The World Values Survey has been described above. Although the search for dimensions was not a primary purpose of this study, WVS director Ronald Inglehart in an overall statistical analysis found two key country-level factors which he called: 'Well-being versus survival' and 'Secular-rational versus traditional authority' (Inglehart, 1997, pp. 81-98). Well-being versus survival correlated with a combination of Individualism and Masculinity; Secular-rational versus traditional authority negatively with Power Distance.

Michael Minkov issued an extended and updated version of his 2007 book in a new volume *Cultural Differences in a Globalizing World* (Minkov, 2011). For the dimensions Exclusionism versus Universalism and Monumentalism versus Flexumility, country scores have been re-calculated from partly different sources, for 86 countries for exclusionism and for 43 countries for monumentalism. Indulgence versus Restraint has been reversed and renamed Industry versus Indulgence; scores for 43 countries have been based on a slightly different choice of WVS items. The old and new versions of these three dimensions are still strongly correlated, in the case of Indulgence obviously negatively.

A unique feature of the new book is the addition of a dimension not based on survey questions but on a statistically strong cluster of national statistics: murder rates, HIV (AIDS) rates, adolescent fertility rates and low average IQ (Intelligence Quotient, explainable from low education levels). This can be used for validation of dimensions based on survey items. Minkov called it Hypometropia versus Prudence; hypometropia is a medical term for short-sightedness, which he borrowed to avoid an *a priori* depreciating term. He calculated hypometropia scores for 80 countries. It correlates significantly with Minkov's Exclusionism and Monumentalism. From the six dimensions in Hofstede et al. (2010) only Individualism correlates significantly negatively with hypometropia, across 55 overlapping countries.

# **Dimensions of Organizational Cultures**

The dimensional paradigm can be applied at other than the national level as well, in particular at the organizational and occupational levels (Helmreich & Merritt, 1998). A research project similar to the IBM studies but focusing on organization rather than national differences was carried out by this author and a team of collaborators in the 1980s (Hofstede, Neuijen, Ohavy, & Sanders, 1990). Qualitative and quantitative data were collected in twenty work organizations or parts of organizations in the Netherlands and Denmark. The units studied varied from a toy manufacturing company to two municipal police corps. The study consisted of three phases: open-ended interviews with a selection of informants, forced-choice questionnaires with all, or random samples of, employees, and collecting measurable characteristics at the organization level. The questionnaires included the items used for calculating national culture dimensions in the IBM crossnational survey, but added a large number of questions collected by the 18 interviewers in the interview phase. This study found large differences among units in perceptions of daily practices but only modest differences in values, beyond those due to such basic facts as nationality, education, gender and age group.

Six independent dimensions, resembling distinctions known from organization sociology, were identified that describe the larger part of the variety in organization practices. These six dimensions can be used as a framework to describe organization cultures, but their research base in twenty units from two countries is too narrow to consider them as universally valid and sufficient. For describing organization cultures in other countries and/or in other types of organizations, additional dimensions may be necessary or some of the six may be less useful. The six dimensions found in our research were:

## 1. Process-oriented versus results-oriented

Process-oriented cultures are dominated by technical and bureaucratic routines, results-oriented by a common concern for outcomes. This dimension was associated with the culture's degree of homogeneity: in results-oriented units, everybody perceived their practices in about the same way; in process-oriented units, there were vast differences in perception among different levels and parts of the unit. The degree of homogeneity of a culture is a measure of its 'strength': the study confirmed that strong cultures are more results- oriented than weak ones, and vice versa (Peters & Waterman, 1982).

## 2. Job-oriented versus employee-oriented

The former assume responsibility for the employees' job performance only, and nothing more; employee-oriented cultures assume a broad responsibility for their members' well-being. At the level of individual managers, the distinction between job orientation and employee orientation has been popularized by Blake and Mouton's Managerial Grid (1964). The Hofstede et al. study (1990) shows that job versus employee orientation is part of a culture and not (only) a choice for an individual manager. A unit's position on this dimension seems to be largely the result of historical factors, like the philosophy of its founder(s) and the presence or absence in its recent history of economic crises with collective layoffs.

## 3. Professional versus parochial

In the former, the (usually highly educated) members identify primarily with their profession; in the latter, the members derive their identity from the organization for which they work. Sociology has long known this dimension as 'local' versus 'cosmopolitan', the contrast between an internal and an external frame of reference (Merton, 1949).

## 4. Open systems versus closed systems

This dimension refers to the common style of internal and external communication, and to the ease with which outsiders and newcomers are admitted. This is the only one of the six dimensions for which a systematic difference was found between Danish and Dutch units. It seems that organizational openness is a societal characteristic of Denmark more than of the Netherlands. This shows that organization cultures also contain elements from national culture differences.

#### 5. Tight versus loose control

This dimension deals with the degree of formality and punctuality within the organization; it is partly a function of the unit's technology: banks and pharmaceutical companies can be expected to show tight control, research laboratories and advertising agencies loose control; but even with the same technology some units may still be tighter or looser than others.

#### 6. Pragmatic versus normative

The last dimension describes the prevailing way (flexible or rigid) of dealing with the environment, in particular with customers. Units selling services are likely to be found towards the pragmatic (flexible) side, units involved in the application of laws and rules towards the normative (rigid) side. This dimension measures the degree of 'customer orientation', which is a highly popular topic in the marketing literature.

The research grounding of these dimensions is documented extensively in Hofstede et al. (1990). Applications and implications can be found in Hofstede et al. (2010, ch. 10).

## **Dimensionality of Cultures in the Future**

The fact that the world around us is changing does not need to affect the usefulness of the dimensional paradigm; on the contrary, the paradigm can help us understand the internal logic and the implications of the changes.

Some critics suggest that the number of dimensions should be extended. Triandis (2004) has defended this position, and the GLOBE project actually tried to extend the five Hofstede dimensions to 18. But additional dimensions are only meaningful if they are both conceptually and statistically independent from those already available, and they should also be validated by significant correlations with conceptually related external measures. There is an epistemological reason why the number of meaningful dimensions will always be small. Dimensions should not be reified. They do not 'exist' in a tangible sense. They are constructs: if they exist, it is in our minds (Levitin, 1973). They should help us in understanding and handling the complex reality of our social world. But human minds have a limited capacity for processing information, and therefore dimensional models that are too complex will not be experienced as useful. In a famous short article, Miller (1956) argued that useful classifications should not have more than seven categories, plus or minus two. I would go for the minus rather than the plus.

Within the dimensional model cultures can of course change their position on a dimension. Critics argue that Hofstede country scores based on IBM subsidiaries around 1970 are obsolete. But studies correlating the old country scores with related variables available on a year-by-year basis in many cases find no weakening of the correlations. A good reason for this is that the country scores on the dimensions do not provide *absolute* country positions, but only their positions *relative to the other countries* in the set. The relationship of the dimensions to basic problems of societies and the historical evidence of the continuity of national solutions to such problems suggest that even over much longer

periods the measures obtained will retain their validity. Influences like those of new technologies tend to affect all countries without necessarily changing their relative position or ranking; if their cultures change, they change together. Only if on a dimension one country leapfrogs over others will the validity of the original scores be reduced. This is a relatively rare occurrence. China might be one of those rare cases, where after a period of relative isolation, decades of unparalleled double-digit economic development concurrent with rapid global exposure and integration may be bringing about shifts, especially in the younger generation. But this remains to be demonstrated in carefully designed research.

Some authors predict that new technologies will make societies more and more similar. Technological modernization is an important force toward culture change and it leads to partly similar developments in different societies, but there is not the slightest proof that it wipes out variety on other dimensions. It may even increase differences, as on the basis of pre-existing value systems societies cope with technological modernization in different ways.

Culture change basic enough to invalidate the country dimension index rankings, or even the relevance of the dimensional model, will need either a much longer period – say, 50 to 100 years – or extremely dramatic outside events. Many differences between national cultures at the end of the 20th century were already recognizable in the years 1900, 1800 and 1700 if not earlier. There is no reason why they should not play a role until 2100 or beyond.

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#### About the Author

Geert Hofstede (1928) holds an M.Sc. level degree in mechanical engineering and a Ph.D. level degree in social psychology. He had a varied career both in industry and in academia, retiring as a professor of organizational anthropology and international management from the University of Maastricht, the Netherlands, in 1993. Through his book *Culture's Consequences* (1980, new edition 2001) he became a pioneer of comparative intercultural research; his ideas are used worldwide. A student-level book Cultures and Organizations: Software of the Mind (1991, third edition 2010 co-authored with Gert Jan Hofstede and Michael Minkov) has so far appeared in 17 European and 4 Asian languages. Geert Hofstede was listed in the Wall Street Journal of May 2008 among the Top 20 most influential business thinkers. He held visiting professorships in Hong Kong, Hawaii, Australia and New Zealand. He received honorary doctorates from ten European universities, and is a Fellow of the Academy of Management and the Academy of International Business in the USA and a Honorary Fellow of the International Association for Cross-Cultural Psychology.