LOCAL TRADITIONS IN GLOBAL COMPETITION

Cultural indicators of the non-European world - a new tool for determining national performance in development

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Abstract:
Comparative analysis of the relationship between culture and development frequently suffers from one of two shortcomings: Either culture is restricted to the symbolic, or holistic descriptions are not conducive to operationalization. In this paper, indicators of the cultural heritage of 87 countries in Africa, Asia, and Melanesia are introduced, based on about 50 variables from social anthropology. After defining culture as a specific configuration of institutional settings of past or present societies, empirical evidence of the impact of the cultural heritage on development is presented. Strong correlations between traditional ways of life and socioeconomic indicators of modern nations support the argument that theoretical explanations could be substantially improved by integrating cultural indicators into general models of development.

Culture is becoming a major issue for at least two reasons: On the one hand, globalization is accompanied by a widening gap between rich and poor countries (UNDP Human Development Reports), and between rich and poor classes within countries (Featherstone 1995). Thus cultural "diversity" is increasing, but more often than not it is a diversity of the negative type: The process of replacing the unique patchwork of well adapted cultural traditions has not resulted in a better culture – a more urban, educated, universalistic, open, just, democratic and ecologically sustainable one. On the contrary we can observe how increasing numbers of people are desperately creating "cultures of poverty" (O. Lewis) in response to the stressful material conditions in which they find themselves trapped. More wealthy sections of the world population perceive this kind of cultural creativity, not unrealistically, as a threat. On the other hand, local responses to globalization differ greatly. In this perspective, cultural processes first of all may appear as an outcome of historic precedences or, as we will call it in the following, of the "cultural heritage". In this view, culture contains the clue to understanding how development is shaped in different world regions, since the actual outcome always represents an amalgam of the local and the global. This paper is based on three assumptions:
• First: The cultural past is shaping development significantly and to an empirically relevant extent.
• Second: The fact that the past influences present performance in development does not mean that certain societies are more "fit" for development than others, but that the dominant concept of development is too monopolistic. Instead of economically and
politically suffocating competition in the production of more viable models, future development has to become multilinear.

• Third: Not every cultural change can claim the status of development. The term development only includes those changes that are considered positive by the people and which are sustainable. The same is true for "Creative Diversity": The term loses its positive connotation if it primarily reflects differential access to essential resources. Differences in access to resources and in deployment of power should not be legitimized by referring to cultural pluralism.

This paper consists of three sections. In a first section (I), previous cultural explanations will be discussed and their limitations shown. Then a holistic and operational definition of culture is presented (II). Thanks to the elaboration of the difference between core culture and cultural style, the distinction between "necessary" and "unnecessary" Westernization in development can be discussed on more objective ground. The following empirical section (III) presents the methods used in constructing cultural indicators. They describe important aspects of the cultural heritage of nations in quantitative terms. The paper ends with a model which links quantitative and qualitative traits of local and national societies (IV). Extensive appendices permit a glimpse into the workshop of cross-national analysis, which uses national indicators of the cultural heritage.

I: EXPOSITION OF THE PROBLEM

Ever since Europeans have been discussing the economic and political performance of the peoples in the peripheries of their expanding capitalistic system, one major issue has been the evaluation of local "cultures" in terms of their contribution to the accumulation of metropolitan capital. This specific look at "development" has not changed much despite the political independence of previous colonial territories. The type of explanations, however, has become more differentiated, less racist, and more cultural.

Our main argument here is that in capitalistic globalization cultural diversity becomes organized within a global hierarchy, affecting non-European countries very differently, partly because of their dissimilar pre-colonial cultural heritage. National structures and dynamic results from an interplay of forces, one local, one global. The partial integration of subordinated societies into the reproduction cycles of the expansionist capitalist system is, more often than not, blocked at a stage where the reproductive capacity of the peripheral units is no longer working. The specificity of commercial capitalist systems in expansion "…to extricate persons from their em-

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1 Excluding Latin America, Caribs, Australia, New Zealand, and Israel, in addition to Europe and North America.
beddedness in 'traditional' relations and to reintegrate them as individual subjects in a more abstract set of contract and monetary relations in which personal and kinship relations become increasingly marginalized and atrophied, often converted into mechanisms of survival" (Friedman 1994: 27) tends to establish subordinate identities that are part of a culture of clientelistic hierarchies. These are the tendencies, but they do not adequately describe the situation in all countries. Therefore the question arises as to what kind of cultural heritage increases, or decreases, the chances that the integrative transformation of peripheries and personal identities will get trapped in a position of dependent reproduction and vice versa.

Before presenting our own way of approach into the problem, we shall discuss the dominant culturalist explanations. It is interesting to note that culture-oriented authors frequently take an isolationist and essentialist position: isolationist in their approach to culture as a closed functional system; essentialist in their treatment of culture as a primordial fact comparable to natural resources, which may be available or not, but is certainly not negotiated or transformed in the course of continuing learning processes. Nevertheless, these studies are stimulating, and I am going to mention a few exponents, preparing the ground for the approach which is presented later. Two lines of thought seem particularly interesting: materialism, and idealism.

a) Materialistic explanations

Evolution is defined as an accumulative process of economic, social and political growth, with modern development as its most recent historical expression. In a seminal article, Lenski and Nolan (1984) established empirical links between certain prevalent traits of the traditional technology and the development of nations since 1960. They separated countries with pre-colonial plough agriculture from countries with traditional horticulture (slash and burn technology and garden production). Since agriculture is taken as an indicator for higher civilization at the time of contact with European colonial powers, and horticulture as an indicator for more primitive societies, the authors postulate differential positions in the world system for the two groups of nations (figure 1): "If ecological-evolutionary theory is correct, there should be substantial differences between industrializing agrarian and industrializing horticultural societies both with respect to their current characteristics and to their trajectories of development.... [I]ndustrializing agrarian societies were already much more developed by modern standards than were industrializing horticultural societies long before the onset of industrialization, and this difference should persist for some time after the beginnings of sustained contact with industrial societies" (dito:4). Why it should persist, and why "for some time" only, is not explained.

With respect to the question of future dynamic, the authors were less decided, but tended towards a perspective of convergence: "Ecological-evolutionary theory does not allow us to predict whether the gap between the trajectories of the two sets of soci-
eties will increase, decrease, or simply persist, though there are reasons for expecting that in the long run (i.e., a century or more), the gap would decrease" (dito: 4). In their empirical analysis all the agricultural societies were Asian, and all the horticultural societies African, including Papua New Guinea. They found that countries with agricultural traditions occupy higher development positions than countries with horticultural traditions at the present time.

The theoretical foundation of the evolutionary position is certainly more sophisticated than reported here (e.g. Boyd/Richerson 1986; Carneiro 1970; Hallpike 1986). What does appear from the study is (1) the idea of a continuity of relative social complexity over the centuries, (2) an uncertainty with respect to the long-term continuity of today's polar structure, and (3) the question of whether the poles will be formed by the same nations over long periods or be occupied by changing groups of nations in a hierarchically structured but socially open global system. The merits lie in the empirical correlation of two important indicators of cultural heritage with some conventional indicators of modern development, at the same time demonstrating the unexplored explanatory potential in the approach.

b) The value school

Probably all development models include values in some way or another. They differ in the explanatory relevance attached to those values. Idealistic approaches define culture as a dominant factor which explains the rest (left side of figure 2), materialistic approaches treat culture as a projective system reflecting more than shaping economic and political reality.

A famous example for the value approach is Max Weber's thesis on the contribution of Protestantism to the development of European capitalism. Values, in the words of the American anthropologist Clyde Kluckhohn (1951a: 395), can be defined as "a broad tendency to prefer certain states of affairs over others". Kroeber and Parsons (1958:583) define culture as "transmitted and created content and patterns of values, ideas, and other symbolic-meaningful systems as factors in the shaping of human behavior and the artifacts produced through behavior". Though culture is not solely identified with values exclusively, these writers tend to attribute a central position to values in the working of culture and the pace of development. Social values, somehow, are seen as a guarantee for long-term continuity in processes of change.
One of the most influential books in this tradition is Edward Banfield's *The Moral Basis of a Backward Society* which uses his concept of "amoral familism" to describe social life in a southern Italian peasant community after World War II. Banfield found that social ties and moral obligation were limited to the nuclear family alone; outside of this, individuals did not trust each other and therefore did not feel a sense of responsibility to larger groups, whether they were the neighborhood, village, church, or nation. In the same vein, Robert Putnam (1993) traced Italy's social and political institutions to its "civic culture", or lack thereof. He claimed that the parts of Italy where democratic institutions are most fully developed today are similar to the areas which first began to generate these institutions in the 14th century. His conclusion is that democracy is not something that can be put on like a coat; it is part of a country's social fabric and takes decades, even centuries, to develop (The Economist: 9/11/96).

In a highly stimulating book entitled "Trust: The social virtues and the creation of prosperity", Fukuyama (1995) argues in favor of an institutional interpretation of values. He insists on the relevance of a strong civil society with a premium on spontaneous sociability which constitutes a subset of social capital: "The most effective [modern] organizations are based on communities of shared ethical values. These communities do not require extensive contract and legal regulation of their relations because prior moral consensus gives members of the groups a basis for mutual trust" (ibid. 26). This is why trust minimizes transaction costs and supports stable links beyond families and kin groups, whereas widespread distrust in a society imposes a kind of tax on all forms of economic activity. Local traditions attributing trust to non-kin support intergenerational accumulation of capital and open competition in the recruitment of managers. With respect to Italy, he extends Putnams argument into the field of economy, claiming that the economically vigorous parts of Italy are those with traditionally strong democratic institutions.

In 1992, Harrison wrote a book with the revealing title: "Who prospers? How cultural values shape economic and political success". He summarized his reasoning in the following words: "[T]he building of durable democratic capitalist institutions can
be dauntingly difficult, particularly since cultural traditions that nurture progress are not likely to be in place. What, then, are the cultural forces that facilitate or suppress the expression of human creative capacity and that influence movement toward or away from this increasingly universal aspirational model? There are, in my view, four fundamental factors: (1) the degree of identification with others in a society – the radius of trust, or the sense of community; (2) the rigor of the ethical system; (3) the way authority is exercised within the society; and (4) attitudes about work, innovation, saving, and profit. These factors flow from the overarching world view of a society, what social scientists refer to as 'cognitive orientation' or 'cognitive view'" (1992:10).

The two approaches discussed are complementary and, despite their obvious antagonism, have much in common: The materialist and evolutionary model focuses on technical, economic and political aspects of culture. The theory postulates a continuation of the relative position of pre- and postcolonial societies in terms of size, economic efficiency, political power, and symbolic abstraction. In the value model, development reflects deep-seated preferences which persist even when the economic and political framework changes. Culture is treated like a super-personality with a strong character. If the traits of the character are favorable to development, societies may change rapidly and successfully. If not, such change "can be dauntingly difficult" (Harrison). Common to both of them is the conception of relatively closed functional systems and the lack of attention to conflictive interaction between global and local processes and to actors' strategies on all levels.

In view of the recent boom of culturalist explanations we should not forget that the importance of world views and the symbolic dimension in development is not a new discovery in the discussion on development. Socialism or classical modernization theory always have stressed the indispensability of secular and rational education for solid economic growth, and for the reproduction of industrial culture. The scientific debate focuses more on the degree of theoretical autonomy of values vis-à-vis the socio-economic structure (Eisenstadt 1990), and on the methodological difficulties of empirical operationalization in comparative research. With respect to the theoretical status of values, it should be acceptable to everybody that an explanation of value systems should not rely on value systems. As to the methodological problem, it seems to have become a matter of routine, at least under the relatively homogenous conditions of Western societies, to analyze value preferences and their linkages with economic and social processes 2. In contrast, the present contribution aims to make a step forward in the comparative analysis of "culture" in the non-European world.

2 see Milton Rokeach's "The Nature of Human Values" (Rokeach 1973, 1977), the European Value Study (Lesthaghe 1983, 1986, 1988), or the research of J. Simons who in a similar way analysed the fields of culture, economy, and fertility in Europe (Simons 1986). A good overview of this type of research is given by Handwerker (1986) as well as de Bruijn (1993).
II: A FUNCTIONAL DEFINITION OF CULTURE

In social anthropology, the term "culture" designates whatever has been created and is socially transmitted through symbolising activities. Cultural reproduction is thus studied in terms of intergenerational knowledge transfer, and not genetic coding (Bohanan 1995). I would like to suggest a terminological differentiation of the concept in order to acquire an analytical tool which permits the empirical handling of data as well as a normative approach to development.

a) Core, structure and style

Friedman (1994:25) suggests a distinction between generic and differential culture. Generic culture refers to the universality of the human elaboration of symbols. Culture, in this approach, plays the role of a functional equivalence to biological drives. All human societies must fulfil certain tasks if basic human needs are to be satisfied. I am going to call these tasks core functions 3 and will distinguish between: (1) the modes of production, e.g. whether communal, associational, private or state; (2) social distribution and solidarity, e.g. relations between producers and consumers, particularly between generations, sexes, and other social groups; (3) public order, including norms and institutions stipulating how to deal with deviant behavior; and (4) socialization, e.g. collective ideas of what kind of knowledge and behavior should be taught to the younger generation and in which way. In the long range, none of these tasks can be performed on individual or family levels alone, and no society can exist without institutional mechanisms which guarantee the performance of these tasks. From a cultural point of view, the sustainability, natural and social, of a society's institutional system can be defined in these terms. It introduces the qualitative dimension into the discussion on culture and development.

Differential culture describes the specific institutional settings in space and time which ensure the fulfilment of the core functions. They can be grouped under three main categories: (1) technology; (2) social organization; and (3) symbols. Such institutions represent the instrumental dimension of culture in all societies (see figure 3). It goes without saying that culture must be understood, and accepted to some extent, by the individual members of a society in order to become effective. Culture is neither purely a extrasomatic reality nor a purely intrasomatic one, but "relating to personhood and experience and the way they are connected to the production of representations of the world and the formation of strategies of practice" (dito: 25).

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3 The term is inspired by Julian Steward (1955:37), but defined slightly differently. Following Steward, the term includes material, social, and symbolic aspects of social organization. With respect to the functional element of the definition, however, the conceptions differ.
Socialization as one of the four core functions should channel the way in which collective representations are internalized by the individual members of the group, not only in order to stabilize social structures, but also to permit informed critique and public bargaining of cultural change.

Figure 3:
A functional and structural model of culture.

The horizontal lines in figure 3 indicate instrumental aspects. They are present in all cultures, but in different forms according to ecological conditions, structural complexity and cultural style. The vertical arrows linking technology, organization, and meaning, symbolize the systemic character of institutional arrangements, as for instance, the correlation of writing systems and the hierarchical ordering of pantheons in archaic states, as well as the linkages between formal education, family planning and the Gross Domestic Product in contemporary societies. On the one hand, the fulfilment of functions always involves a certain mixture of technology, organization and shared meanings, but on the other hand this mixture needs constant monitoring and adaption.

The fact that only some of the cultural traits are systematically linked in cross-cultural research, whereas others are not, leads to the analytic differentiation between structure and style. The structural aspect of a society is defined as the configuration of institutional settings which, in intercultural research, show significant correlations with the production system. Those institutions not linked to structural complexity will be defined as cultural style. The distinction will play an role later in the empirical analysis of cultural indicators and in the discussion of the degree of freedom, which societies have in deciding on their own model of development.

The horizontal arrows, linking the core functions, point to the risk of increasing cultural distortions in the process of capitalist expansion (Appadurai 1990). It is common knowledge that societies can be described as systems because certain cultural elements are strongly interconnected. For example, hunter-gatherer societies differ
from farming ones not only with regard to the type of subsistence technology, but always in terms of certain aspects of their social organisation, their religious conceptions and legitimization systems too. And the Balinese irrigation management was tightly linked to the ritual calendar of local monasteries. Accordingly, certain forms of social reciprocity, conceptions of time or cognitive models had to change – and had to change in the right way! – when local subsistence economies were replaced by more capital-intensive methods of production. More often than not, this did not happen. When distorted local institutions become amalgamated within a decontextualized "universalistic" order, the competing institutional arrangements appear to be incongruent and cease to serve their purpose. This complex question cannot be elaborated on further here (but see Naroll 1983); two examples must suffice: (1) Increasing international migration of low-class groups, and particularly of women, undermine the education of children. Consequently, culture is weakened with respect to the core function of socialization. (2) If developing countries are not in a position to finance security in old age for the great majority of citizens, but at the same time allow kinship solidarity to be weakened for reasons of political rationality, then culture is undermined with respect to the core function of distribution (in this case: between generations). In globalization, the dichotomy opposing modern to traditional is transformed into a dichotomy of center-periphery. This transformation is accompanied by sharper power differentials, extended knowledge areas, generalized cultural distortions and higher social tension.

The term "culture", then, always refers here to differential culture, that is (a) the institutional configuration of a particular society, framing the social specificity regarding technology, organization and symbolic forms, and (b) the performance with respect to the fulfilment of the core functions. The second point is of particular relevance since discussions on development are usually strongly biased in favor of the instrumental dimension. It is commonly assumed that the modernization of economic, social and symbolic means will automatically result in improved functional performance. Empirical evidence rather points to the contrary. A holistic concept of culture as outlined here could contribute to a broader discussion of the aims of development. It is the functional dimension which prepares the field for an evaluation of the cultural change taking place during the partial integration of peripheric societies into the capitalist world system. This point will be taken up at a later point. Instead, I now want to introduce two more elements into the discussion. They highlight the fundamental role of culture in development.

b) Power potentials immanent in structural complexity

In this general approach, the effects of expanding capitalism vary with the cultural heritage of nations. It is suggested that the main descriptive quality used to
characterize specific cultures should be the structural complexity of their institutions, because we expect that the development of present-day states depends first of all on the political power inherent in the structural complexity of indigenous societies. As mentioned before, the structural aspect of culture focuses on the power differentials between societies and nations based on different levels of technology. In the colonial situation, more powerful indigenous societies formed social classes interested in organizing the extraction of surplus, depending on military force. Such centralized and hierarchical systems were often in a better position to deter invading parties and to maintain a certain degree of autonomy (Otterbein 1970). There is no doubt that the differences in the deterring capacity of non-European societies influenced the extent and the quality of the colonial penetration of European powers. Given more local power, the transformation from indigenous to national societies was based more on local social forces, depending on internal legitimation. The resulting development models permitted more collective learning, and a more diversified economy, resulting in a more well trained workforce, more informed political consciousness and faster formation of national capital. The rough lines of this approach are summarized in figure 4.

Figure 4:
Simplified model 4 of the developmental quality of traditional structural complexity.

It should be emphasized that the dependent variable "Social position and mobility in the world system" does not reduce development to economic growth, though I do believe that in poor countries there is no development without an increase in productivity. Since economic growth is rooted to a number of non-economic local factors, social mobility is not a one-dimensional phenomenon, but represents a "phénomène social total", combining social, political and symbolic capacities. In the most recent phase of capitalist penetration, culture advances to an increasingly relevant criterion for the investment decisions of international as well as national actors, since new technologies in communication and transport reduce protection through distance and increases competition on a global scale. It is expected that the

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4 For a complete version of the model see Müller 1996:123.
bargaining capacity of societies and nations – in the past not less than in the present – depends on the structural qualities of their culture. These qualities combine technical, organizational, and symbolic-normative elements of the cultural configuration.

c) Cultural style and the limits of cultural relativism

Cultural traits which are relevant neither for core functions nor structural growth constitute the cultural style. They can be identified when looking for variations between societies of similar structural complexity. From a theoretical point of view, style defines cultural areas where cultural elements are not related to the cultural core. Taking intersocietal competition into consideration, such areas have a high degree of freedom in cultural change. Societies with the same mode of production (structural complexity) may show great variations in cultural style (e.g. Fiske 1991; Hofstede 1980). For example, most European societies have an extremely undifferentiated kinship system, called the "Eskimo system" by social anthropologists and named after arctic hunters with a kinship organisation similar to that in European societies. Obviously, certain forms of kinship organization are compatible with societies of very different structural complexity. Another example concerns initiation rites and the circumcision of young males. This institution has nothing at all to do with either the traditional level of civilisation or with modern development, and yet it plays a central role in collective and gender identity (e.g. Schlegel/Barry 1980; Barry/Schlegel 1979; Munnroe/Munroe 1973). Similar findings can be established in many other areas, such as cuisine, codes of honor, religion, philosophy or art (Wolfe 1969). Cultural elements lacking systemic properties in intercultural analysis may be called cultural style. In the course of cultural change these elements can take on practically any form without affecting social efficiency either positively or negatively. Nonetheless, such cultural elements are not simply subject to individual whim: Precisely because of their arbitrariness, they are ideally suited to becoming symbols of cultural identity and social cohesion. What looks arbitrary, and actually varies greatly from society to society, is often elevated to an obligatory cultural norm, binding the members of specific societies together, although it is not invulnerable to historical change.

Such aspects of culture should not be replaced when the production system is altered to increase productivity. They should consciously be protected against the influence of Western life-style (again not functionally necessary to maintain high levels of productivity and power) as it is exerted by Western controlled mass media or long-distance tourism. Still following the same line of reasoning, pressure on traditional culture would be legitimate and necessary under only two conditions, i.e. when incompatible with economic growth, or when incompatible with social or environmental sustainability. It goes without saying that energy-intensive and individualistic patterns of Western life-style give more grounds for criticism than most of the traditional forms of cultural style. It should also have become clear that the concept of
cultural style as it is used here fundamentally differs from individualistic definitions of life styles so common in Western thinking.

A final remark: since structural variables embrace technical, social, political and normative institutions, the dichotomy of structure and style does not reproduce the classic Marxist dichotomy of material base and superstructure. The two conceptions are logically independent. In the past as well as in contemporary societies, "development" (or "civilization") is always multidimensional, including weaponry as much as priestly knowledge, machinery as well as education and human rights.

III METHODOLOGY:
CONSTRUCTING THE CULTURAL HERITAGE OF NATIONS

In this paragraph, I want to describe the selection and transformation of primary data for the cultural heritage up to the national level. The reader should be able to judge the content, strength, and limits of the methodology. Three types of data are involved: (1) a data bank of economic, social and political traits in approximately 3000 precolonial cultural units in Africa, Asia, and Melanesia; (2) a data bank of cultural indicators for 95 non-European countries, 29 Chinese provinces and 25 Indian states; (3) a collection of 36 regional maps locating the precolonial cultural units and showing the distribution of the cultural traits.\(^5\)

\(^5\) For a more detailed discussion I refer to Müller, et al. 1991; Müller/Arpagaus 1994; Müller 1996; also Müller/Kock/Seiler [1997]. The basis for this paper was laid in 1989 when a research project was awarded to the author the German "Bundesministerium für wirtschaftliche Zusammenarbeit" (BMZ, German Development Corporation). The ministry assumed that the success of developing countries was linked with the traditional "level of civilisation" (Entwicklungsstand) of the indigenous population. The research was expected to establish a ranking order of all developing countries (including Latin America) according to their precolonial development, and to explore some hypotheses regarding the effect of the traditional Entwicklungsstand (level of civilization) on development since 1960. 113 developing countries were then described and analysed accordingly (Müller et al., 1991). Some of the results of that study still hold and are incorporated in the present paper, namely: (I) the method of transforming standardized ethnographic information into country data; (II) the ranking of countries according to the "level of civilisation" of the indigenous societies; (III) insight into the insufficiency of evolutionist criteria regarding the cultural heritage. Between 1990 and 1993, with the support of the Swiss National Foundation, the concept of cultural heritage was extended and the methodology improved. The research area was limited to the non-European world and extended to the Commonwealth of Independent States (CIS, former USSR). In addition, the Chinese provinces and the Indian federal states were coded separately. They now can be treated in the same way as a national unit. In the meantime, efforts were made to visualize these data on maps.
3.1 DATA BANK OF TRADITIONAL SOCIOCULTURAL UNITS

Most of the information regarding the cultural diversity of developing countries relies on Western anthropological research performed during Western colonization. Whatever arguments may be raised against such information, it is the best that is available. At least, certain aspects of the indigenous societies of the non-European world prior to modern transformation are well documented, and the data open an amazing view of the cultural diversity of the precolonial past. Most contemporary nation-states are comprised of a certain number of distinctly different cultural areas and cultural types. The traditional sociocultural population units of the data bank share common linguistic, religious, social or occupational elements - a fact which does not give the slightest hint of the possible existence of "ethnic" consciousness or identity. It must be emphasized, therefore, that the objective of the documentation is not to document ethnic groups or lend scientific legitimation to any kind of ethno-nationalist claims, but simply to describe the cultural diversity of contemporary nation-states by ethnographic variables of the pre-national past.

As a result of the research performed up to today, about 95% of the national population in most countries could be paired with a traditional sociocultural unit. If people of the same group are dispersed over several countries, the relative proportion is documented in each of the respective countries. The information is compiled from a large number of sources, like the "Human Relations Areas Files" (New Haven), the "Atlas Naradov Mira" (Moscow), "Languages of the World (SIL), the "Area Handbook Series" (Washington), national censuses and primary sources, as well as many others 6. The data are presented in a way that allows the reader to pinpoint any group – even if no data are available – with the help of a register which contains alternate names for the same group or subgroups, if such names are known (Müller/Arpagaus 1994).

It is not surprising that only a very limited spectrum of the indigenous societies are described so extensively that the cultural heritage of the national population as a whole is known. The final list contains a set of 51 variables in total, most of them selected from the "Ethnographic Atlas" by G.P. Murdock. These variables give relevant information on three different thematic fields (see table 1 for a condensed view): (I) preindustrial subsistence technology (E, T), (II) precolonial political structures, in particular the centralization of political power (bands, tribes, chiefdoms, and states: P), and (III) traditional family and kinship systems (M, F, K, T). Based on these variables, several indices and typologies were constructed. They permit a shorthand characteri-

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Table 1
Main variables measuring cultural heritage. Adapted from Murdock 19

<table>
<thead>
<tr>
<th>NR.</th>
<th>CONTENT</th>
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<tbody>
<tr>
<td><strong>E</strong></td>
<td>Dominant mode of subsistence economy</td>
</tr>
<tr>
<td>E1</td>
<td>Subsistence economy: indicates the estimated relative dependence of the society on extraction (gathering, hunting, fishing), animal husbandry, or agriculture.</td>
</tr>
<tr>
<td>E2</td>
<td>Type and intensity of agriculture (incidental, extensive or shifting, horticulture, intensive agriculture with or without irrigation, etc.).</td>
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<tr>
<td>E3</td>
<td>Type of animal husbandry (goats, sheeps, pigs, geese, etc.).</td>
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<tr>
<td>E4</td>
<td>Specialization on trade or crafts.</td>
</tr>
<tr>
<td>E5</td>
<td>Prevailing type of grain (rice, maize, sorghum etc.).</td>
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<tr>
<td><strong>T</strong></td>
<td>Technology</td>
</tr>
<tr>
<td>T1</td>
<td>Presence of plough cultivation; prevailing type of working animals (oxen, camels, horses)</td>
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<tr>
<td>T2</td>
<td>Relevance of metal working.</td>
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<tr>
<td>T3</td>
<td>Relevance of weaving.</td>
</tr>
<tr>
<td>T4</td>
<td>Elaboration of writing system.</td>
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<tr>
<td><strong>P</strong></td>
<td>Sociopolitical structure</td>
</tr>
<tr>
<td>P1</td>
<td>Prevailing type of settlement pattern (nomadic, sedentary, settlement type, etc.).</td>
</tr>
<tr>
<td>P2</td>
<td>Mean size of local communities.</td>
</tr>
<tr>
<td>P3</td>
<td>Size of the population.</td>
</tr>
<tr>
<td>P4</td>
<td>Jurisdictional hierarchy and political complexity beyond the local community.</td>
</tr>
<tr>
<td>P5</td>
<td>Class stratification (distinctions according to wealth, elite stratification, differentiation of occupational status, etc.).</td>
</tr>
<tr>
<td>P6</td>
<td>Succession to the office of local headman (hereditary, influence, seniority, election, etc.).</td>
</tr>
<tr>
<td><strong>M</strong></td>
<td>Mode of marriage</td>
</tr>
<tr>
<td>M1</td>
<td>Prevailing mode of obtaining a wife (bride-price, dowry, exchange, etc.).</td>
</tr>
<tr>
<td><strong>F</strong></td>
<td>Family types</td>
</tr>
<tr>
<td>F1</td>
<td>Family organization: prevailing form of domestic or familial organization (nuclear families, extended families, etc.).</td>
</tr>
<tr>
<td>F2</td>
<td>Marital composition (monogamy, polygamy, polyandry, etc.).</td>
</tr>
<tr>
<td>F3</td>
<td>Transfer of residence at marriage (patrilocal, matrilocal, neolocal, etc.).</td>
</tr>
<tr>
<td><strong>K</strong></td>
<td>Kinship systems</td>
</tr>
<tr>
<td>K1</td>
<td>Rule of descent (patrilineal, matrilineal, bilateral, etc.).</td>
</tr>
<tr>
<td>K2</td>
<td>Largest patrilineal or matrilineal kin group.</td>
</tr>
<tr>
<td>K3</td>
<td>Cognate kin groups.</td>
</tr>
<tr>
<td><strong>T</strong></td>
<td>Intergenerational status transfer</td>
</tr>
<tr>
<td>T1</td>
<td>Transfer of residence at marriage.</td>
</tr>
<tr>
<td>T2</td>
<td>Succession to the office of local headman.</td>
</tr>
<tr>
<td>T3</td>
<td>Inheritance of real property (land).</td>
</tr>
</tbody>
</table>
zation of the traditional sociocultural units. In addition, the approximate population size was calculated for each unit as per 1960. Based on these variables a number of indices and combined types were constructed.

In line with the above differentiation of culture, a way of attributing the variables either to structural complexity or to cultural style had to be found. Only then was it possible to check hypotheses linking traditional attributes of structure and style with national attributes of structure and style.

a) Structural complexity

On the basis of previous cross-cultural analysis (Chick 1996; Müller et al. 1991; Schweizer 1978), four different variables or groups of variables were selected as indicators of the traditional structural complexity:

- the traditional agro-technical efficiency (i.e. intensity of traditional food production and know-how of metal working);
- the sociopolitical complexity (in terms of vertical differentiation of the social structure, population size, and writing used for secular or religious administration);
- the population of the traditional sociopolitical units;
- the proportion of people adhering to a so-called world religion (monotheistic, or philosophic-moral, systems which are decontextualized) around 1900.

The inclusion of a religious variable as a measure of structural complexity may astonish. From a sociological point of view, however, the crucial point with respect to structural complexity is whether or not the adherents of the religion are defined in socially abstract terms, or whether they are local, or congruent with some kind of descent groups. Thus, religion as a social indicator is two-edged: on the one hand it represents an evolutionary variable if "contextualized" forms are compared with "decontextualized" forms. On the other hand, the variable can be used as a qualitative indicator for cultural style as long as religions are compared which belong to the same level of structural complexity. It should be kept in mind that religion was not aggregated from ethnographic data, but developed from country data (census etc.). More will be said about the other variables in the section on the construction of national indicators.

b) Cultural style

The remaining variables were treated as indicators of the traditional cultural style. They are taken from four different institutional fields 7:

7 The term "institution" is always used in the sociological sense which means a social practice that is regularly and continuously repeated, is sanctioned and maintained by social norms, and has a major significance in the social structure. This definition at least minimal organizational forms and a certain stability of social actor groups in the performance of institutions.
• **Economy:** The relative importance of settled agriculture as compared to nomadic grazing;
• **Social organization:** The relative importance of large extended families as compared to nuclear families;
• **Principles of social legitimation:** The relative importance of patri- as compared to matri-dominant rules in the construction of kinship groups;
• **Religion:** The proportion of the most common "universalist" religions.

c) Cartographic presentation

In addition to tabled data sets, the documentation of traditional sociocultural units is presented on maps of high data density. These maps are presented in two groups: 12 so-called Identification Maps, and 24 Thematic Maps, documenting most of the relevant anthropological variables in the form of culture types. They can be reconstructed and changed with any geographical information system; it is also possible to joint the three regions into one large map on Africa, Asia (excluding Russia), and 4 Melanesian countries.

**The identification maps (scale 1 : 9 to 16 Mio. - see examples Appendix IIa).**

7 Asian and 5 African maps identify the names, geographical localizations, and population sizes for the traditional sociocultural units included in the data bank. The color of the background indicates the population density of the countries (or provinces/federal states in China and India). All the cultural units to which the signs on the thematic maps refer can be identified on the identification maps. Attached are tables (2 to 3 pages per map) which provide a quick overview of the largest traditional sociocultural units and their population sizes, as well as the most important religious and linguistic groups in each country.

**The thematic maps (scale 1 : 26 Mio. - see example: Appendix IIb).**

For each of the three main regions of the non-western world (Africa; South- and East Asia; Southeast Asia and Melanesia), 8 topics are presented in suggestive maps of high information density. These topics cover:
- traditional types of production systems
- traditional types of precolonial political organizations
- traditional types of marriage and transactions
- traditional types of family organization
- traditional types of intergenerational transfer of social status
- traditional types of patri- and matrilinearity
- traditional types of kin groups
- language families.

Thematic maps, unlike the identification maps, contain legends which require scientific explanations of at least 3 to 5 pages for each of the 8 topics. For the time being, an unpublished extensive commentary to the legends exists in German.
3.2 THE CONSTRUCTION OF NATIONAL INDICATORS

As long as cultural information is available for local social units only, it cannot be correlated with national data. In principle, two solutions are thinkable in order to bring the two levels together: either national information – on GNP, education, health etc. – is disaggregated to the level of local units, or the cultural information of local units is aggregated to national level.

The first solution would be preferable, because it increases information instead of decreasing it. Unfortunately, this way is blocked precisely because additional information is involved. If anything, disaggregated national data are available for administrative units, but these administrative units of lower order are not congruent with traditional cultural units. Therefore, in spite of the loss of information, ethnographic information was aggregated up to the national level. Aggregation means: the calculation of national averages weighted by the proportion of local units in a country's population. Mathematically, the algorithm for aggregation was as follows: (1) Calculation of the proportion (%) of each cultural unit in the total national population in 1960; (2) Multiplication of (1) by the value of the variable; (3) The calculation of the sum of ranked values of all cultural units leads to the country value. According to circumstances, the value was transformed in a scale ranging from 0 to 100 (e.g. figure 5 below), or indices were constructed with standardized values. This procedure is demonstrated by a simple example from Sri Lanka. In the chapter on "Ethnicity, Religion and Citizenship", the Sri Lankan Census (1980) gives the following figures and comments a:

Table 2: 
The aggregation of ethnographic information on national level - a fictitious example for Sri Lanka.

<table>
<thead>
<tr>
<th>Ethnic group</th>
<th>Population of the cultural unit in 1960</th>
<th>Proportion of the cultural unit (%)</th>
<th>Original value (ranked)</th>
<th>Weighted value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sinhalese</td>
<td>10,979,561</td>
<td>74.0</td>
<td>1</td>
<td>74</td>
</tr>
<tr>
<td>Sri Lanka Tamil</td>
<td>1,886,872</td>
<td>12.7</td>
<td>3</td>
<td>38.1</td>
</tr>
<tr>
<td>Indian Tamil</td>
<td>818,656</td>
<td>5.5</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>Sri Lanka Moor</td>
<td>1,046,926</td>
<td>7.0</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>Burgher</td>
<td>39,374</td>
<td>0.3</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>Malay</td>
<td>46,963</td>
<td>0.3</td>
<td>3</td>
<td>0.3</td>
</tr>
<tr>
<td>Other [like Vdhhahs]</td>
<td>28,398</td>
<td>0.2</td>
<td>3</td>
<td>0.6</td>
</tr>
<tr>
<td>ALL ETHNIC GROUPS:</td>
<td>14,846,750</td>
<td>100.0</td>
<td>-</td>
<td>138.3</td>
</tr>
</tbody>
</table>
In this fictitious example with seven sociocultural units and a variable with three values only, the country value would be 138.3. It becomes clearly visible that the country value is highly determined by one group. The higher the proportion of units with high values, the higher the total of the country. The maximum would be 300, the minimum 100, *irrespective of the number of units in a country*, but only defined by the variable's range.

### 3.3 NATIONAL INDICATORS OF CULTURAL HERITAGE

By aggregation, the set of ethnographic variables is reproduced on a national level. In addition to the aggregated anthropological data, a few more indicators from other sources are included in the list of national indicators of the cultural heritage (see below). In the following, the two main dimensions inherent in the anthropological variables will be discussed, the structural complexity first, the cultural style second. This section prepares the ground for the presentation of some results on the relationship between cultural heritage and the development of non-Western countries.

#### 3.3.1 Main dimension I: Structural Complexity

a) The aggregated traits of pre-national cultural units

Statistical factor analysis in cross-cultural research (i.e. of ethnographic units) consistently produces a first, strong factor which combines technical and sociopolitical aspects of the cultural organization. We expect the same pattern to appear in the aggregated data. As table 3 shows, the replication on national level analysis perfectly replicates cross-cultural results inspite of the limited number of cultural indicators available world wide.

Table 3:
The 10 variables loading on the first factor higher than .50.

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Agro-technical efficiency</th>
<th>Sociopolitical differentiation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>ATE</td>
<td>SPD</td>
</tr>
<tr>
<td>P3</td>
<td>Population size</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>P2</td>
<td>Size of local community</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>P4</td>
<td>Political hierarchies</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>P5</td>
<td>Class stratification</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>T4</td>
<td>Writing system</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>E2</td>
<td>Intensity of cultivation</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>E5</td>
<td>Major crop type: Cereals</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>T1</td>
<td>Plough cultivation</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>T2</td>
<td>Metal working</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>T3</td>
<td>Weaving</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
Table 3 includes all the variables loading higher than .50 on the first factor. The economic and sociopolitical character of the variables is so obvious that the factor can be called the "structural complexity of cultural heritage". Looking at the 10 variables in more detail, one detects two different aspects of the dimension: one is more social and political (\(SPD = \text{Socio-Political Differentiation}\)), the other more technical (\(ATE = \text{Agro-Technical Efficiency}\)). The relative positions of the 87 African, Asian, and Melanesian countries on the two aspects of traditional structural complexity is shown in Figure 5 (below). The two sub-dimensions of the structural complexity are significantly correlated (\(R=64\)). Societies with a high loading on this factor may on the one hand, have a larger population, and be more vertically stratified, with larger settlements (horizontal axis); or, on the other hand, they may have developed agricultural systems based on cereals and plough cultivation (vertical axis). Societies with lower loadings are less stratified with a more extensive subsistence economy. Whether the existence of an elaborated writing system should be classified as "social" (focusing on the social class producing and using the knowledge under pre-industrial conditions) or as "technical" (focusing on the functional aspect of increased efficiency in theocratic or bureaucratic control), is a matter of taste. I prefer to class the variable as sociopolitical.

The fact that the \textit{structural} dimension of cultural heritage is statistically reproduced permits the identification of other cultural aspects \textit{not} correlated with structural complexity, representing indicators of the cultural \textit{style}. The mode of marriage may serve as an example. Under pre-industrial conditions, the mode of marriage does not have much to do with the structural complexity of a society. Bride-price, dowry, exchange of wives etc. can be found in societies of very different levels of structural complexity. Another example is the preference for matri- or patridendominant rules. On nearly all levels of structural complexity both kinds of social organizations are found – the difference is a matter of cultural style, not of power potentials and intersocietal competitiveness.

b) Cultural homogeneity of nations

The higher the structural complexity of pre-national cultural units, the more homogeneous are present-day states and the higher the proportion of religions of a non-local type. Because of the functional logic of these correlations, the two additional variables can be integrated in the concept of structural complexity.

---

8 The term complexity always relates to "structure" because anthropological field work found amazing complexity among structurally simple societies. Such complexity may have developed in kinship systems, mythology, health conceptions, music or other fields. Since complexities in non-structural fields are less relevant in intersocietal competition, in an article on culture and development, complexity is associated only with the structural form.

9 "Animism", "ancestral religions", etc. as part of a local socio-ecological context, as opposed to "universalistic", monotheistic", "world" religions which are, to a large degree,
Figure 5:
87 non-Western nations in Africa, Asia and Oceania: Sociopolitical differentiation and Agro-technical Efficiency

The graph shows the traditional agrarian intensity (vertical) and social differentiation (horizontal) in 87 non-Western countries. The stronger the sociopolitical differentiation of the indigenous, pre-colonial societies, the more intensive their agricultural production is (and vice versa). Three of the four Melanesian countries (small frame; Fidji ranges in the middle due to its large Indian population) exhibit the lowest degree of traditional structural complexity, followed by the African countries south of the Sahara, then the countries of western Asia and North Africa, which again are followed by the remaining Asian countries. Some Arabic countries, as well as Mongolia, stand out because social differentiation is relatively much higher than agricultural intensity (big frame).

decontextualized. We are fully aware of the crudeness of such a typology, knowing that "local" religions as opposed to "universalistic" religions embrace highly different situations. However, the criterion regarding the presence or absence of organized priesthood, holy scripts, or large temple buildings is relevant and well documented.
Linguistic and religious homogeneity records the percentages of the most common language and the most common religion in a country. Table 4 and figure 6 below) give an indication of the great variety found in the non-European world.

Table 4:
The linguistic homogeneity and heterogeneity of nations.

<table>
<thead>
<tr>
<th>Country</th>
<th>main language in %</th>
<th>Number of languages spoken</th>
<th>Country</th>
<th>main language in %</th>
<th>Number of languages spoken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Korea Rep</td>
<td>100.0</td>
<td>1</td>
<td>Zaire</td>
<td>17.7</td>
<td>212</td>
</tr>
<tr>
<td>Korea DPR</td>
<td>99.5</td>
<td>2</td>
<td>Cameroon</td>
<td>18.5</td>
<td>269</td>
</tr>
<tr>
<td>Japan</td>
<td>99.2</td>
<td>14</td>
<td>Tanzania</td>
<td>18.6</td>
<td>127</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>99.1</td>
<td>37</td>
<td>Uganda</td>
<td>19.0</td>
<td>41</td>
</tr>
<tr>
<td>Burundi</td>
<td>98.2</td>
<td>3</td>
<td>Nigeria</td>
<td>21.4</td>
<td>413</td>
</tr>
<tr>
<td>Taiwan</td>
<td>98.1</td>
<td>21</td>
<td>South Africa</td>
<td>21.5</td>
<td>32</td>
</tr>
<tr>
<td>Yemen AR</td>
<td>98.1</td>
<td>3</td>
<td>Ivory Coast</td>
<td>23.2</td>
<td>72</td>
</tr>
<tr>
<td>Egypt</td>
<td>97.8</td>
<td>11</td>
<td>India</td>
<td>25.4</td>
<td>380</td>
</tr>
<tr>
<td>Jordan</td>
<td>97.6</td>
<td>6</td>
<td>Liberia</td>
<td>28.6</td>
<td>34</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>97.0</td>
<td>6</td>
<td>Kenya</td>
<td>29.5</td>
<td>59</td>
</tr>
<tr>
<td>Malagasy Rep</td>
<td>96.8</td>
<td>3</td>
<td>Chad</td>
<td>29.8</td>
<td>117</td>
</tr>
<tr>
<td>Somalia</td>
<td>96.1</td>
<td>7</td>
<td>Guinea-Bissau</td>
<td>32.9</td>
<td>22</td>
</tr>
<tr>
<td>China</td>
<td>93.9</td>
<td>142</td>
<td>Sierra Leone</td>
<td>33.5</td>
<td>23</td>
</tr>
<tr>
<td>Tunisia</td>
<td>93.0</td>
<td>11</td>
<td>Zambia</td>
<td>33.7</td>
<td>37</td>
</tr>
<tr>
<td>Lebanon</td>
<td>92.9</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Rwanda</strong></td>
<td><strong>92.7</strong></td>
<td><strong>3</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>West Sahara</td>
<td>92.0</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yemen PDR</td>
<td>90.9</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Spoken languages

It is remarkable that among the 18 linguistically homogeneous countries, all but Burundi and Rwanda belong to the Asian or Arab group. This is in sharp contrast to the 13 linguistically most heterogeneous countries, all of which (with the notable exception of India) are in Africa, south of the Sahara. Table 4 further shows that larger numbers of spoken languages are not only found in countries of great linguistic heterogeneity, but also in some of the more homogeneous countries, where dozens of spoken languages can be found (most extreme case: China with more than 140 different languages).

Common language is an indicator for common history and potential interaction. The more heterogeneous the population of a country, the smaller the common ground of symbolic and direct communication becomes and social mobilization, common law, and political legitimization become more difficult. The proportion of the largest linguistic community is highly relevant for the process of nation building. What such different countries as Korea, Japan, Bangladesh or Burundi have in common is their linguistic homogeneity, in contrast to a country like Zaire where most of the languages
represent the mother-tongue for less than 1% of the country's population. As the cases of China and India show, linguistic homogeneity depends less on a limited number of spoken languages but reflects the proportion of the largest linguistic community (94% in China, 25% in India).

**Religious universalism**

Compared to language, the symbolic universe of common religion is much more widespread. Countries normally have several spoken languages, but only one dominant body of religion. (Different denominations within the main religions are not considered here.) In order to measure national homogeneity or heterogeneity in the field of religion, it may be useful to consider the notion of competition between religions and their embeddedness in different sociopolitical systems. Two kinds of competition between the religions seem relevant here. On the one hand, monotheistic or universalistic world religions compete with animistic, local or kinship based religions. On the other hand, there is competition among "universalistic" religions. A high proportion of people adhering to context-bound religions indicates not only religious, but also cultural heterogeneity. Religious universalism refers to a historical situation in which religions became more abstract and to some extent decontextualized, though still remaining firmly interwoven with the historical process of political centralization and social differentiation (Siriwardena 1987). The more thorough the colonization by archaic states in the distant past, or by colonial and postcolonial states in the recent past, the more local religions were replaced by religious forms which transcendent local social networks. This process has not yet come to an end and probably will never do so.

Using the synchronic approach of comparative analysis, countries may be grouped according to the relative proportions of "universalistic" (decontextualized) and "local" (contextual) religions (figure 6). It is felt that this dichotomy allows us to grasp a fundamental cultural divide of great importance in the ongoing process of globalization.

Figure 6 shows the situation in non-European countries in Africa, Asia, and Melanesia. On the vertical axis, the proportion of people adhering to a dominant world religion is indicated. The horizontal axis indicates the proportion of believers in local cults. The different stages in the historical process of replacing local religions by universalistic ones is reflected in a country's position along the diagonal axis. There is a concentration of 43 Asian countries (triangles) – representing more than 80% of the non-European population in 1960 – with nearly 90% or more of the population adhering to the same main religious group. In countries where the dominant religion percentage is less than 80% , a bifurcation is discernible.
Figure 6: Homogenous and heterogenous countries in terms of religion

- When the complementary religion is of the local type, then an undisputable hierarchical relationship between the two types of religion characterize the situation, as is the case in most African countries (small black squares) where local religions are under pressure from Islamic or Christian denominations. Such religions offer cognitive and moral codes more adapted to high structural complexity. The close position to the line indicates that competition within a country, from non-local religions is minimal (with the exception of Malawi, Tanzania and Nigeria).

- When the complementary religion is also of the "universalistic" type, these polar or tripolar situations are clearly more conflictive, although rare. It is only in a few countries, like Sri Lanka, Ethiopia, Malaysia, Lebanon, and Nigeria, that more than one world religion exists in substantial proportions. Competition in such situations frequently takes on a tougher quality, since world religions are rooted in societies of comparable structural complexity.
Religion defines relatively large areas of shared meanings and symbolic practice. The large number of spoken languages compared with religions seems to indicate that religious differences are deeper than language differences, though of less practical value. Language differences within an area of shared religious beliefs are more common than the reverse.

3.2.2 Main dimension II: Cultural Style

Cultural style is a concept with a plural meaning. Whereas structure deals with one dimension only, the potential power of societies, the theme of cultura style is diversity within comparable levels of structural complexity. This point is important because only then does it represent a positive social capital. However, if cultural diversity reflects stable power differentials, diversity can be negative and incompatible with the intentions of qualitative development and human rights.

What kind of "free" cultural elements can be observed in traditional societies, i.e. what institutional variations are not connected with structural complexity? As mentioned above, the number of such traits is probably very large, but has to be restricted, in the approach of the present analysis, to those which are well documented worldwide. They can be grouped under the three headings, listed below:

1) Variations in the traditional type of subsistence economy:
   - the relative importance of animal husbandry for the daily diet;
   - the relative importance of nomadic cattle-raising compared to sedentary agriculture.

2) Variations in the traditional type of kinship organization:
   - the elaboration of a lineage organization in marriage and kinship;
   - the relative importance of patri- vs. matrilineal rules in inheritance.

3) Variations in the type of "decontextualized" religions prevailing in 1960:
   - % of christians in the national population;
   - % of muslims in the national population;
   - % of "non-theistic" religions or moral systems (Buddhism, Confucianism, Shintoism, Taoism etc.) in the national population;

Based on these criteria, a typology of the cultural heritage of nations can be constructed. Within the qualitative criteria, correlations indicate two distinct and broad cultural complexes: on the one hand, different configurations of nomadic herders with a tendency to patrifocal kinship organization and the islamic religion (clear exception: Mongolia); on the other hand, configurations of various agri- and horticulturalists. It should be noted that the distinction between pastoralism, based on animal converters, and agriculture, based on vegetable converters, first of all reflects adaptations to different environmental conditions, not different stages in cultural evolution.
It goes without saying that these two general adaptive types appears in a large number of cultural forms. Based on preliminary analysis (Müller 1996), I suggest a grouping of nations on a medium level of differentiation: not too detailed, but still sufficiently complex to permit an adequate approximation of empirical variations. The same result is shown in table 5. The figures attached to the sample countries indicate the value calculated for the sociopolitical differentiation (SPD):

Table 5:
Cultural heritage: Criteria of a typology of nations

1 Africa south of the Sahara and Melanesia with low structural complexity

<table>
<thead>
<tr>
<th>Example</th>
<th>Subsistence</th>
<th>Kinship</th>
<th>Religion</th>
<th>National Homogeneity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Papua NG (8)</td>
<td>agriculture</td>
<td>mixed</td>
<td>Christian</td>
<td>low</td>
</tr>
<tr>
<td>CentrAfrRep.(10)</td>
<td>agriculture</td>
<td>patrilinear</td>
<td>animistic</td>
<td>medium</td>
</tr>
<tr>
<td>Gabon.(14)</td>
<td>agriculture</td>
<td>patrilinear</td>
<td>Christian</td>
<td>medium</td>
</tr>
<tr>
<td>Congo (14)</td>
<td>agriculture</td>
<td>matrilinear</td>
<td>mixed</td>
<td>medium</td>
</tr>
<tr>
<td>Zambia (21)</td>
<td>agriculture</td>
<td>matrilinear</td>
<td>animistic</td>
<td>low</td>
</tr>
<tr>
<td>Ghana (41)</td>
<td>agriculture</td>
<td>matrilinear</td>
<td>mixed</td>
<td>medium</td>
</tr>
<tr>
<td>Benin (48)</td>
<td>agriculture</td>
<td>patrilinear</td>
<td>animistic</td>
<td>medium</td>
</tr>
<tr>
<td>Rwanda (52)</td>
<td>mixed</td>
<td>patrilinear</td>
<td>Christian</td>
<td>high</td>
</tr>
</tbody>
</table>

2 Countries of the arid and semi-arid zone with low to medium structural complexity

<table>
<thead>
<tr>
<th>Example</th>
<th>Subsistence</th>
<th>Kinship</th>
<th>Religion</th>
<th>National Homogeneity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mali (34)</td>
<td>mixed</td>
<td>patrilinear</td>
<td>Islamic</td>
<td>medium</td>
</tr>
<tr>
<td>Mongolia (39)</td>
<td>lifestock</td>
<td>patrilinear</td>
<td>Buddhist</td>
<td>high</td>
</tr>
<tr>
<td>Saudi Arabia (59)</td>
<td>lifestock</td>
<td>mixed</td>
<td>Islamic</td>
<td>high</td>
</tr>
<tr>
<td>Libya (71)</td>
<td>mixed</td>
<td>patrilinear</td>
<td>Islamic</td>
<td>high</td>
</tr>
</tbody>
</table>

3 Asia: Structural complexity from high to very high

<table>
<thead>
<tr>
<th>Example</th>
<th>Subsistence</th>
<th>Kinship</th>
<th>Religion</th>
<th>National Homogeneity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaysia (64)</td>
<td>agriculture</td>
<td>mixed</td>
<td>mixed</td>
<td>medium</td>
</tr>
<tr>
<td>Bangladesh (76)</td>
<td>agriculture</td>
<td>patrilinear</td>
<td>Islam</td>
<td>high</td>
</tr>
<tr>
<td>Syria (80)</td>
<td>mixed</td>
<td>patrilinear</td>
<td>Islam</td>
<td>high</td>
</tr>
<tr>
<td>Myanmar (83)</td>
<td>agriculture</td>
<td>matrilinear</td>
<td>Buddhist</td>
<td>high</td>
</tr>
</tbody>
</table>

The three main clusters are clearly regional and at the same time represent different levels of traditional structural complexity. African countries occupy the lower half of the scale, predominantly based on agriculture in forest areas (mostly hoe-culture based on women's work); the countries of the arid and semi-arid zone (including Mongolia) ranging around the lower middle level of complexity, are strongly dependent on lifestock, and countries of high structural complexity – a zone extending from the Mediterranean Sea to the Pacific Ocean – depend on cereal agriculture. Within each of the three regional main clusters, various kinds of configurations appear as subtypes. In the analysis of the influence of cultural heritage on the way the different countries
adjust to the process of globalization, not only are traditional structural complexity and cultural homogeneity expected to play a role, but also cultural style, operationalized in terms of traditional subsistence economy, kinship system, and religion.

IV: SUMMARY AND DESCRIPTIVE MODEL

Links between culture and development are discussed under the premises: (I) that culture is not reduced to religion, language and art, i.e. to symbolic expressions, and (II) that the cultural heritage from the past is expressed as properties of modern states. The last point responds to the methodological requirement that indicators of the cultural heritage on the one hand, national indicators of development on the other hand, are available on the same organizational level.

“Culture” defines a specific, socially institutionalized way of life. Three central areas of cultural functioning are distinguished: (I) technology; (II) economic, social, and political organisation; and (III) normative codes and values. These three areas must be analysed at two interrelated analytical levels (see table 6):

Table 6:
Two-level analysis for an explanation of economic development

<table>
<thead>
<tr>
<th>METHOD LEVEL</th>
<th>COVERAGE</th>
<th>SOURCES</th>
<th>ANALYTICAL DIMENSIONS</th>
<th>TIME SPAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>CULTURAL HERITAGE</td>
<td>Pre-colonial societies: socioeconomic structure, language and religion</td>
<td>Anthropological data banks and monographs</td>
<td>Structural complexity and cultural style</td>
<td>approx. 100 years</td>
</tr>
<tr>
<td>ECONOMIC DEVELOPMENT</td>
<td>Modern nations: economic and social development</td>
<td>Data from UN-Organisations; results from cross-national analysis</td>
<td>Structural growth and qualitative development</td>
<td>approx. 30 years</td>
</tr>
</tbody>
</table>

The cultural heritage roughly describes the traditional situation prior to European expansion, i.e. it is the base line of development. The anthropological categories refer to traditional types of economy, modes of settlement, systems of kinship and political organisation, in addition to language and religion. Without wanting to idealize non-European cultures, we want to sensitize the reader to another aspect of cultural diversity on our planet. There is also the expedient, pragmatic argument that strategies of development – even catch-up development and economic growth – yield the best qualitative results when they start out explicitly from specific cultural preconditions (Kottak 1990). Since conventional socio-economic indicators of national development do not deal with such aspects at all, they should be complemented for historical informations provided by social and cultural anthropologists.
The potential use of the abundantly available statistical data on economic, social and symbolic-normative development as cultural indicators has so far gone unrecognised. In no book are such sources drawn upon systematically in order to document the cultural differentiation of world society, even though the data are particularly well-suited to comparative analyses. The reason for this lack has probably more to do with a defensive and conservative concept of culture than with problems of feasibility. From such standpoint, culture and development seem at times to be antagonistic concepts, because culture - in the sense of transmitted values and their social representation - is often attacked and devalued in the course of development.

*But development can also be conceived as cultural change.* It is characteristic of the third world modernisation (in contrast to the new religious movements in the post-modern consumer societies) that the cultural core shifts from the religious to the technological. In developing countries the legitimising effect of cultural symbols becomes transferred from the agrarian to the industrial sector, or to put it somewhat summarily, there is an shift from ancestors, priests, temples and palaces to material infrastructure, health, education and mass consumption, and from rejoicing in family and inter-generational continuity to a fascination with individual self-realisation and technological control of the environment. The question as to how long such fascination will last is not the issue here. Of central concern here is the thesis that, in an epoch of, there is a fundamental shift in the dynamics of culture, and that therefore cultural analysis must keep pace with this movement, if it is not to limit itself to being a purely conservationist project. Accordingly, the instruments of cultural analysis also have to change.

By way of cross-national comparison, the analysis aims to identify the relative contribution of the cultural factor to quantitative and qualitative growth of 87 developing countries in Africa, Asia and Oceania in times of global economic expansion (before 1975) and in times of recession (after 1975). New data allows us to study the interconnection between indigenous forms of social organisation, and the present position of countries in the world system. The object of this contribution is to increase awareness regarding the role cultural factors play in development.

The cultural heritage of the non-European countries was constructed from variables representing structure and style of traditional cultural units in each of these countries. The structural differentiation includes technical, organizational and symbolic aspects as far as they are relevant in intersocietal competition. Cultural style, defined as cultural elements which are independent from structural complexity, was identified in terms of economic, social, and symbolic characteristics prevailing in the 96 countries studied. Whereas the main differences in economic style could be interpreted, to a large extent, as adaptations to different climatic conditions, the differences in kinship organization and religion seem to reflect rather arbitrary historical particularities.
The theoretical status of cultural heritage in a theory of development is unique in that local traditions are always in the position of independent variables. Since one of the fundamental aspects of culture lies in its contribution to continuity, social integration and personal identity, the way developing countries assimilate external influences should be interpreted in the light of their cultural heritage: their traditional economic system (e.g. Lenski/Nolan 1984), their traditional social organization (e.g. leVine/White 1986), their traditional political organisation (e.g. Punam 1993), and religion (e.g. Bellah 1985). In a global model of the economic, political and symbolic penetration of the capitalist system, the cultural properties of local structure and style define a base line for development, and an autonomous reference system for local actors, frequently ignored by metropolitan actors. In more abstract terms, and in line with the concept of culture presented earlier, the qualities of social forces at work on all social levels can be grouped under three headings (see figure 7): economic, political, and symbolic.

Figure 7: Quantitative and qualitative dimensions operating on global level
Firstly, we can identify the economic organization of societies. As far as cultural heritage is concerned, a distinction was proposed between agricultural efficiency and the type of agricultural techniques. According to Nolan/Lenski (1984), efficiency was operationalized in terms of energy conversion and output per hectare (Adams 1988; Debeire 1991), and the qualitative difference of agricultural systems was based on the dependence on livestock or agriculture. It is expected that certain of these properties of the economic systems influence not only the adaptive strategies of peripheric societies in the face of external forces of globalization, but also the strategies of the forces operating in the world market.

Secondly, we identified various aspects of the traditional social and political organization. As far as cultural heritage is concerned, it is expected that the sociopolitical differentiation (SPD) together with the degree of territorial homogenization in terms of religion and language are strong predictors for successful nation building, power and bargaining capacity in the world system. But certain qualities of the local kinship system can also shape the character of society, irrespective of the level of structural complexity. Traditional kinship organization, as well as the degree of amalgamation of kinship and political organization, defines the extension of social units within which trust is rational behavior (Fukuyama 1994). The question arises as to what extent the precolonial disentangling of the political from the social by developing separate political institutions influences the capacity of dealing rationally with social forces operating on global level. The same applies to the kind of kinship organization. In the world system, political power depends on the economic capacity to extract resources from other countries, partly civilized by international norms.

Thirdly, the symbolic field was considered in three domains: religion, language, and kinship organization. Language and religion are widely discussed in literature, particularly with respect to ethno-nationalistic movements (Gurr 1993). They should be studied in much more detail than was possible here if their influence on social processes is to be assessed correctly. But even the very general approach used in this statistical analysis produces interesting insights. On the one hand, religion and language were introduced as an indicator for the cultural homogeneity, or heterogeneity, of contemporary nations. Homogeneity correlates with structural complexity if the proportion of "contextual" religions in a country is taken as an indicator for cultural diversity. On the other hand, language and religion define a framework of collective representations of social, political, economic and symbolic boundaries. Insofar as identity construction is relevant for dealing with domination, patterns of struggle, and organization of resistance, qualitative properties of the symbolic universes are expected to matter a lot in the constitution of world society. Apart from religion and language, the principles of kinship organization should also be taken into consideration when analyzing the ideological (legitimizing) properties of cultural heritage. For example, I expect that the role of women in development, their
productive and reproductive choices, and their civic, cultural and political participation at all levels (UNESCO 1995: 273) are influenced by the type of traditional kinship organization. The symbolic forces operating in the world society contribute to globally relevant standards guiding cognitive, normative, and esthetic orientation, on global no less than on national or local level (Wallerstein 1990).

However, the principles of efficiency, power, and legitimation are ambivalent since they play both an integrative and a disintegrative role in the process of globalization. Integration into the world market, for instance, increases competitiveness, profits and higher income for the privileged, and at the same time deprives the masses of personal and communal property, destroying their subsistence economy. Furthermore, increasing national power in the peripheries may reduce the power gap between the countries in the world system, but at the same time transferring global disparities into the interior of each country. Finally, when propagating new global ethics for the new global village, one should not forget the fact that most people live in real, not virtual villages and urban districts. As long as secure access to jobs, resources, and political influence continues to be the privilege of small minorities in the world population, contextualized identity space should not be delegitimized too early by global ideologies reflecting, after all, highly particularistic interests of a particular social class. In a context of increasing social polarization, the majority of people remain in too marginal a position to reasonably turn to Western individualistic strategies and value patterns. As long as the dominant actors are not willing to change the rules of the game, poor people may find themselves better-off when they reproduce or construct social networks which are inspired by traditional notions of power, legitimation, honor, shame, and gender roles.

It is here that the empirical data available on cultural heritage may contribute to a more pluralistic assessment of the future course of social processes in globalization. It is my hypothesis that modern changes more often than not reproduce pre-existing historical differences. Thanks to the new indicators on the cultural heritage of national units, cross-national analysis which permits the testing of such hypotheses has become possible. Preliminary results support the expectation that there is great explanatory potential in an approach which succeeds in integrating the concept of culture into an operational model of development.
APPENDICES
APPENDIX I:
CULTURAL FACTORS IN DEVELOPMENT:
A GLIMPSE INTO A WORKSHOP

The hypothesis of the relevance of cultural heritage in the process of globalization is systematically tested in cross-national comparison. The parts which follow contain a tentative approach to theory construction (A/1 - A/3); scattergrams of statistically significant correlations between cultural indicators of traditional structural complexity and properties of present-day nations (A/4 - A/6); empirical evidence of the relevance of cultural style ("familism") for economic growth (A/7); and a short conclusion regarding the explanatory potential and limitations of the cultural indicators available from social anthropology (A/8). The reader should be aware of the exploratory nature of these results. They should stimulate the discussion, and explore the limits of the approach presented here.

A/1

Table 7:
Typology of variables based on the functional model of culture

<table>
<thead>
<tr>
<th><strong>CULTURAL HERITAGE</strong></th>
<th><strong>GENERIC CULTURE:</strong> Core functions (examples)</th>
<th><strong>DIFFERENTIAL STRUCTURE:</strong> Structure (examples)</th>
<th><strong>Style:</strong> (examples)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>Frequency of famines</td>
<td>Agro-technical efficiency</td>
<td>Relevance of livestock</td>
</tr>
<tr>
<td>Organization</td>
<td>Frequency of wars</td>
<td>Sociopolitical hierarchy</td>
<td>Mono- or polygyny</td>
</tr>
<tr>
<td>Meanings</td>
<td>Preferences of girls or boys</td>
<td>Proportion of Monotheism</td>
<td>Patriarchal dominance</td>
</tr>
<tr>
<td><strong>NATIONAL DATA</strong></td>
<td><strong>Technology</strong></td>
<td><strong>Organization</strong></td>
<td><strong>Meanings</strong></td>
</tr>
<tr>
<td></td>
<td>Ecological sustainability</td>
<td>Road density</td>
<td>Proportion of public transport</td>
</tr>
<tr>
<td></td>
<td>Gini-coefficient</td>
<td>Level of urbanization</td>
<td>Type of party system</td>
</tr>
<tr>
<td></td>
<td>suicide rates</td>
<td>Existence of death penalty</td>
<td>Legal position of women</td>
</tr>
</tbody>
</table>
Figure 8:
Traditional complexity and modern growth: The three sub-dimensions of the traditional social system proper (not including cultural homogeneity) and predicted links to three different aspects of the structural growth of nations: (I) Technical modernity; (II) Sociopolitical differentiation; (III) Structural growth (change).

Legend:
- Ø POP of cult units (log.) = Average size of the population of the traditional sociocultural units.
- Log. 10 due to asymmetrical distribution.
- ATE = Agro-Technical Efficiency of the traditional sociocultural units according to table 3.
- SPD = Sociopolitical Differentiation of the traditional sociocultural units according to table 3.
- R = Pearson's correlation coefficient N = 87; all values with p < .001
- Arrows = Hypotheses.

I would draw attention to the different qualities of the three hypotheses: "Political power" and "Level of modernization" refer to rank positions, "Economic growth" refers to social mobility. Empirical results support the expected continuity of positions only, not the more relevant hypotheses concerning growth.
A/3

Some hypotheses on structural complexity.

(I)
The cultural heritage may be understood as a base-line for the processes of cultural transformation. The institutional and psychological features of particular cultures constitute local resources for development. As certain institutional and psychological potentials are better suited to generating and maintaining increased productivity than others, such preconditions are highly selective within the framework of a competitive capitalist environment. Therefore, the normative and cognitive incompatibilities of local-traditional and global-modern cultural patterns and mental programming may become key factors of economic success. The increasing disparities between different geographical regions, particularly Africa and Asia, can be explained, to some extent, by the cultural heritage of these regions. However, we reject a one-dimensional explanation, and particularly any kind of "historical determinism". In fact, the ruptures and risks resulting from "catching up" do not result primarily from inherent "weaknesses" in other cultures but from the competitive rules dominating liberal markets.

(II)
Economic (and structural) growth is a necessary, though not a sufficient condition of development in the poorer section of the world system. The cultural heritage is expected to influence economic (and structural) growth in two ways, directly and indirectly. As a rule, we do not expect direct causal links between the cultural heritage and any of the economic aspects of national culture. If statistical correlations can be shown - as we strongly expect they will -, this would reflect actors' strategies under particular external conditions, like climate, soil, raw materials, world market prices, position in international networks, strategic interests of external powers, and so on. Most such intermediary factors influencing economic and structural growth will have to be excluded from empirical analysis for practical reasons, though not excluded from theoretical consideration.

(III)
Longitudinal data comparing the situation in the 1960s, 1970s, and 1980s may support another hypothesis: that is, the influence of cultural heritage varies with the long economic waves. During phases of economic expansion with increasing prices for raw materials, and higher capacity to absorb labor force and guarantees for social security, traditional networks and knowledge systems are quickly eroded and eventually become redundant. During shrinking phases, or in areas with stagnating economies, anomie increases, and people as well as political leaders tend to reactivate local resources of organisation, solidarity, and legitimization.
(IV)

In situations of metropolitan weakness we expect a contradictory social dynamic: If the traditional societies in a developing country are of a high structural complexity, such phases may stimulate endogenous capacity building, combined with economic growth (example southeast Asia since the eighties). If however, the traditional societies in a developing country are of low structural complexity, discouraging the appearance of central authorities, and are based on a "moral development" (Kohlberg) centred around kinship solidarity, phases of metropolitan weakness will probably coincide with low economic performance. If these assumptions are correct, metropolitan recessions tend to polarise the periphery (but not the world system) due to cultural differences with respect to the capacity of profiting from new opportunities in a competitive environment.
Continuity in history: The population size of sociocultural units compared with the population of present-day states.

The scattergram shows the correlation between the average population size of the traditional cultural units (approx. 1960) and the national population in 1970. The four different symbols indicate four major cultural areas: Subsaharan Africa, West Asia and North Africa, South and East Asia, and Melanesia. The size of the symbols indicates the population of the largest traditional sociocultural unit in each country, which is a very rough approximation.

Two regularities appear:
- On the one hand, the larger the cultural units in the past, the larger the modern nations are nowadays. This is shown with the regression curve.
On the other hand, the size of the symbols stands for the proportion of the largest cultural unit within each country: The larger the population in the past and in the present (upper right), the more homogenous it is in terms of religion and language. Two historical factors could explain the continuity in the ranking of cultural and national units: (1) the existence of a political class which successfully established institutions enabling them to mobilize and circulate economic surplus on a large scale; (2) the availability or nonavailability of symbolic systems which are functional for legitimising hierarchical control, such as writing systems. As a general rule, I would say that cultural homogeneity contributes to the capacity for social mobilization.
The proportion of industrial labor force as a function of traditional sociopolitical complexity.

**Correlations:**
1965: $R = .54$;

**Commentary:**
- The graph shows two regression curves: one for 1965, one for 1990. The position of the symbols, however, refers to one point in time only, i.e. to 1990.
- The shape of the symbols reflects the population size of a country (different from figure 9!).
- As can be seen from the graph, the increase of labor in industry between 1965 and 1990 is not the same everywhere: in the lowest quarter of the traditional complexity scale (below 25), industrial labor increased by 1% only (from 7 to 8%); in the highest
quarter (above 75), the proportion increased by 5% (from 16 to 21%). This means that the discrepancy in the labor employment has increased during the period observed.

- Among the countries with a labor force higher than expected (i.e. above the curve of 1990) there are many which export industrial raw materials. In fact, among the units above the upper curve (like South Africa, UAE, Libya, Malaysia, Congo, etc.), more than 50% of the total exports result from the export of non-agricultural raw materials, as against 17% for the units below the lower curve. Such ecological rents permit capital investments which go far beyond anything possible on the basis of internal mobilization of labor and tax extraction alone. In such cases the level of industrialization cannot be predicted by cultural heritage alone.

- It should be noted that relevance of the traditional social complexity for industrialization is increasing rather than decreasing. This observation probably has to be interpreted in the context of the increasing economic and political competition among developing countries for capital investments, so that potential investors can be more selective than in the past. Because capital-intensive production needs higher qualifications, the weight of cultural factors increases, and the criteria as to which forms of social and symbolic capital are considered positive or negative are narrowing.
Two measures of traditional structural complexity: Their explanatory power for structural growth on national level.

<table>
<thead>
<tr>
<th>Variables</th>
<th>R with SPD</th>
<th>R with ATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical infrastructure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Irrigated land as % of crop land (1978)</td>
<td>.56*</td>
<td>.48*</td>
</tr>
<tr>
<td>- Paved roads per 1000 km2 of land area (1980)</td>
<td>.54*</td>
<td>.40*</td>
</tr>
<tr>
<td>- Total rail track per 1000 km2 of land area</td>
<td>.43*</td>
<td>.30</td>
</tr>
<tr>
<td>- Number of sea, river and lake ports per 1 Mio km2</td>
<td>.72*</td>
<td>.45*</td>
</tr>
<tr>
<td>Economic sector structure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- % of labor force in agriculture (1965)</td>
<td>–.53*</td>
<td>–.33*</td>
</tr>
<tr>
<td>- % of labor force in agriculture (1989-91)</td>
<td>–.53*</td>
<td>–.25</td>
</tr>
<tr>
<td>- % of labor force in industry (1965)</td>
<td>.54*</td>
<td>.35*</td>
</tr>
<tr>
<td>- % of labor force in industry (1989-91)</td>
<td>.67*</td>
<td>.35*</td>
</tr>
<tr>
<td>- Highest international function found in any city</td>
<td>.46*</td>
<td>.32*</td>
</tr>
<tr>
<td>- Manufacturing share of total GDP (1965)</td>
<td>.51*</td>
<td>.33</td>
</tr>
<tr>
<td>- Manufacturing share of total GDP (1989)</td>
<td>.46*</td>
<td>.32*</td>
</tr>
<tr>
<td>Economic autonomy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Public dev. aid in $/cap</td>
<td>–.50*</td>
<td>–.43*</td>
</tr>
<tr>
<td>- Public dev. aid in % of GNP (1980)</td>
<td>–.47*</td>
<td>(–.23)</td>
</tr>
<tr>
<td>- Foreign property in % of GDP (1975)</td>
<td>–.48*</td>
<td>–.51*</td>
</tr>
<tr>
<td>- % of 5 most important export products</td>
<td>–.39*</td>
<td>–.31*</td>
</tr>
<tr>
<td>Human investments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Gross secondary enrolment ratio (total), 1990</td>
<td>.62*</td>
<td>.40*</td>
</tr>
<tr>
<td>- Proportion of age group (boys) in secondary schools, 1980</td>
<td>.59*</td>
<td>.38*</td>
</tr>
<tr>
<td>- Proportion of age group (girls) in secondary schools, 1980</td>
<td>.54*</td>
<td>.32*</td>
</tr>
<tr>
<td>- % persons aged 20-24 enrolled in higher education, 1980</td>
<td>.52*</td>
<td>.38*</td>
</tr>
</tbody>
</table>

* p < .001; no asterix: p 1-5%; () p > 5%.

The two columns show the correlations of the sociopolitical (SPD) and the agrotechnical (ATE) dimensions of cultural heritage with some indicators for economic and structural growth. These are presented under four different headings:

- the technical infrastructure in the agricultural and transport sectors;
- the occupational sector structure;
- the economic autonomy: foreign aid and commodity concentration;
- the level of education.

Where the sociopolitical differentiation (SPD) was traditionally high, today's governments not only invest more in technical infrastructure, but also in education. These human investments enhance the learning, monitoring and managing capacity of national systems. Thus observation can be interpreted in the light of the "culture-as-information" model.
Consistently, with one minor exception, the agro-technical efficiency (ATE) is much weaker as a predictor than SPD. The result shows that measuring the sociopolitical dimension via the horti- / agriculture dichotomy (as Lenski/Nolan 1984 did – see discussion in chapter 1) is far less efficient than the direct measurement with sociopolitical variables.

In sum, the results demonstrate the explanatory power of anthropological indicators of the cultural heritage. In addition they confirm the expectations that the socio-economic position of the peripheric countries continues to reflect the structural complexity of the pre-colonial past. It has to be stressed that the same is not true for socio-economic growth rates. Therefore, I would like to show one more result, relating the cultural heritage to the dynamics of the global system. By doing so, a different group of variables, complementary to the indicators of structural complexity, comes to the foreground.
The micro/macro link: Economic growth as a function of the structural relevance of marriage and kinship ("familism").

F. Fukuya ("Trust" 1995) draws attention to "familism" – not necessarily "immoral" in the sense of Banfield or Putnam, but rather as "family centered norms" or simply kinship orientation. The concept was operationalized on the basis of three variables from our data bank: (1) frequency of mono- and polygyny; (2) the extent of marital transactions, and (3) the extensive elaboration of family networks. The index is composed so as to measure the structural relevance of marriage and kinship in the traditional social structure.

Within nation-states, marriage and kinship behavior belong to the microsocial level. Today, as in the past, the state is antagonistic to the power and autonomy of kin-based groups. On the one hand, state-related classes denounce kin-based solidarity as particularistic and "immoral"; on the other hand, familistic orientation tends to exclude solidarity with generalized others beyond kinship lines.

In order to find the link with structural growth, I think that we should look at the effect of "familism" on demography. Competing kin groups tend to strengthen their position - in the past as in the present - by favoring large numbers of offspring. In today's international competition, however, high fertility increases reproduction costs or, if avoided by neglect, simply postpones the burden for a few years till the unemployed have to be subsidized in one way of another. It is perhaps reasonable to expect that the unresolved conflict between these two radically different types of social formations
absorb substantial social energies and hamper the monitoring and management capabilities of the state. It is therefore assumed that a cultural heritage with greatly extended kin groups ("Familism") reduces modern economic growth via the intervening variable of fertility. On the basis of figure 11 which also includes the rate of analphabetism, it becomes visible that the path from "familism" to economic growth probably leads via analphabetism (negative) as well as via fertility (positive).

**Figure 12.**
Fertility – the most relevant intervening variable between family centered norms and economic growth.

The link between fertility, analphabetism and economic growth is undisputed in development theory. The scattergram in figure 12 shows the correlation with the newly developed indicator for familism, a specific aspect of the cultural style.
The correlation of .75 is high and very significant. Countries below the curve (like China, Thiland or Tunesia) are relatively effective in their efforts to reduce fertility - taking into consideration their traditional social organization. Of course, other factors, like the development position, also play a role, and we should also consider feed-back mechanisms. However, since our cultural indicator precedes all other factors in history, it appears to be a strong evidence for the explanatory power of cultural traditions.

A/8

As a tentative conclusion we may say that the structural position of developing countries and their level of modernization echo the structural complexity of their pre-colonial past. This is the macro-social side of the coin.

For the explanation of the national mobility, however, a more qualitative and micro-social aspect of structural complexity has to be taken into account. Following Fukuyama, I measured the effect of "familism", i.e. the structural relevance of marriage and kinship. The result seems to support the hypothesis which says: The wider and more elaborate the traditional kinship system, the higher fertility and the lower the economic growth rate.

In the macro-social approach, priority is given to the long-term reproduction of power structures. National mobility, then, is deduced from the structural position in the world system (dependence theory). If, however, the focus is on the micro-social processes, the traditional kinship system seems to be more relevant. It influences the strategies of actors and in turn the chances for national mobility. This approach would reflect the modernization theory which explains mobility from within the societies and within the framework of an allegedly open social system. We probably need both theories in order to deal with the empirical evidence.
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