is shaped by two linkages: (1) a *means-motives linkage* that connects self-expression values with individual resources; and (2) a *motives-rules linkage* that ties effective rights to self-expression values. We briefly outline how these linkages function.

**The MEANS-MOTIVES LINKAGE:** People's value orientations reflect the restrictions that their social conditions put on human autonomy. These restrictions are most concrete and most pressing in the socioeconomic sphere, when scarce individual resources deprive people of many options in their life. Usually, people tend to adapt their aspirations to these restrictions (Schwartz 1992; Diener et al. 1995; Cummins 2000; Eckersley 2000; Schmuck, Kasser and Ryan 2000). This mechanism, known in social psychology as "aspiration adjustment" (Costa, McCrae and Zonderman 1987), has emerged through human evolution, because it secured survival (Birch and Cobb 1981; Doyal and Gough 1991; Tooby and Cosmides 1992). Aspiration adjustment leads people to aspire for most pressing things first and to avoid wasting energy on unattainable goals

(Maslow 1970). On the other hand, however, the fundamental fact that human beings are self-conscious creates a need for self-realization and self-expression that is latent in each person. This insight led many theorists—including Karl Marx, Maslow, Inkeles and Flanagan—to the conclusion that social conditions, which offer people greater choice, create greater satisfaction. Indeed, data from the World Values Surveys support the view that greater human choice increases individual life satisfaction. In each of 148 national representative surveys, conducted in such diverse societies as Uganda, China, Iran, Brazil, Sweden or Poland, there is a highly significant correlation between individuals' life satisfaction and their perception of how much choice they have in shaping their life.<sup>1</sup>

Yet, people adapt their strive for self-expression to the restrictions posed on human autonomy by their social conditions. Under restrictive conditions, human beings reduce their striving for self-expression, although this downward adjustment of aspirations has psychological costs in that it diminishes life satisfaction. Downward adjustment of aspirations is nonetheless necessary to survive under restrictive conditions, such as those prevailing in poor societies where scarce resources drive human beings into a struggle for survival. Survival strategies may constitute a Hobbesian “homo homini lupus” situation in which outsiders are distrusted as hostile competitors for scarce resources. Distrust towards outsiders forces individuals into rigid in-group discipline that restricts human autonomy. Banfield (1958) examined the Southern Italian community of Montegrano to describe such a typical survival situation. Putnam (1993) reaches similar conclusions in his description of differences between Italian citizens of the affluent North and the poor South, finding that Southern Italians distrust their fellow citizens and therefore support rigid community discipline. These citizens tend to put much emphasis on social control, public order, hierarchy, moral rigidity and strong authority—survival values that prevail under restrictive human conditions.

Inglehart (1997) demonstrated for a much wider array of countries that publics suffering from scarce resources tend to be dominated by survival values. On the other hand, his analyses also provide evidence that, if individual resources grow, individual freedom gains momentum, reducing the benefits of survival values. Then survival values tend to give way to the human strive for self-expression, which is reflected in greater tolerance of human diversity, higher life satisfaction and greater respect for individual freedom as opposed to community discipline. According to Flanagan (1987), this value change reflects a functional mechanism of aspiration adjustment at the societal level.

The MOTIVES-RULES LINKAGE: Human self-expression is inherently targeted at private and public activities that require a legal space based upon effective rights. The directedness of self-expression values towards effective rights has consequences for the stability of political regimes, provided these values gain momentum among the broader public.

If growing individual resources give rise to mass emphasis on self-expression within an autocracy, people will consider authoritarian rule as an unlegitimized restriction of their rights.

---

<sup>1</sup> Life satisfaction in the World Values Surveys is measured on a 10-point rating scale (as noted in footnote 5 of Table 2). Choice perception, too, is measured on a 10-point rating scale based on the following question (V82): “Some people feel they have completely free choice and control over their lives, while other people feel that what they do has no real effect on what happens to them. Please use this scale where ‘1’ means ‘none at all’ and ‘10’ means ‘a great deal’ to indicate how much freedom of choice and control you feel you have over the way your life turns out.” In 148 of a total of 178 surveys where these variables can be created, there is a highly significant positive correlation. The average within-nation correlation is .35. Pooled across all surveys the individual level correlation is .42. At the aggregate cross-national level the correlation is .85. The individual level correlation holds even controlling for financial satisfaction.



Confronted with an authoritarian elite unwilling to democratize, these people will withdraw as much material and moral support as they can. This makes authoritarian rule increasingly ineffective and costly, since the regime must bear the growing costs of “aspiration suppression” (Kuran 1991). The exhaustion of a regime’s resources and the loss of legitimacy increase the probability of an intra-elite division such that a faction of the elite splits off in an attempt to regain legitimacy by institutional reforms (Bova 1991; Przeworski 1992). Such elite splits encourage dissidents to mobilize popular support, which helps to overthrow the regime and to initiate a transition to democracy (see Welzel 1999; McAdam, Tilly and Tarrow 2001: ch. 9).<sup>2</sup>

If mass emphasis on self-expression grows in a democracy, the likely result is not regime change but an increasing effectiveness of citizen rights. A society may be organized as a constitutional democracy such that all the basic civil and political rights are formally guaranteed. But legal codification does not necessarily make these rights effective. Even a democracy can be ruled by corrupt elites who deprive the citizens of their rights. In a poor society which is dominated by survival values, the bulk of the citizenry has neither the resources nor the motivation to form effective popular pressure such that the elites feel urged to respect the constitutional rights. In a society in which self-expression values are strongly pronounced, however, people will be more willing to exert public pressure to keep the elites accountable. Usually, these citizens also possess the resources to make their pressure effective. As noted by Verba, Nie and Kim (1978:73): “in all nations, citizens appear to convert socio-economic resources into political involvement.”

In democracies, elites are recruited from the electorate. Thus, changing values among the citizens will affect the elites as well. So if there is a shift toward self-expression values in the population, the elites, too, will show stronger emphasis on self-expression. Data from the World Values Surveys support this assumption, demonstrating that people with university degrees show in each society a stronger acceptance and appreciation of self-expression than does the ordinary citizen (Welzel 2002). But the national differences in emphasis on self-expression are just as large among people with university degrees as they are among the ordinary citizens. Since elites are overwhelmingly recruited from people with university education, this finding indicates that a public’s emphasis on self-expression is well represented among its elites.

Growing acceptance and appreciation of self-expression among elites implies that these elites themselves condemn corrupt behavior as an illegitimate violation of citizen rights. Thus, there are two reasons why a societal shift towards self-expression values will reduce corrupt elite behavior and increase the effectiveness of given rights. One is that the masses possess more resources and stronger motivations to put elites under popular pressure. The other reason is that the elites are by their own beliefs willing to keep citizen rights effective. From a rational choice perspective, there is no reason to expect that elites avoid maximizing their incomes through corruption, unless their own values or popular pressure eliminate this option from rational calculation.

---

<sup>2</sup> Indeed, using data from the third and fourth waves of the World Values Surveys, there is a .29 individual level correlation between respondents’ emphasis on self-expression and their preference for democracy (using Klingemann’s index of democratic regime support, see Klingemann 1999). At the aggregate level of nations, the same correlation is to .66. Interestingly, however, mass support for democracy is a much weaker predictor of both constitutional and effective democracy (see explanation of these variables below) than is mass-emphasis on self-expression. This indicates that reported support for democracy entails a good deal of fashionable lip service, while emphasis on self-expression reflects more deeply rooted every day life values which, according to Eckstein (1966), are particularly relevant for the functioning of democracy.

Consider now the reverse relation: Can civil and political rights by their mere presence create self-expression values among the citizens? Our answer is “no,” unless the resources which feed these values are present. For example, consider India: though offering its citizens a wide array of citizen rights during 50 years of constitutional democracy, most Indians did not develop a correspondingly strong emphasis on self-expression (as is demonstrated by India’s location in Figures 1A and 2A, below). On the other hand, former Czechoslovakia provided its citizens much narrower formal rights under four decades of communist rule, but the Czechs (and to a lesser degree also the Slovaks) developed much stronger emphasis on self-expression than most of the Indians did—in keeping with their greater resources in terms of incomes and education (see again Figure 1A, below). This does not mean that constitutional democracy cannot exist without corresponding self-expression values. Actually it can, as the Indian example shows. But if so, constitutional democracy is likely to be ineffective. To be practiced effectively, formal rights need corresponding values but cannot create them. Formal rights are only an institutional offer that cannot by itself create the demands that make it effective. In conclusion, effective democracy is more the consequence rather than the cause of mass emphasis on self-expression.

### **Constitutional Democracy and Effective Democracy**

The Indian case illustrates how important it is to differentiate between constitutional (or formal) democracy and effective democracy. India is without doubt a constitutional democracy that guarantees its citizens a wide array of civil and political rights. But as Heller has pointed out (2001), most Indians do not have the resources enabling them to exert their rights effectively. They also do not share the values that make them willing to insist on fully practicing their rights. In terms of effective democracy, India ranks closer to China than to Japan (see Figure 2A, below), although India has a democratic constitution.

Democracy is central to Human Development because it grants civil and political rights to the citizens. Formal rights are one necessary element of effective democracy, because without formal democracy there can be no democracy at all. But formal rights are not sufficient to make democracy effective. What makes given rights effective is how much the elites respect these rights in their actual behavior. Law-abiding elite behavior or what we call “elite integrity” is an expression of the “rule of law” that, as O’Donnell (1993), Linz and Stepan (1996) and many others claimed, distinguishes effective democracy from constitutional democracy. Hence, our measure of effective democracy is the product of constitutional democracy (i.e., formal rights) and elite integrity (i.e., rule of law). So we weight formal rights by rule of law as to measure effective democracy.

### **The Micro-Macro Linkage in Human Development**

Our Human Development theory maintains that effective democracy is linked to mass emphasis on self-expression that is in turn linked to the citizens’ available resources. But while the linkage between effective democracy and self-expression values becomes manifest only at the community level, the linkage between self-expression values and available resources originates at the individual level and translates to the community level through aggregation. The aggregation of this linkage is strongly influenced by mass tendency effects, which, as we will see, are important to understand the micro-macro connection of Human Development.

It is indeed true that the linkage between available resources and self-expression values originates at the individual level, since individuals with more resources show a significantly stronger emphasis on self-expression: within each of 112 opinion-polls from the World Values Surveys there is a significantly positive correlation between individuals’ emphasis on self-expression and their income and education. On average, these individual level correlations within

nations point to  $r=.29$  (standard deviation: .08).<sup>3</sup> But compared to the community level, where we measure a .91 correlation between these variables across nations (see below), the correlation is relatively weak at the individual level within nations. Why this is so can be explained by the mass tendency effects of communities.

National communities share similar education and communication systems and other institutions that socialize the citizens. Accordingly, nations tend to create significant “central tendencies” among their citizens’ prevailing values. Thus, there is much larger variance in value orientations between citizens of different nations than between those of the same nations. Of course, emphasis on self-expression varies considerably between individuals within nations. Yet, within each nation a majority of the individuals clusters near their nation’s mean emphasis on self-expression. In other words, most people’s emphasis on self-expression is close to the average citizen’s emphasis. But these averages vary enormously from nation to nation (see Figure 2A, below). Hence, the national averages in emphasis on self-expression capture fully 40 per cent of the total individual level variance among all people ever surveyed in four waves of the World Values Surveys. This is a remarkable proportion, with only 73 national units accounting for nearly half of the variance among 158,802 individuals (this is more than 2,000 times the random likelihood).

The relevance of nations’ central tendencies becomes evident when one recognizes another regularity in social sciences: variations in an independent variable  $x$  never translate in a deterministic manner into corresponding variations of a dependent variable  $y$ . All known relationships in social reality are probabilistic, showing a “range of tolerance” within which variation in  $x$  has no systematic effect on  $y$ . Only large variations in  $x$  which exceed this tolerance may be reflected in corresponding variations of  $y$ . From this point of view, consider the relation between available resources and self-expression values and assume that both variables show relatively concentrated distributions within nations. This implies that only a minority of individuals deviates largely from the national averages in both variables. In other words, the majority of individuals is bounded within the tolerance range where variations in available resources are *not* reflected in corresponding variations in self-expression values, which necessarily results in a small individual level correlation within nations. But across nations, most individuals’ resources deviate so largely from the overall mean that they exceed the range beyond which corresponding deviations in self-expression values occur. In this case, the individual level correlation is considerably stronger across than within nations. Therefore, it is important to take cross-national variation into account: this makes individual level relations visible that are otherwise hidden by the nations’ mass tendencies.

The nations’ mass tendencies are reproduced through social processes that affect national populations uniformly but to degrees that vary largely between them. The growth of individual resources is a typical process of this kind. Germany is one among many examples where most people’s financial income is close to the average national income. This has been so 40 years ago and it is still so today. However, during these 40 years the average individual income has quadrupled, with little effect on the distribution of incomes (Zapf and Habich 1999). Hence, income growth is a process that affects national populations rather uniformly, although this process varies enormously between nations. As noted by Landes (1998:xx), 200 years ago the

---

<sup>3</sup> Income and education are measured as an interaction term between individuals’ years of schooling and their financial income, measured in deciles of national currencies. The correlation between this interaction term and individuals’ emphasis on self-expression (see section below for measurement of this variable) is significantly positive in 112 of a total of 120 surveys (94%) where these variables could be created. Using years of schooling and financial income as sole correlates, the same applies 95% and 94% of the surveys, respectively.

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 today. Thus, economic development moves through nations in a way that reproduces their central tendencies to a considerable degree, while it creates much greater disparity between them. As a consequence, any effect connected to growing individual resources, such as rising self-expression values, must be more pronounced between than within nations.

If the distributions of two related variables are both shaped by mass tendencies that are relatively focused within nations but very divergent between them, then the individual level correlation must be relatively weak within and rather strong across nations. The cross-national correlation is usually even stronger when these variables are aggregated to the nation level, since aggregation reduces the measurement error at the individual level. Survey data in particular contain a large component of measurement error at the individual level: many respondents give erratic answers that reflect “non-attitudes,” producing a good deal of random noise in survey data (Converse 1970). As Yule and Kendall (1950) and Blalock (1961) have pointed out, the variation of a variable consists of a systematic and a random element. So the correlation between two variables  $x$  and  $y$  also consists of a systematic term and a random term which diminishes the systematic correlation (“attenuation effect”). But when  $x$  and  $y$  are averaged across nations, the random elements counterweigh each other: negative and positive deviations from the mean, which are random, cancel each other 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.

Furthermore, aggregation captures genuine community characteristics. This is also true for a national community’s average emphasis on self-expression. Of course, this average is calculated from each individual’s responses, but nonetheless the average is for each individual composed to practically 100 per cent of all *other* individuals’ responses. Thus, aggregated mass characteristics illuminate aspects of the societal context which are exogenous to individuals. It is therefore not mistaken to operate with nationally aggregated self-expression values. The nation-level is the level where these values get linked with democracy.

The linkage between mass emphasis on self-expression and effective democracy reflects a relation between two different sorts of community characteristics. Self-expression values represent an *aggregated mass characteristic* that accumulates from the individual level. By contrast, effective democracy is a *genuine system characteristic* that cannot be disaggregated to the individual level. But the difference between mass and system characteristics does not invalidate the question of their relationship. On the contrary, such a *mass-system linkage* illuminates the relationship between the citizens and their regime—quite a relevant relation from the perspective of democratic theory. If a mass-system linkage should exist, it must be reflected in the relation between a mass variable, such as aggregate self-expression values, and a system variable, such as effective democracy. Human Development theory focuses on precisely this linkage.

## Analyses

### Data Sources and Measurement

In order to measure self-expression values we use the largest available database, the European/World Values Surveys (EVS/WVS), which cover 73 countries representing 80 per cent

of the world's population.<sup>4</sup> We measure self-expression values using a scale of factor scores summarizing several attitudes that Inglehart and Baker (2000) have proposed as indicators of self-expression values. We replicate their analyses using for the first time all four waves of the EVS/WVS conducted between 1981 and 2001. The results are reported in Table 2.

The emancipatory logic of self-expression values points to what Rawls (1993) calls a "rational sense of reciprocity:" people who put emphasis on self-expression want this to be respected by others, but others will not respect one's self-expression if one does not respect theirs'. Hence, it is rational when people who put emphasis on their own self-expression do respect the others' self-expression as well. Thus, self-expression values include an "ego-emphasizing" attitude, reflected in liberty aspirations<sup>5</sup> and an inclination to civic protest (such as signing petitions),<sup>6</sup> as well as an attitude of acceptance towards "alter-ego," as reflected in tolerance of human diversity and interpersonal trust (see the footnotes in Table 2 for the operationalization of these variables). Moreover, self-expression values are linked with greater life satisfaction, implying that the striving for self-expression is embedded in human motivation in that it creates greater satisfaction. Finally, as a typical survival value, strong religiousness is negatively linked with the dimension of self-expression values.

**Table 2. The Dimension of Self-Expression Values**

Variables:	Levels of Analysis:		
	Individual level within nations (mean loadings)	Individual level across nations (pooled loadings)	Aggregate cross-national level (pooled loadings)
Strong self-expression values imply:			
- Tolerance of human diversity <sup>1</sup>	.47	.68	.82
- Inclination to civic protest <sup>2</sup>	.45	.65	.87
- Liberty aspirations <sup>3</sup>	.54	.59	.82
- Trust in people <sup>4</sup>	.34	.47	.64
- High life satisfaction <sup>5</sup>	.13	.44	.76
- Weak religiousness <sup>6</sup>	-.29	-.37	-.41
Weak self-expression values			

<sup>4</sup> Data from the first to the third wave of the World Values Surveys can be obtained from the International Consortium for Political Research (ICPSR) under the study-number 6160. Data from the fourth wave are not yet public domain. More detailed information on questionnaire, methods and field work can be obtained from the World Values Study Group's homepage: <http://wvs.isr.umich.edu>. For the data provided by the European Values Study Group see <http://evs.kub.nl> and Halman (2001).

<sup>5</sup> Although these items are taken from the postmaterialism-scale (see fn. 3 in Table 2), we have reason to distinguish them as "liberty aspirations" from other components of postmaterialism, namely preferences for a "less impersonal society," "beautiful cities," and "a society in which ideas count more than money." This is argued in more detail by Welzel and Inglehart (2001).

<sup>6</sup> As noted by Barnes and Kaase et al. (1979), signing petitions is a low cost form of civic protest. Hence, a society with many people who sign petitions has a rich opportunity structure for low cost protest. This in turn implies that there must be many people who invest the higher costs which are necessary to create low cost opportunities for all.

imply the opposite.			
Explained variance	23%	29%	54%
Number of cases	137 national surveys	158,803 individuals	137 national surveys
<p><i>Notes:</i> Entries are factor loadings. Explorative principal components analysis (extraction of factors with Eigenvalues above 1 selected), no rotation. <i>Source:</i> World Values Surveys I-IV.</p> <p><sup>1</sup> “Not mentioned” for “disliked neighbors” coded “1” and dichotomized against 0; scores added for neighbors with AIDS (V58) and homosexual neighbors (V60). Aggregate data are national averages on this 0-2 scale.</p> <p><sup>2</sup> “Already done” for “signing petitions (V118) coded “1” and dichotomized against “0.” Aggregate data are national percentages already done.</p> <p><sup>3</sup> Respondents’ first and second priorities for “giving people more say in important government decisions” and “protecting freedom of speech” (V106-107) added to a four-point index, assigning 3 points for both items on first and second rank, 2 points for one of these items on first rank, 1 point for one of these items on second rank and 0 for none of these items on first or second rank. Aggregate data are national averages on this 0-3 scale.</p> <p><sup>4</sup> Respondents believing “most people can be trusted” (V27) dichotomized as “1” against “0.” Aggregate data are national percentages of people trusting.</p> <p><sup>5</sup> 10-point rating scale for life satisfaction from WVS (V65). Aggregate data are national averages on this 1-10 scale.</p> <p><sup>6</sup> “How important is God in your life?” (V190). 10-point scale (1: not at all, 10: very important). Aggregate data are national averages on this 1-10 scale.</p>			

As expected, factor loadings increase systematically from the individual level within nations to the pooled individual level to the aggregate level across nations. The reasons were explicated in the previous section: (1) there are pronounced mass tendencies within nations which bound individuals’ value orientations into such a small range that the linkage between these orientations does not become fully visible, while, once we have taken cross-national variation into account, the syndrome becomes more clearly shaped; (2) there are measurement errors at the individual level which are eliminated through aggregation, so the syndrome is most clearly shaped at the aggregate level. This is particularly true for life satisfaction. Life satisfaction is only weakly linked with the dimension of self-expression values, if one ignores individual level variation across nations. But among individuals from different nations, and even more at the aggregate level of whole nations, life satisfaction is clearly linked with the dimension of self-expression values: citizens of nations where human tolerance, civic engagement, liberty aspirations, and inter-personal trust are more pronounced and where religiousness is less pronounced, tend to be more satisfied with their life. Satisfaction, in short, flourishes in societies with greater emphasis on self-expression.

In subsequent analyses, we examine the citizens’ emphasis on self-expression, measured in about 1990, as an *independent* variable to explain effective democracy in 1999-2000; and we use the citizens’ emphasis on self-expression, measured in about 1995, as a *dependent* variable to be explained by prior mass levels of individual resources in 1990. This temporal ordering should make sure that independent variables are measured prior to their presumed effects. However, not all of the 73 nations for which at least one measure of self-expression values is available, participated in each wave of the European/World Values Surveys. Thus, we had to choose between analyzing different subsets of countries with considerable amounts of missing data in

each, or to estimate missing data in one survey from existing data in another survey. The latter alternative has the advantage of analyzing the total set of countries covered by the World Values Surveys. The disadvantage of partly operating with estimated data is not really severe, for one obvious reason: value change proceeds rather slowly. As a consequence, cross-national differences in self-expression values at one point in time are highly indicative for differences at a slightly earlier or later point in time. Indeed, the prediction error in regressing self-expression values in 1995 on self-expression values 1990 (or vice versa) is less than 10 per cent.

The means-component of Human Development, individual resources, is measured using Vanhanen's (1997) "index of power resources." This index combines measures of the nations' physical and intellectual resources, and a measure of social complexity. We use Vanhanen's most recent version of this index which captures the early 1990s.<sup>7</sup> This measure is preferable to single indicators such as per capita GDP. The use of GDP has been criticized for quite understandable reasons. Anand and Sen (1998) have argued that per capita GDP is an incomplete measure of a society's human resources. It only captures financial income, excluding other important resources, such as education. Some of the OPEC countries reach outstanding levels in per capita GDP, but in terms of education these societies are far less advanced. Using a combined measure of individual resources, these countries show a mediocre performance at best. Moreover, GDP does not include the distribution of resources, although from the viewpoint of democratic theory (Dahl 1973: ch. 4; Muller 1997), a relatively equal distribution of resources is a crucial precondition for the functioning of democracy. Finally, social complexity, which is important for the individualization of resources, is also not tapped by GDP.

For these reasons, the Human Development Index has been constructed to provide a more complete measure of individual resources (Human Development Report 2000). But this index has its own limitations. One of its three components, life expectancy, does not measure individual resources at all. By contrast, the Vanhanen-index captures all aspects of individual resources that are relevant from our theory of Human Development. It measures both physical and intellectual resources. It measures not only levels but also the distribution of these resources. Finally, it includes a measure of social complexity. So this is the most comprehensive measure of individual resources known to us.

The rules-component of Human Development, effective democracy, is measured by the combined Freedom House scores for civil and political rights and estimates from Transparency International on elite corruption.<sup>8</sup> The scores from Freedom House range from 1 to 7 on each of

---

<sup>7</sup> Vanhanen creates three subindices. The subindex of "physical resources" is generated from the 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). The subindex of "intellectual resources" is measured by the number of students per 100,000 inhabitants and the literacy rate. The subindex of "occupational diversification" ("social complexity" in our terminology) is produced from the proportion of the urban population and the percentage of the non-agricultural work force. All component variables are standardized before they are combined to the subindices. The three subindices are each combined additively from their component variables, assuming that each subindex represents an own dimension. The same assumption then leads to a multiplicative combination of the three subindices to create the overall index of individual resources. This index is standardized to 100 as the maximum. For a detailed description of scale construction see Vanhanen (1997:42-63) and the appendices of his book for extensive documentation of data sources.

<sup>8</sup> See Elkins (2000) who provides convincing theoretical reasons, plus empirical evidence, that Przeworski and Limongi's (1997) pleading for a dichotomous classification of democracies vs. non-democracies is flawed and that continuous measures of democracy are preferable.

the two scales, with 1 indicating the highest and 7 the lowest level of freedom.<sup>9</sup> We reversed this scale so that higher figures indicate a broader scope of freedom rights. The scores from Freedom House are expert judgements that estimate the scope of given rights in a society. We interpret these estimates as a measure of formal democracy, which is a necessary but insufficient element of effective democracy. We use the most recent scores from 1999-2000 in order to make sure that our measure of formal democracy is temporally subsequent to self-expression values as its predictor.

The Freedom House scores are imperfect measures of citizen rights. They neglect the extent to which given rights are respected by actual elite behavior. This problem can be solved using the corruption perception indices from Transparency International (see Rose 2001 for a similar argument).<sup>10</sup> These scores are also given by experts. They judge the corruption of political, bureaucratic and economic elites of a country. One indication of the validity of these estimates is that they strongly correlate with the citizens' perception of elite corruption in representative surveys (Rose 2001). The Transparency scores range from 1 to 100, with 100 indicating the greatest amount of corruption. Reversing these scores, one obtains a measure of "elite integrity." As argued in the previous section, we operationalize effective democracy as the interaction between formal democracy and elite integrity. In this conception elite integrity is the weighting factor that makes formal rights effective. Since elite integrity is a weighting factor and not a compensating factor, we calculate the product of the reversed and combined Freedom House scores (standardized to 10 as the maximum) and elite integrity (also standardized to 10). This produces an index of effective democracy from 0 to 100 per cent. Since we use the most recent Transparency scores from 1999, we obtain a measure of effective democracy in 1999-2000. As can be shown by a two-dimensional plot (not documented here), this measure is much more restrictive in assigning a high level of democracy than are the combined scores from Freedom House alone (i.e., our measure of formal democracy).

In summary, we have measures for a society's individual resources, self-expression values and effective democracy. These measures refer to different points in time and are obtained from completely different sources. Given that these measures are imperfect and may have considerable measurement error, any systematic relationship between them points all the more to the conclusion that they capture some robust aspect of reality.

### **Operationalizing Cultural Zones**

In order to test the general applicability of Human Development theory, one question must be answered: "Are the two linkages of Human Development universal in their presence across cultural zones?" Would the linkages of Human Development only apply to *specific* cultural zones, Human Development could not be considered as a general theory. It would be a culture-specific theory at best.

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 the same cultural zone tend to share similar worldviews, institutional traditions and patterns of economic subsistence. Thus, cultural zones can be considered as "supra-national units of diffusion" which let nations follow similar patterns of societal development.

---

<sup>9</sup> The Freedom House scores can be obtained from the homepage of Freedom House: <http://www.freedomhouse.org>. For a description of the estimation process and scale construction, see Freedom in the World (1996:530-535). On the validity of these indices compared to other democracy scales see Bollen and Paxton (2000).

<sup>10</sup> Data and methodological report can be obtained from Transparency International's homepage: <http://www.transparency.org>.



Three variables have been considered as determinants of cultural zones: historical traditions, reflected in common religious roots (1) and imperial legacies (2); and region or vicinity (3), a factor that facilitates diffusion between nations (Kopstein and Reilly 2000).

Each of the gray shadowed areas in Table 3 summarizes a group of nations into a distinguished cultural zone. The first criterion of this classification is religious tradition, which produces 18 countries with a historically Protestant tradition or with Protestants as the largest religious group; 27 Catholic countries; 10 Christian Orthodox countries; 10 Islamic countries; and a residual category of 5 countries in the tradition of an “Asian” religion, such as Buddhism, Hinduism or Confucianism (a quasi-religion).

These five religious groups were subdivided for region or imperial legacy, if there were enough cases to allow for such a division. Thus, the Catholic countries were divided into the zones of “Catholic Western Europe,” “Catholic Eastern Europe” and “Latin America.” The division between Western and Eastern Europe reflects whether a country belonged to the Soviet communist empire or not. Latin America as well does not only represent its own region but is distinguished by its Iberian imperial legacy.

For some countries, specific decisions had to be made. Among the Asian countries, we saw no criterion to group China and India together with other nations. According to Huntington (1996), both of these countries, each with a population of more than one billion, represents a “civilization” of its own. On the other hand, Japan, South Korea and Taiwan share a Confucian tradition and have in common that they are economically far advanced. So we summarized them as “Developed Far East.” Moreover, Estonia and Latvia, though having a Protestant tradition, were grouped with the Catholic Eastern European countries, with which they share the legacy of Soviet controlled communism and 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. Although there are Christian and Islamic influences in Sub-Saharan Africa, there remain specific Black African imprints, based on this region’s animist religious roots and its distinctive ethnic make-up. This justifies classifying the Sub-Saharan countries as a specific cultural zone (Huntington 1996).

Our classification is crude. Yet, it captures respectively 85%, 84% and 83% of the variance in individual resources, self-expression values and effective democracy across 73 nations. Even this crude classification designates relatively homogeneous zones.

In addition to this differentiation of “cultural zones,” we use a more fine-tuned classification based on 24 smaller “regions,” such as Scandinavia, the Baltics, Transcaucasia, Mediterranean Europe, Central America and so forth. The smaller boxes in Table 3 indicate these regions. The regional classification captures 93%, 92%, and 91% of the cross-national variance in individual resources, self-expression values and effective democracy. Though the classification into regions entails more than twice as much categories than the classification into cultural zones, it explains only 8 per cent more of the cross-national variance, confirming the adequacy of the cultural zones in Table 3.

**Table 3. The Location of the WVS-Nations within Cultural Zones and Regions**

		RELIGION:				
		Western Christian		Orthodox	'Oriental'	
REGION:	Protestant	Catholic			Islamic	'Asian'
<b>Western Europe</b>		Germany	Austria			
			Switzerland			
	Scandinavia	Denmark	France	Greece		
	Mediterranean	Finland	Italy			
		Iceland	Malta			
	Benelux	Norway	Portugal			
		Sweden	Spain			
		Netherlands	Belgium			
			Luxemburg			
		Great Britain	Ireland			
<b>Ex-British Overseas</b>		Australia				
		New Zealand				
		Canada				
		U.S.A.				
<b>Eastern Europe</b>		Estonia	Lithuania	Armenia	Azerbaijan	
		Latvia		Georgia		
	Baltics		Czech Republic	Belarus		
			Hungary	Moldova		
	Catholic Central Europe		Poland	Russia		
			Slovakia	Ukraine		
	Catholic Ex-Yugoslavia		Croatia	Macedonia	Bosnia-Herzegovina	
			Slovenia	Yugoslavia		
			Bulgaria		Albania	
			Romania			
<b>Middle East</b>						
<b>South Asia</b>						
<b>Far East</b>						
<b>Sub-Saharan</b>		Ghana			Nigeria	
		South Africa				
		Uganda				
		Zimbabwe				
<b>Latin America</b>			Argentina			
	South America		Brazil			
			Chile			
			Peru			
			Uruguay			
			Venezuela			
	Dominican Republic					
		El Salvador				
		Mexico				

**CATHOLIC WESTERN EUROPE**

**PROTESTANT WESTERN ZONE**

**ORTHODOX EASTERN EUROPE**

**ISLAMIC ZONE**

**CATHOLIC EASTERN EUROPE**

Middle East

Arab countries

South Asian Islam

**DEVELOPED FAR EAST**

**INDIA**

**CHINA**

**SUB-SAHARAN AFRICA**

**LATIN AMERICA**

Central America/Caribbean

### The Human Development Linkages in Cross-Cultural Perspective

Nations, regions and cultural zones are part of a three-level hierarchy, with nations nested inside regions and regions inside cultural zones. From this perspective the question is whether there are “frictions” in the cross-level translation of the two linkages of Human Development: “Do these linkages translate from the national to the regional to the cultural zone level with or without frictions?” If there are frictions, Human Development could not be considered as a general theory because its linkages would vary, depending on the level at which they are observed. Using regression models, such frictions become evident to the extent that the intercepts and slopes of the two Human Development linkages vary at different levels of aggregation.

As Table 4 demonstrates, the Human Development linkages do not substantially vary in either their intercepts or slopes at different levels of aggregation. Whether at the national, regional or cultural zone level, intercepts and slopes remain virtually constant. The correlations, by contrast, increase systematically with higher levels of aggregation, indicating that random variation among nations (that may reflect measurement error) is averaged out through aggregation at supra-national levels. Apart from the correlations, however, neither intercepts nor slopes vary for different levels of aggregation, showing that Human Development translates without frictions from lower to higher levels of aggregation.

Another way to express this finding is to specify an integrated two-level model in which we estimate an overall intercept and slope which are constant across cultural zones, together with the intercept- and slope-variances for cultural zones (Goldstein et al. 1995). In this way we formulate the relation between individual resources and self-expression values and that between self-expression values and effective democracy. The levels of variation are indicated with suffix “j” for the national level and suffix “k” for the cultural zone level. The “random slopes and intercepts model” is written as follows:

$$\begin{aligned} \text{SELFEXVALS1995}_{jk} &= \beta_{0k} + \beta_{1k} * \text{INDIVRESOUR1990}_{jk} + e_{jk} \\ \text{EFFECDEMOC99-00}_{jk} &= \beta_{0k} + \beta_{1k} * \text{SELFEXVALS1990}_{jk} + e_{jk} \end{aligned}$$

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

$$\begin{aligned} \text{Intercept: } \beta_{0k} &= \beta_0 + u_{0k} \\ \text{Slope: } \beta_{1k} &= \beta_1 + u_{1k} \end{aligned}$$

Intercept and slope are each composed of a fixed part that is constant across cultural zones ( $\beta_0$ ,  $\beta_1$ ) and a variable part that differs for cultural zones ( $u_{0k}$ ,  $u_{1k}$ ). In addition, there is an error term for nations’ remaining variation ( $e_{jk}$ ). This random variation can neither be attributed to the overall effects nor to their variation for cultural zones.

**Table 4. The Linkages of Human Development at Different Levels of Aggregation (Regression Analyses)**

Levels:	Means-Motives Linkage:					Motives-Rules Linkage:			
	$SELFEXVALS1995 = \beta_0 + \beta_1 * INDIVRESOUR1990 + e$					$EFFECDEMOC1999-00 = \beta_0 + \beta_1 * SELFEXVALS1990 + e$			
	Intercept $\beta_0$ (Standard Error)	Slope $\beta_1$ (Standard Error)	Pearson's R	N		Intercept $\beta_0$ (Standard Error)	Slope $\beta_1$ (Standard Error)	Pearson's R	N
Nations	-1.493*** (.090)	.060*** (.003)	.90	73		38.941*** (1.912)	29.397*** (2.066)	.87	68
Regions	-1.103*** (.111)	.050*** (.004)	.93	24		43.069*** (2.146)	27.800*** (2.035)	.95	24
Cultural Zones	-1.517** (.154)	.058** (.006)	.97	8		37.873*** (2.521)	33.970** (3.194)	.97	8

*Significance-Levels:* \* p<.100 \*\* p<.010 \*\*\* p<.001. Using the DFFITS-statistic, no unusual cases have been identified.

*Meaning of abbreviations:* SELFEXVALS1995: Self-Expression Values 1995  
INDIVRESOUR1990: Individual Resources 1990  
EFFECDEMOC1999-00: Effective Democracy 1999-00  
SELFEXVALS1990: Self-Expression Values 1990

**Table 5. The Linkages of Human Development in Integrated Multi-Level Models**  
(Standard Errors in Parentheses)

<b>Components:</b>	<b>Means-Motives Linkage:</b>		<b>Motives-Rules Linkage:</b>		
	$\text{SELFEXVALS1995}_{jk}$ $= \beta_{0k} + \beta_{1k} * \text{INDIVRESOUR1990}_{jk} + e_{jk}$		$\text{EFFECDEMOC1999-00}_{jk}$ $= \beta_{0k} + \beta_{1k} * \text{SELFEXVALS1990}_{jk} + e_{jk}$		
<b>Intercept, fixed component</b>	$\beta_0$	<b>-1.539***</b>	<b>(.091)</b>	<b>39.416***</b>	<b>(1.908)</b>
Intercept-variance for Cultural Zones	$\nu_{0k}$	2.198	(1.483)	343.481***	(18.533)
<b>Slope, fixed component</b>	$\beta_1$	<b>.060***</b>	<b>(.003)</b>	<b>29.279***</b>	<b>(2.044)</b>
Slope-variance for Cultural Zones	$\nu_{1k}$	.001	(.034)	67.233***	(8.199)
Random Variance	$e_{jk}$	14.168	(.205)	15382.658	(240.354)
Variance explained by fixed effects		67.319		49325.885	
Number of cases		71 nations in 8 cultural zones		66 nations in 8 cultural zones	
<i>Meaning of suffixes:</i>	0 Intercept	SELFEXVALS1995:		Self-Expression Values 1995	
	1 Slope	INDIVRESOUR1990:		Individual Resources 1990	
	<i>j</i> Nation-Level	EFFECDEMOC1999-00:		Effective Democracy 1999-00	
	<i>k</i> Cultural Zone Level	SELFEXVALS1990:		Self-Expression Values 1990	

As Table 5 shows, the overall effects of both linkages are highly significant, greatly exceeding their standard errors. Hence, there actually are overall effects of individual resources on self-expression values, and of self-expression values on effective democracy, which are independent of cultural zones. Compared to these overall effects, the cultural zone variances of intercepts and slopes are negligible. They do not capture significant proportions of the variance that remains unexplained by the overall effects. This can be seen calculating the share which the intercept and slope variances have in the unexplained variance: only the intercept variance in the model explaining self-expression values captures more than 2 per cent of the random variance, but measured against its standard error, this variance is insignificant.

Still another way to model these findings, is to control the effect of individual resources on self-expression values for the cultural zone level of self-expression values. In other words, we assign to each nation its cultural zone average in self-expression values and introduce this variable

as an additional predictor. So we test the extent to which a nation's own emphasis on self-expression is a function of the average emphasis found in its cultural zone, modeling each nation's emphasis on self-expression as a function of diffusion within cultural zones. In order to avoid a tautological measure of cultural zone diffusion, we assign each nation the mean cultural zone level calculated by *excluding* a given nation's own value. Hence, we specify for each nation an *exogenous* cultural zone effect, which is crucial for the concept of diffusion. Similarly, we estimate the effect of self-expression values on effective democracy controlling for the cultural zone level of effective democracy.

**Table 6. The Linkages of Human Development Controlled for Diffusion within Cultural Zones**

Predictors:	Dependent Variable: Self-Expression Values 1995			Dependent Variable: Effective Democracy 1999-2000		
	Model 1.1	Model 1.2	Model 1.3	Model 2.1	Model 2.2	Model 2.3
Individual Resources 1990	.056*** (.003)		.036*** (.007)	—————	—————	—————
Self-Expression Values 1990	—————	—————	—————	29.397*** (2.066)		12.768** (3.933)
Cultural Zone Level of Dependent Variable		.970*** (.060)	.401** (.120)		.969*** (.061)	.593*** (.126)
Constant	-1.493*** (.090)	-.006 (.060)	-.969*** (.190)	38.941*** (1.912)	1.159 (2.876)	16.470** (5.152)
Adjusted R <sup>2</sup>	.81	.78	.85	.75	.77	.82
N	73	71	71	68	72	66

Entries are unstandardized regression coefficients (standard errors in parentheses).  
Significance Levels: \*\*\* p<.001 \*\* p<.010 \* p<.100

The results of these regressions are shown in Table 6. As is evident, the effect of individual resources on self-expression values and that of self-expression values on effective democracy remain highly significant across nations, even controlling for diffusion within cultural zones. This confirms our previous finding: the two linkages of Human Development are independent of cultural zones to a considerable degree. On the other hand, cultural zones, too, show a significant impact, accounting for a remarkable proportion of both linkages of Human Development. In fact, diffusion within cultural zones captures 30 per cent of the sole effect of individual resources on self-expression values, and 40 per cent of the effect of self-expression values on effective democracy. Why this is so, is demonstrated in Figures 1 and 2. These figures show that cultural zones and Human Development are not *competing* factors in a true sense. Instead, they represent *interplaying* factors which function complementary.

Figures 1A and 2A show the linkages of Human Development across nations, Figures 1B and 2B across regions and cultural zones. We can see that both linkages are clearly shaped across

nations, although the confidence interval within which these linkages appear is relatively broad. This points to relatively large “ranges of tolerance” within which the linkages are invisible. “Ranges of tolerance” can be examined in the vertical dimension ( $y$ ) or in the horizontal dimension ( $x$ ). The range of tolerance in  $x$ , for instance, is the horizontal distance between the left and the right boundary of the confidence interval. This distance is constant for any value of  $y$ , since the confidence interval has parallel boundaries. What does this range of tolerance imply?

Consider Figure 2A and assume you begin traveling from weaker to stronger self-expression values (i.e., from the left to the right), starting at the left boundary of the confidence interval: as long as you travel a horizontal distance that is shorter than the “range of tolerance,” it is not for sure that the next society you meet is farther advanced in effective democracy than the previous one. Within this range, there is much random variation in effective democracy. But once your travel from weaker to stronger self-expression values exceeds the range of tolerance, there is a more than 95 per cent probability that the next society you meet actually is farther advanced in effective democracy. The same logic applies to the relation between individual resources and self-expression values (see Figure 1A). You must exceed a certain distance in the growth of individual resources in order to gain certainty that the next society you meet shows stronger emphasis on self-expression.

Now consider Figures 1B and 2B. It is evident that the horizontal distances covered by cultural zones are so small that they hardly exceed the range of tolerance beyond which the two linkages of Human Development become manifest. It is obvious that there is diffusion creating cultural zones that cluster regions and nations into relatively homogenous units, making the question of whether the linkages of Human Development appear *within* cultural zones almost irrelevant. Since there is much more variance between than within cultural zones, the decisive question is whether the linkages of Human Development operate across precisely these cultural zones.

Figures 1B and 2B leave little doubt that this is actually the case. The means-motives linkage and the motives-rules linkage do work across regions and cultural zones. In other words, these linkages are so pronounced across nations because they operate across the supra-national units that integrate nations into homogenous zones of diffusion.

The Human Development syndrome is strikingly evident at the cross-cultural level. It is present there to an even higher degree than cultural zones equalize nations: cultural zones capture about 85 per cent of the cross-national variance in each of the three components of Human Development, but the linkages between these components explain more than 90 per cent of the cross-cultural variation. In conclusion, the linkages of Human Development are not culture-specific but universal.

Figure 1A. The Means-Motives Linkage across Nations

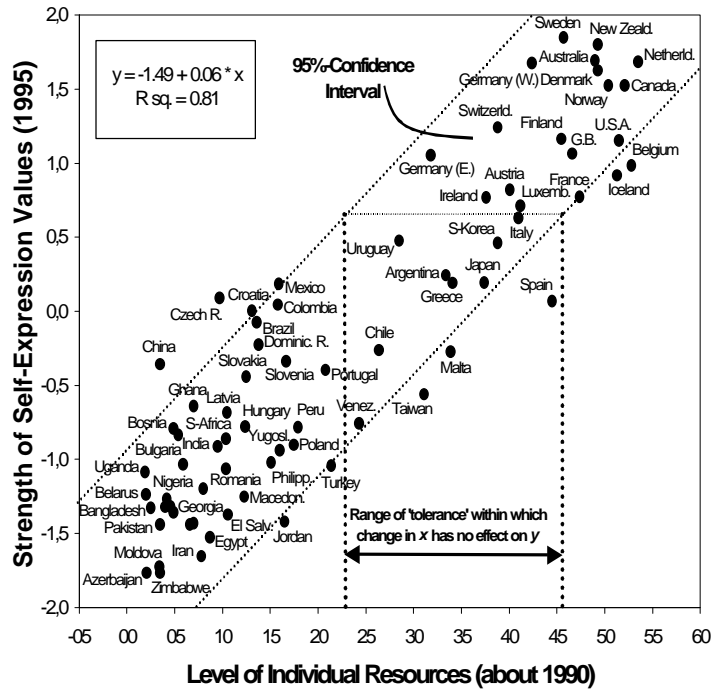


Figure 1B. The Means-Motive Linkage Across Regions and Cultural Zones

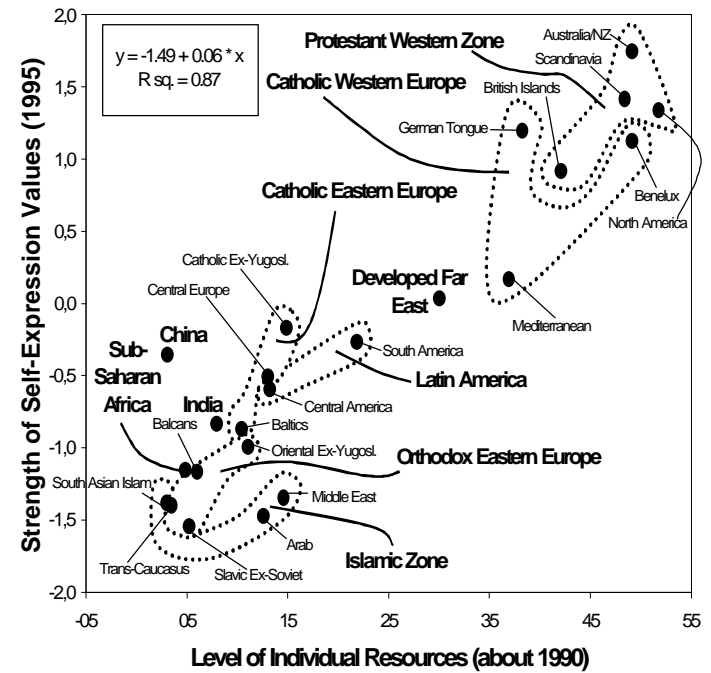
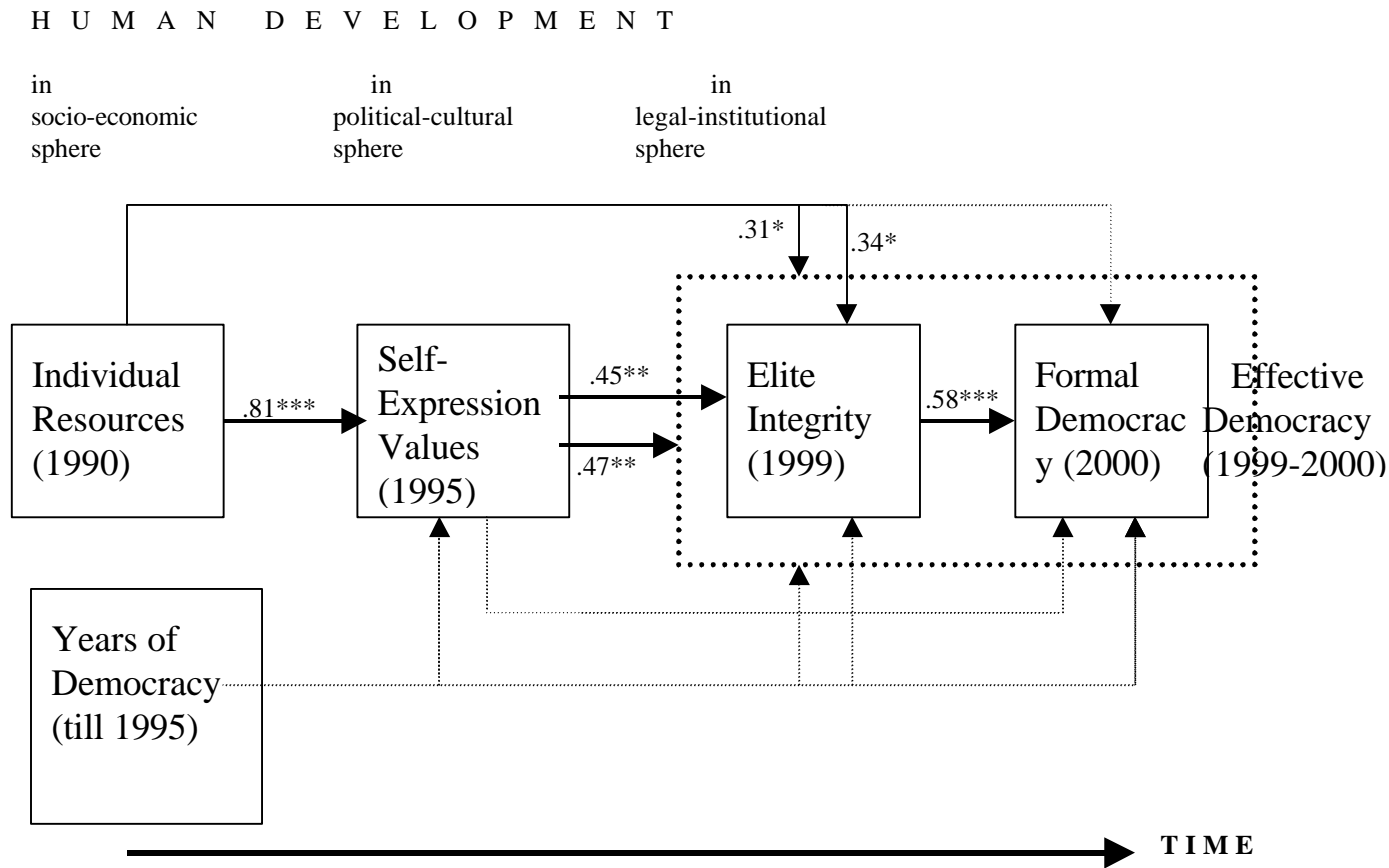






Figure 3. Democracy as a Component of Human Development



*Remarks:* Coefficients are standardized path coefficients. Bold arrows indicate strongest effect on respective dependent variable. Interrupted arrows show insignificant effects. There is no overall fit for this fully identified model. Dropping the effects of 'Years of Democracy', the Adjusted Goodness of Fit Index points to .88, showing that democratic tradition is negligible. Number of cases: N=68.

## The Genesis of Human Development

According to our theoretical argument, growing individual resources on a mass level tend to shift a society's values toward greater emphasis on self-expression. Growing mass emphasis on self-expression then fuels popular pressure in direction to effective democracy. The most debatable assumption in this argument concerns the causal relation between mass values and democracy. A number of writers have claimed that the causal relation between political culture and political institutions operates into the opposite direction: only democratic institutions can produce a pro-democratic culture (Rustow 1970; Muller and Seligson 1994; Miller and Jackman 1998).

If this is correct, mass emphasis on self-expression should be rather the consequence of a nation's *preceding* democratic tradition than the cause of its *subsequent* democratic performance. This assumption and our own one, which maintains the contrary, can be tested with our data. For this purpose, we specified a cross-national path model which starts from individual resources 1990 and democratic traditions up to 1995,<sup>11</sup> continues with self-expression values as of 1995 and ends up with effective democracy 1999-00. If the Human Development model holds, self-expression values should have a stronger effect on subsequent democracy than prior democratic traditions have on self-expression values. If the opposite assumption is correct, the contrary should hold true.

The path model in Figure 3 clearly supports the Human Development model. While democratic traditions have *no* effect on self-expression values when controlled for individual resources, self-expression values *do* have a significant impact on subsequent degrees of effective democracy. This effect holds up controlling for individual resources and democratic traditions, with the latter showing no significant effect on subsequent democracy. Hence, in explaining effective democracy, the linkages of Human Development seem to be more important than democratic traditions, implying that growing individual resources give rise to mass emphasis on self-expression, which in turn tends to promote effective democracy—even if there is a weak democratic legacy from the past.

Our path model gives further insight on how the impact of self-expression values on effective democracy works. To figure this mechanism out, we decomposed effective democracy into its components, elite integrity and formal democracy. Controlling for all other effects in the model, elite integrity proves to be the only factor with a significant impact on formal democracy.

This reflects that elites are the prime force in shaping constitutional democracy. Indeed, the scope of civil and political rights is determined by what the elites write into the constitutions— a basic premise of the elite approach (O'Donnell and Schmitter 1986; Higley and Gunther 1992; Casper and Taylor

---

<sup>11</sup> The variable “democratic tradition” measures the number of years which a country has spent under a democratic constitution. These years haven been counted from the beginning of a nation's independence (or from 1850 onward in case of countries that haven been independent before 1850) till 1995. Countries that emerged from the dissolution of the Soviet Union and Yugoslavia have been dealt like their former mother country as long as they belonged to it. A year has been counted as one under democratic constitution, if a country obtained at least +7 points on the “Autocracy-Democracy” index from Jagers and Gurr (1995). This index is based on an analysis of constitutions considering of how many restrictions there are for executive power and of how effective the influence of the electorate is in constituting government. Gurr and Jagers classify countries as “coherent democracies,” if they reach +7 or more points on their -10 to +10 index. Data and methodological description can be obtained from the homepage of the “Polity 98” project: <http://www.bsos.umd.edu/cidcm/polity>. We used these data here because they reach farther back in time than the scores from Freedom House and are therefore more adequate to measure democratic tradition in its length.

1998). On another point, however, adherents of this approach seem to be wrong. Obviously, elite behavior is not such an independent factor, as they assume. Quite the contrary, mass emphasis on self-expression has a sound effect on elite integrity. In other words, the impact of mass culture on effective democracy operates primarily through its impact on elite behavior. Mass emphasis on self-expression tends to produce “elites of integrity” who extend or sustain constitutional democracy.

There is little reason to assume a reverse causation behind the relationship between self-expression values and elite integrity. Elites may have leverage to influence public attitudes in more specific issues. But such deeply rooted values, like emphasis on human self-expression, can not be simply created by elite campaigns. Elites can appeal to such values but not create them. And even if they could, what interest should elites have in breeding a public that is highly critical to their behavior-- which the public definitely is in case of strong self-expression values. From a rational choice perspective, elites have no reason to avoid maximizing their incomes by corruption, unless there are severe restrictions on such behavior. Mass emphasis on self-expression constitutes certainly one of the strongest of these restrictions. It either translates into powerful public pressure against corruption-seeking elites, or it creates elites whose own beliefs reflect mass values in a way that violating citizen rights is largely excluded from rational calculation. Specifying legal sanctions against such violations is by far not enough to avoid them, if there is strong elite consensus in holding these sanctions ineffective. In conclusion, we maintain that the most plausible reading of the evidence is that mass emphasis on self-expression increases elite integrity rather than the reverse.

## **Conclusion**

Socioeconomic development, changing values, and democratization constitute a coherent syndrome of social progress. Modernization theorists did not reflect the syndrome-phenomenon itself and thus failed to integrate its components into a coherent theory. The concept of Human Development, as introduced by Anand and Sen, has the potential of an integrating theory, but this has not been fully exploited: so far the concept did neither include mass values nor elite integrity. Thus, we described Human Development as an integrated syndrome, arguing that the underlying theme of its three components is human choice: socioeconomic development widens human choice by enlarging people's individual resources; cultural change releases mass emphasis on self-expression which leads people to seek for human choice; and institutional change towards effective democracy extends human choice by granting legal rights and producing integer elites who keep these rights working.

Inglehart and Baker proposed a revised theory of modernization, showing that cultural zones have a significant additional impact on the effect which growing individual resources have on self-expression values. We go one step further here in that we add effective democracy as a third component to individual resources and self-expression values, arguing that these three components converge in a more comprehensive syndrome of Human Development. Furthermore, we have argued that the role of cultural zones is not one that competes with the process of Human Development. Instead there is a complementary interplay between the forces of Human Development and cultural zones such that the diffusion effects of cultural zones make Human Development more visible at the cross-cultural level: Human Development is evident across nations because it operates across the cultural zones which integrate these nations into homogenous units of diffusion.

The empirical evidence indicates that the syndrome of Human Development is shaped by a causal priority of individual resources and self-expression values over effective democracy. Democracy is effective only to the degree that it finds support by a mass culture that emphasizes human self-expression. Such an emancipatory culture needs a socioeconomic basis that reduces restrictions on

human autonomy. Effective democracy is much more an evolutionary phenomenon than something that can be simply created through intelligent constitutional engineering. The emergence of effective democracy is deeply embedded in changes at the mass side of societies. It is also closely linked to these changes by the emancipatory logic of Human Development. Indeed, effective democracy is an inherent element of Human Development.

The data we used are, of course, imperfect measures. The Vanhanen-index of individual resources, the World Values Survey measures of self-expression values, the citizen rights scores from Freedom House and the corruption estimates from Transparency International all contain a considerable amount of estimation error. The existence of these errors, however, points all the more to the conclusion that the strong linkages we found capture relevant aspects of social reality. The variables we used measure clearly distinguished phenomena, are temporally separated, and derive from completely different sources. The strong linkages between these variables can therefore be reasonably considered as a cross-validation of the underlying dimension, which we termed Human Development.

## Appendix

### Aggregating Self-Expression Values

National aggregates of self-expression values have been calculated running the factor analysis shown in Table 2 across the time-pooled aggregated data set of the World Values Surveys (WVS), including 128 “nation per wave” units (137 units counting extra-regional surveys in Russia and Spain). Instead of running the factor analysis across each wave of the WVS separately, this makes sure that value shifts between these waves are represented in the factor scale of self-expression values. We summarized Serbia and Montenegro to represent Yugoslavia, and we separated Germany into its Western and Eastern part as to reflect their distinct history during the communist period.

### Separating Self-Expression Values in about 1990

The time-pooled data matrix provides aggregates of self-expression values from the 2nd WVS (about 1990) for 34 countries, including: Argentina, Austria, Belarus, Belgium, Brazil, Bulgaria, Canada, Chile, China, Denmark, Germany (East), Germany (West), Finland, France, Great Britain, Hungary, Iceland, India, Ireland, Italy, Japan, Latvia, Mexico, Netherlands, Nigeria, Norway, Portugal, Russia, South Korea, Slovenia, Spain, Sweden, Turkey, U.S.A.

For another 29 countries, missing self-expression values in the 2nd WVS (about 1990) have been estimated from existing self-expression values in the 3rd WVS (about 1995). For estimation, we used the following regression equation (which explains 91% of the variance across 21 countries):

“ $\text{SELFEXVAL1990} = .124 + .841 * \text{SELFEXVAL1995}$ .” Estimates based on this equation have been assigned to the following countries: Albania, Armenia, Australia, Azerbaijan, Bangladesh, Bosnia-Herzegovina, Colombia, Croatia, Czech Republic, Dominican Republic, Estonia, Georgia, Ghana, Lithuania, Macedonia, Moldova, New Zealand\*, Pakistan\*, Peru, Philippines, Romania, South Africa, Slovakia, Switzerland, Taiwan, Ukraine, Uruguay, Venezuela, Yugoslavia.

For still another 10 countries, missing self-expression values in the 2nd WVS have been estimated from existing self-expression values in the 4th WVS (about 2000). For estimation, we used the following regression equation (which explains 92% of the variance across 28 countries):

“ $\text{SELFEXVAL1990} = .047 + .858 * \text{SELFEXVAL2000}$ .” Estimates based on this equation have been assigned to the following countries: Egypt, El Salvador, Greece, Iran, Jordan\*, Luxembourg, Malta, Poland, Uganda, Zimbabwe.

### Separating Self-Expression Values in about 1995

The time-pooled data matrix provides aggregates of self-expression values from the 3rd WVS (about 1995) for 50 countries, including: Albania, Argentina, Armenia, Australia, Azerbaijan, Bangladesh, Belarus, Bosnia-Herzegovina, Brazil, Bulgaria, Chile, Colombia, Croatia, Czech Republic, Dominican Republic, Germany (East), Germany (West), Great Britain, Estonia, Finland, Georgia, Ghana, Hungary, India, Latvia, Lithuania, Macedonia, Mexico, Moldova, New Zealand\*, Nigeria, Norway, Pakistan\*, Peru, Philippines, Romania, Russia, South Africa, Slovakia, Slovenia, Spain, Sweden, Switzerland, Taiwan, Turkey, U.S.A., Ukraine, Uruguay, Venezuela, Yugoslavia.

For another 13 countries, missing self-expression values in the 3rd WVS (about 1995) have been estimated from existing self-expression values in the 2nd WVS (about 1990). For estimation, we used the following regression equation (which explains 91% of the variance across 21 countries):

“SELFEXVAL1995 =  $-.130 + 1.078 * \text{SELFEXVAL1990}$ .” Estimates based on this equation have been assigned to the following countries: Austria, Belgium, Canada, China, Denmark, France, Iceland, Ireland, Italy, Japan, Netherlands, Portugal, South Korea.

For still another 10 countries, missing self-expression values in the 3rd WVS have been estimated from existing self-expression in the 4th WVS (about 2000). For estimation, we used the following regression equation (which explains 89% of the variance across 27 countries): “SELFEXVAL1995 =  $-.159 + 1.000 * \text{SELFEXVAL2000}$ .” Estimates based on this equation have been assigned to the following countries: Egypt, El Salvador, Greece, Iran, Jordan\*, Luxembourg, Malta, Poland, Uganda, Zimbabwe.

\* In case of Jordan, New Zealand and Pakistan, aggregates for self-expression values have been calculated excluding “tolerance of human diversity” (see fn. 1 in Table 2 for operationalization), since the relevant questions have not been asked there. Using a linear transformation, we translated the location that these countries have on the reduced self-expression values scale into the scale comprising all composite variables.

## References

- Almond, G.A. and Verba, S. (1963). *The Civic Culture*. Princeton: Princeton University Press.
- Anand, S. (1993). Poverty and Human Development in Asia and the Pacific. In United Nations Development Programme (ed.), *Poverty Alleviation in Asia and the Pacific*. New York: UNDP Press, 1-39.
- Anand, S. and Sen, A. (2000). Human Development and Economic Sustainability. *World Development* 28 (12):2029-49.
- Banfield, E.C. (1958). *The Moral Basis of Backwardness*. Glencoe: Free Press.
- Barnes, S.H. and Kaase, M. et al. (1979). *Political Action*. Beverly Hills: Sage.
- Barro, R.J. (1997). *Determinants of Economic Growth*. Cambridge: MIT Press.
- Bendix, R. (1974). *Work and Authority in Industry*. Berkeley: University of California Press.
- Blalock, H.M. (1961). *Causal Inferences in Nonexperimental Research*. Chapel Hill: University of North Carolina Press.
- Bell, D. (1973). *The Coming of Postindustrial Society*. New York: Penguin.
- Birch, C. and Cobb, J.B. (1981). *The Liberation of Life*. Cambridge: Cambridge University Press.
- Blau, P.M. (1994). *Structural Contexts of Opportunity*. Chicago: University of Chicago Press.
- Brint, S. (1984). 'New Class' and Cumulative Trend Explanations of the Liberal Political Attitudes of Professionals. *American Journal of Sociology* 90 (1): 30-71.
- Bollen, K.A. and Jackman, R.W. (1985). Political Democracy and the Size Distribution of Income. *American Sociological Review* 50 (August): 438-457.
- Bollen, K.A. and Paxton, P.M. (2000). Subjective Measures of Liberal Democracy. *Comparative Political Studies* 33 (2): 58-86.
- Budge, I. (1996). *The New Challenge of Direct Democracy*. Cambridge: Polity Press.
- Bürklin, W., Klein, M. and Ruß, A. (1996). Vom postmateriellen zum anthropozentrischen Wertewandel. *Politische Vierteljahresschrift* 37 (4): 517-536.
- Butler, D. and Austin, R. (1994). *Referendums* (2<sup>nd</sup> edition). Washington D.C.: American Enterprise Institute for Public Research.
- Burkhart, R.E. and Lewis-Beck, M.S. (1994). Comparative Democracy: The Economic Development Thesis. *American Political Science Review* 88 (December): 903-910.
- Casper, G. and Taylor, M.M. (1996). *Negotiating Democracy*. Pittsburgh: University of Pittsburgh Press.
- Chirot, D. (1986). *Social Change in the Modern Era*. Orlando: Harcourt Brace Jovanovich.
- Clark, T.N. (1998). Is There really a New Political Culture. In: Clark, T.N. and Hoffmann-Martinot, V. (eds): *The New Political Culture*. Boulder: Westview, 75-92.
- Coleman, J.S. (1968). Modernization: Political Aspects. In D.L. Sills (ed.), *International Encyclopedia of the Social Sciences* (vol. 10). Washington D.C.: Free Press, 395-402.
- Coleman, J.S. (1988). Social Capital and the Creation of Human Capital. *American Journal of Sociology* 94 (Supplement):S95-S120.
- Converse, P.E. (1970). Attitudes and Non-Attitudes. In E.R. Tufté (ed.), *The Quantitative Analysis of Social Problems*. Reading, MA: Addison-Wesley, 168-189.
- Costa, P.T., McCrae, R.R. and Zonderman, A.B. (1987). Environmental and Dispositional Influences on Well-Being. *British Journal of Psychology* 78: 299-306.
- Cronin, T.E. (1999). *Direct Democracy* (2<sup>nd</sup> edition). Cambridge: Harvard University Press.



- Cummins, R.A. (2000). Objective and Subjective Quality of Life. *Social Indicators Research* 52: 55-72.
- Cutright, P.C. (1963). National Political Development. *American Sociological Review* 28 (April): 253-264.
- Dahl, R.A. (1973). *Polyarchy*. New Haven: Yale University Press.
- Dahl, R.A. (1998). Development and Democratic Culture. *Journal of Democracy*: 34-39.
- Dalton, R.J. (2002). *Citizen Politics* (3<sup>rd</sup> edition). New York: Chatham House.
- Diamond, L. (1992). Economic Development and Democracy Reconsidered. In G. Marks and L. Diamond (eds.), *Reexamining Democracy*. London: Sage, 93-139.
- Diamond, L. (1993). The Globalization of Democracy. In R.O. Slater, B.M. Schutz and S.R. Dorr (eds.), *Global Transformation and the Third World*. Boulder: Lynne Rienner, 31-69.
- Diener, E., Diener, M. and Diener, C. (1995). Factors Predicting the Subjective Well-Being of Nations. *Journal of Personality and Social Psychology* 69: 851-864.
- Dorenspleet, R. (2000). Reassessing the Three Waves of Democratization. *World Politics* 52 (April): 384-406.
- Doyal, G. and Gough, I. (1991). *A Theory of Human Need*. New York: Guilford Press.
- Durkheim, É. (1988) [1893]. *Über soziale Arbeitsteilung*. Frankfurt/M.: Suhrkamp.
- Dworkin, R. (1988). *The Theory and Practice of Autonomy*. Cambridge: Cambridge University Press.
- Eckersley, R. (2000). The State and Fate of Nations: Implications of Subjective Measures of Personal and Social Quality of Life. *Social Indicators Research* 52: 3-27.
- Eckstein, H.S. (1988). A Culturalist Theory of Political Change. *American Political Science Review* 82(4):789-804.
- Eisenstadt, S.N. (1986). The Axial Age Breakthroughs. In S. N. Eisenstadt (ed.), *The Origins and Diversity of Axial Age Civilizations*. New York: State University of New York Press, 1-28.
- Elkins, Z. (2000). Gradations of Democracy?. *American Journal of Political Science*, 44 (April): 287-294.
- Ersson, S. and Lane, J.-E. (1996). Democracy and Development. In A. Leftwich (ed.), *Democracy and Development*. Cambridge: Polity Press, 45-73.
- Estes, R.J. (1998). Trends in World Social Development. *Journal of Developing Societies* 14(1):11-39.
- Flanagan, S. (1987). Value Change in Industrial Society. *American Political Science Review* 81 (4): 1303-1319.
- Feng, Y. (1997). Democracy, Political Stability and Economic Growth. *British Journal of Political Science* 27 (3): 391-418.
- Foweraker, J. and Landman, T. (1997). *Citizenship Rights and Social Movements*. Oxford: Oxford University Press.
- Freedom in the World*. several volumes, Freedom House (ed.). Lanham: University Press of America.
- Frey, R. S. and Al-Roumi, A. (1999). Political Democracy and the Physical Quality of Life. *Social Indicators Research* 47: 73-97.
- Fukuyama, F. (1995). *Trust: Social Virtues and the Creation of Prosperity*. New York: Free Press.
- Gasiorowski, M.J. and Power, T.J. (1998). The Structural Determinants of Democratic Consolidation. *Comparative Political Studies* 31 (December): 740-771.
- Gibson, J.L. and Duch, R.M. (1994). Postmaterialism and the Emerging Soviet Democracy. *Political Science Quarterly* 47:5-39.
- Goldstein, H. et al. (1998). *A User's Guide to Mlwin*. Multilevel Models Project, University of London.
- Gurr, T.R., Jagers, K. and Moore, W.H. (1990). The Transformation of the Western State. *Studies in Comparative International Development* 25 (1):73-108.
- Halman, L. (2001). *The European Values Study*. Tilburg: EVS, WORC, Tilburg University.

- Heller, P. (2000). Degrees of Democracy. *World Politics* 52 (July): 484-519.
- Helliwell, J.F. (1993). Empirical Linkages Between Democracy and Economic Growth. *British Journal of Political Science* 24 (April): 225-248.
- Higley, J. and Gunther, R. (eds.) (1992). *Elites and Democratic Consolidation in Latin America and Southern Europe*. New York: Cambridge University Press.
- Hughes, B.B. (1999). *International Futures* (3rd ed.). Boulder: Westview Press.
- Huntington, S.P. (1991). *The Third Wave*. Norman: University of Oklahoma Press.
- Huntington, S.P. (1996). *The Clash of Civilizations and the Remaking of the World Order*. New York: Simon and Schuster.
- Inglehart, R. (1977). *The Silent Revolution*. Princeton: Princeton University Press.
- Inglehart, R. (1990). *Culture Shift in Advanced Industrial Societies*. Princeton: Princeton University Press.
- Inglehart, R. (1997). *Modernization and Postmodernization*. Princeton: Princeton University Press.
- Inglehart, R. and Baker, W.E. (2000). Modernization, Cultural Change and the Persistence of Traditional Values. *American Sociological Review* 65 (February): 19-51.
- Inkeles, A. and Smith, D.H. (1974). *Becoming Modern*. Cambridge: Harvard University Press.
- Inkeles, A. (1983). *Exploring Individual Modernity*. New York: Columbia University Press.
- Jackman, R.W. and Miller, R.A. (1998). Social Capital and Politics. *Annual Review of Political Science* 1: 47-73.
- Jagers, K. and Gurr, T.R. (1995). Tracking Democracy's Third Wave with the Polity III Data. *Journal of Peace Research* 32 (4): 469-482.
- Klingemann, H.-D. (1999). Mapping Political Support in the 1990s. In P. Norris (ed.), *Critical Citizens*. New York: Oxford University Press, 31-56.
- Knack, S. and Keefer, P. (1997). Does Social Capital Have an Economic Payoff? *Quarterly Journal of Economics*: 1251-1288.
- Kopstein, J.S. and Reilly, D.A. (2000). Geographic Diffusion and the Transformation of the Postcommunist World. *World Politics* 53(October): 1-37.
- Kuran, T. (1991). Now Out of Never. *World Politics* 44 (1): 7-48.
- Kurzban, C. (1998). Waves of Democratization. *Studies in Comparative International Development* 33 (Spring): 42-64.
- Landes, D.S. (1998). *The Wealth and Poverty of Nations*. New York: W.W. Norton.
- Leblang, D.A. (1997). Political Democracy and Economic Growth. *British Journal of Political Science* 27 (3): 453-472.
- Lerner, D. (1958). *The Passing of Traditional Society*. New York: Free Press.
- Lerner, D. (1968). Modernization: Social Aspects. In D.L. Sills (ed.), *The International Encyclopedia of the Social Sciences* (vol. 10), New York: Free Press, 386-395.
- Lewis, W.A. (1955). *The Theory of Economic Growth*. Homewood: Richard D. Irvin.
- Linz, J.J. and Stepan, A. (1996). *Problems of Democratic Transition and Consolidation*. Baltimore: Johns Hopkins University Press.
- Lipset, S.M. (1959). Some Social Requisites of Democracy. *American Political Science Review* 53 (March): 69-105.
- Lipset, S.M., Kyoung-Ryung, S. and Torres, J.C. (1993). A Comparative Analysis of the Social Requisites of Democracy. *International Social Science Journal* 45 (May): 155-175.
- Macpherson, C.B. (1977). *The Life and Times of Liberal Democracy*. Oxford: Oxford University Press.
- Maslow, A. (1970). *Motivation and Personality* (2<sup>nd</sup> edition). New York: Harper and Row.
- McAdam, D., Tarrow, S. and Tilly, C. (2001). *Contentious Dynamics*. Cambridge: Cambridge University Press.
- Modelski, G. and Perry, G. III (1991). Democratization in Long Perspective. *Technological Forecasting and Social Change* 39: 23-34.

- Mouzelis, N. (1999). Modernity. *British Journal of Sociology* 50 (March): 141-159.
- Muller, E.N. and Seligson, M.A. (1994). Civic Culture and Democracy. *American Political Science Review* 88 (3): 635-52.
- Muller, E.N. (1997). Economic Determinants of Democracy. In: Midlarski, M.I. (ed.), *Inequality, Democracy and Economic Development*. Cambridge: Cambridge University Press, 133-155.
- Nagle, J.D. and Mahr, A. (1999). *Democracy and Democratization*. London: Sage.
- Nevitte, N. (1996). *The Decline of Deference*. Ontario: Broadview Press.
- O'Donnell, G. and Schmitter, P.C. (1986). Tentative Conclusions about Uncertain Democracies. In: O'Donnell, G., Schmitter, P.C. and Whitehead, L. (eds.): *Transitions from Authoritarian Rule* (vol. 4). Baltimore: Johns Hopkins University Press, 1-78.
- O'Donnell, G. (1993). On the State, Democratization and Some Conceptual Problems. *World Development* 21 (8): 1355-1369.
- Olson, M.J., Sarna, N. and Swamy, A.W. (2000). Governance and Growth. *Public Choice* 102:341-364.
- Page, B. and Shapiro, R. (1993). The Rational Public and Democracy. In G.E. Marcus and R.L. Hanson eds., *Reconsidering the Democratic Public*. Pennsylvania: Pennsylvania State University Press, 35-64.
- Perkin, H. (1996). *The Third Revolution*. London: Routledge.
- Przeworski, A. (1992). The Games of Transition. In: Mainwaring, S., O'Donnell, G. and Valenzuela, A. (eds.), *Issues in Democratic Consolidation*. Notre Dame: University of Notre Dame Press, 105-152.
- Przeworski, A. and Limongi, F. (1997). Modernization: Theories and Facts. *World Politics* 49 (January): 155-183.
- Putnam, R.D. (1993). *Making Democracy Work*. Princeton: Princeton University Press.
- Pye, L.W. (1990). Political Science and the Crisis of Authoritarianism. *American Political Science Review* 84(March):3-19.
- Randall, V. and Theobald, R. (1998). *Political Change and Underdevelopment*. Durham: Duke University Press.
- Rawls, J. (1993). *Political Liberalism*. New York: Columbia University Press.
- Rodrik, Dani (1999). *The New Global Economy and Developing Countries*. Washington D.C.: Overseas Development Council.
- Rokeach, M. (1960). *The Open and the Closed Mind*. New York: Basic Books.
- Rose, R. (2001). A Diverging Europe. *Journal of Democracy* 12(1):93-106.
- Rostow, W.W. (1961). *The Stages of Economic Growth*. Cambridge: Cambridge University Press.
- Rowen, H.S. (1996). World Wealth Expanding. In: Landau, R., Taylor, T. and Wright, G. (eds.) *The Mosaic of Economic Growth*. Stanford: Stanford University Press, 92-125.
- Rustow, D.A. (1970). Transitions to Democracy. *Comparative Politics* 2 (April): 337-363.
- Scarborough, E. (1995). Materialist-Postmaterialist Value Orientations. In E. Scarborough and J. van Deth (eds.), *The Impact of Values*. Oxford: Oxford University Press, 123-159.
- Scarrow, S. (2001). The Expansion of Direct Democracy. *Comparative Political Studies*.
- Schmuck, P., Kasser, T. and Ryan, R.M. (2000). Intrinsic and Extrinsic Goals. *Social Indicators Research* 50: 225-241.
- Schwartz, S.H. (1992). Universals in the Content and Structure of Values. In: Zanna, M.P. (ed.), *Advances in Social Psychology*. New York: Academic Press, 1-65.
- Sen, A. (2001). *Development as Freedom*. New York: Alfred Knopf.
- Sides, J. (1999). It Takes Two: The Reciprocal Relationship between Social Capital and Democracy. Paper presented at the American Political Science Association annual meeting, Atlanta.
- Simmel, G. (1984). *Das Individuum und die Freiheit*. Berlin: Duncker and Humblodt.

- Sniderman, P. (1975). *Personality and Democratic Politics*. Berkeley: University of California Press.
- Sørensen, G. (1993). *Democracy and Democratization*. Boulder: Westview Press.
- Tooby, J. and Cosmides, L. (1992). The Psychological Foundations of Culture. In: Barkow, J.H., Cosmides, L. and Tooby, J. (eds.), *The Adapted Mind*. Oxford: Oxford University Press, 19-136.
- Vanhanen, T. (1997). *Prospects of Democracy*, London: Routledge.
- Verba, S., Nie, N.H. and Kim, J.-O. (1978). *Participation and Political Equality*. Cambridge: Cambridge University Press.
- Weber, M. (1958) [1905]. *The Protestant Ethic and the Spirit of Capitalism*. Boston: Allen and Unwin.
- Welzel, C. (1999). Elite Change and Democracy's "Instant Success" in East Germany, in: Higley, J. and Lengyel, G. (eds.), *Elites After State Socialism*. Rowman and Littlefield, 103-122.
- Welzel, C. and Inglehart, R. (2001). Human Development and the 'Explosion' of Democracy. WZB Discussion Paper, WZB: Berlin.
- Welzel, C. (2002). *Fluchtpunkt Humanentwicklung*. Opladen: Westdeutscher Verlag.
- Yule, G.U. and Kendall, M.G. (1950). *An Introduction to the Theory of Statistics*. London.
- Zapf, W. and Habich, R. (1999). Die Wohlfahrtsentwicklung in der Bundesrepublik Deutschland 1949-1999. In: Kaase, M. and Schmid, G. (eds): *Eine lernende Demokratie*, Berlin: Sigma, 285-314.

