Management Scientists Are Human

Author(s): Geert Hofstede

Source: *Management Science*, Vol. 40, No. 1, Focused Issue: Is Management Science
International?, (Jan., 1994), pp. 4-13

Published by: INFORMS

Stable URL: http://www.jstor.org/stable/2632841

Accessed: 21/04/2008 05:43

Management Scientists Are Human

Geert Hofstede

University of Limburg, The Netherlands

The culture of the national environment in which an organization operates affects the management process through the collective mental programming of its members, its managers, and the management scientists who offer their theories. Four dimensions of national culture differences have been found. Among other things, they affect the implicit models in people's minds of what the act of organizing means. Among the pioneers in management science around 1900, differences along these dimensions are already noticeable. A fifth dimension was added when the research instrument used was designed exclusively by Chinese scholars, and it provides a cultural explanation for the economic success of East Asian countries in the past quarter century. At the same time, it highlights the influence of the culture of the management scientist on the research questions and the resulting theories.
(*Culture; Uncertainty; Power; Individualism*)

Cultural Relativity of Management Theories

The economic success of Japan and other Asian countries has decisively terminated a naive kind of literature that assumed that "successful" (what is that?) "managers" (what is that?) behaved the same the world over. There are few serious writers left who would deny, if pressed, that effective ways of leading people and organizations can differ, depending on the national environment. Yet the ultimate consequence of this is rarely drawn: the cultural relativity of any kind of theory of management, not only across countries but possibly even within them. There is still a "one best way" tradition in, especially American, management theory, and old habits die hard.

By cultural relativity I mean that the culture of the human environment in which an organization operates affects the management process. My own simplified definition of "culture" is: "the collective programming of the mind which distinguishes the members of one group or category of people from those of another" (Hofstede 1991, p. 5). The term "culture" in this sense can apply to nations but also to organizations, occupations and professions, age groups, the sexes, religious groups, ethnic groups etc., although the manifestations of culture at these different levels vary considerably (Hofstede 1991, p. 181 ff). Because cultural influences on management are most clearly recognizable at the national level, I will in this article use the word "culture" to mean "national culture," unless otherwise specified.

The collective programming of the mind in a country affects all people, the leaders as well as those led, and it therefore affects the way these people organize. The academic field of Organizational Behavior impresses students that employees are human; it rarely stresses that managers are human too, and that the humanness of the leaders and of the led are closely matched. A next intellectual step which is even more seldomly taken is recognizing that, if all these people are human, then the management scientists a country produces must also be human, and that their theories cannot but reflect the collective programming of the mind dominant in this country, that is its national culture.

For example, some years ago, for a seminar in Indonesia, someone asked me to address the problem of how to train Indonesian managers to replace "Theory X" by "Theory Y." These two theories are really management philosophies, developed by the late American professor Douglas McGregor (1960). The main thrust of Theory X is that the average human being has an inherent dislike of work and will avoid it if he can; therefore people must be coerced, punished and controlled, to make them contribute to organizational ob-

jectives. The main thrust of Theory Y is that exerting physical and mental effort in work is as natural as play or rest, and that under proper conditions, people will not only accept but seek responsibility and exercise effort toward achieving organizational objectives.

Before applying this distinction to another culture than the one with which McGregor was familiar: the U.S.A. of the first half of the 20th century, we should test what basic, unspoken cultural assumptions are present in both Theory X *and* Theory Y. In a comparative study of U.S. values versus those dominant in ASEAN countries, I found the following common assumptions on the U.S. side and underlying both X and Y (Hofstede 1988):

(1) Work is good for people.

(2) People's capacities should be maximally utilized.

(3) There are "organizational objectives" that exist apart from people.

(4) People in organizations behave as unattached individuals.

These assumptions reflect value positions in McGregor's U.S. society; most of them would be accepted in other Western countries as well. None of them, however, applies in ASEAN countries. Southeast Asian assumptions would rather be:

(1) Work is a necessity, but not a goal in itself.

(2) People should find their rightful place, in peace and harmony with their environment.

(3) Absolute objectives exist only with God. In the world, persons in authority positions represent God, so their objectives should be followed.

(4) People behave as members of a family and / or group. Those who do not are rejected by society.

Because of these different culturally determined assumptions, McGregor's Theory X-Theory Y distinction becomes irrelevant in Southeast Asia. In the above-mentioned study I suggest a distinction more in line with Southeast Asian cultures, but this need not concern us here.

Cultural programs differ from one nation to another in ways which are seldom fully recognized and often misunderstood. Every nation has a considerable moral investment in its own mental software, which explains why it is not easy to make cultural differences discussable.

The origins of the differences from one nation to another, and sometimes between ethnic, religious, or lin-guistic subgroups within nations, are hidden in history. In some cases causal explanations are possible; in many other cases one should simply assume that a small difference arose hundreds or thousands of years ago, and that in being transferred from generation to generation this small difference grew ever larger, until it became as big as we know it today.

Differences in National Cultures

In order to function as world citizens, we should be able to understand the value differences that come with nationality differences. Above all, we should be aware of the position of our own national value system as compared to those of various other countries with which we interact.

My own research over the past 25 years has focused on value differences as part of national cultures (Hofstede 1980, 1991). I found that these can be classified along five dimensions which are largely independent of each other. The first four were initially detected through a comparison of the values of similar people (employees and managers) in 64 different national subsidiaries of IBM Corporation. People working for the same multinational, but in different countries, represent very well-matched samples from the populations of their countries, similar in all respects except nationality. These four dimensions have been widely published (Hofstede 1980), and readers familiar with them can skip their description which follows.

The first dimension has been labelled *Power Distance*, and it can be defined as the degree of inequality among people which the population of a country considers as normal: from relatively equal (that is, small power distance) to extremely unequal (large power distance). On the basis of the answers of IBM employees in different countries, I have computed scores on this dimension for 50 separate countries and three multicountry regions: East Africa, West Africa, and Arab countries.

The second dimension has been labelled *Uncertainty Avoidance*, and it can be defined as the degree to which people in a country prefer structured over unstructured situations. Structured situations are those in which there are clear rules as to how one should behave. These rules can be written down, but they can also been unwritten and imposed by tradition. In countries which score high on uncertainty avoidance, people tend to show more

nervous energy, while in countries which score low, people are more easygoing. A (national) society with strong uncertainty avoidance can be called rigid; one with weak uncertainty avoidance, flexible. One way of describing countries where uncertainty avoidance is strong, is to say that in these countries a feeling prevails of "what is different, is dangerous." In weak uncertainty avoidance societies, the feeling would rather be "what is different, is curious".

The third dimension is labelled *Individualism*, and it is the degree to which people in a country prefer to act as individuals rather than as members of groups. The opposite of individualism can be called *Collectivism*, so collectivism is low individualism. In collectivist societies a child learns to respect the group to which it belongs, usually the family, and to differentiate between in-group members and out-group members (that is, all other people). When children grow up they remain members of their group, and they expect the group to protect them when they are in trouble. In return, they have to remain loyal to their group throughout life. In individualist societies, a child learns very early to think of itself as "I" instead of as part of "we". It expects one day to have to stand on its own feet and not get protection from its group anymore; and therefore it also does not feel a need for strong loyalty.

The fourth dimension has been called *Masculinity* and its opposite pole *Femininity*. It is the degree to which values like assertiveness, performance, success and competition, which in nearly all societies are associated with the role of men, prevail over values like the quality of life, maintaining warm personal relationships, service, care for the weak, and solidarity, which in nearly all societies are more associated with the role of women. Women's roles differ from men's roles in all countries; but in some societies, the differences are larger than in others. If the differences are large, the dominant values are "masculine," and the society can be called "tough" to its people: it becomes a performance society. In a masculine society, even the women have fairly tough values, but not as much as the men. If in a country the differences between women's roles and men's roles are relatively small, the dominant values are more "feminine," and the society is more "tender" to its people: it becomes a welfare society. In a feminine culture, even the men have fairly tender values. One consequence of the fact that in masculine countries the values of men and women are more different than in feminine countries, is that women's values differ less across countries than men's values.

Table 1 shows the relative positions on these four dimensions of 12 sample countries or regions: Arab countries, France, Germany, Great Britain, The Netherlands, Hong Kong, Indonesia, Japan, Brazil, Mexico, U.S.A., and West African countries (the meaning of the fifth column in Table 1 will be explained later).

The table shows that each country has its own configuration on the four dimensions. U.S. culture presents itself compared to others as highly individualistic, fairly masculine, and below average on both Power Distance and Uncertainty Avoidance. Japanese culture presents itself as extremely masculine, strongly uncertainty

Table 1   Culture Dimension Scores for Twelve Countries (0 = low, 100 = high)

Orientation	Power Distance	Uncert Avoidance	Individualism	Masculinity	Long-term
Arab countries	80	68	38	53	
France	68	86	71	43	
Germany	35	65	67	66	31
Great Britain	35	35	89	66	25
Netherlands	38	53	80	14	44
Hong Kong	68	29	25	57	96
Indonesia	78	48	14	46	
Japan	54	92	46	95	80
Brazil	69	76	38	49	65
Mexico	81	82	30	69	
U.S.A.	40	46	91	62	29
West Africa	77	54	20	46	16

avoiding, and around average on both Power Distance and Individualism-Collectivism. Indonesia, the country in my earlier example, scores collectivist with a large Power Distance but about as tolerant of uncertainty as the U.S.A., and somewhat feminine. McGregor's theories were written from an individualistic, fairly masculine cultural background, which make little sense in collectivist, moderately feminine Indonesia.

National Cultures and Implicit Organizational Models

From the four dimensions of national cultures identified in the IBM study, Power Distance and Uncertainty Avoidance affect both the way in which people organize themselves and the way in which they write about organizing. The two dimensions cover the two crucial questions which have to be answered in any effort at organizing. Power Distance deals with who will decide what; Uncertainty Avoidance with establishing predictability of outcomes, with the need for structures and rules. Both questions are culturally subjective: other things being equal, in countries with smaller Power Distances, the leaders as well as those led will function best with a wider spread of decision power than in countries with larger P.D.s; in countries with stronger Uncertainty Avoidance, all will need more structure and rules than in countries with weaker U.A.

National scores on the Power Distance and on the Uncertainty Avoidance dimension are independent of each other, so that all combinations occur. According to Table 1 and Figure 1, France, for example, scores high on both P.D. and U.A.; Germany low on P.D. but higher on U.A.; Great Britain low on both; and Hong Kong, as an exponent of Chinese culture, high on P.D. but low on U.A.

There is empirical evidence for the relationship between a country's position within a P.D. × U.A. matrix, and models of organizations implicit in the minds of people from those countries which affect the way problems are tackled (Hofstede 1980, p. 320). In the 1970s Owen James Stevens, an American professor at INSEAD business school in Fontainebleau, France, used as an examination assignment for his Organizational Behavior course a case study describing a conflict between two department heads within a company. Among the IN-SEAD MBA students taking the exam the three largest national contingents were French, German, and British.

Figure 1   Four Implicit Models of Organizations
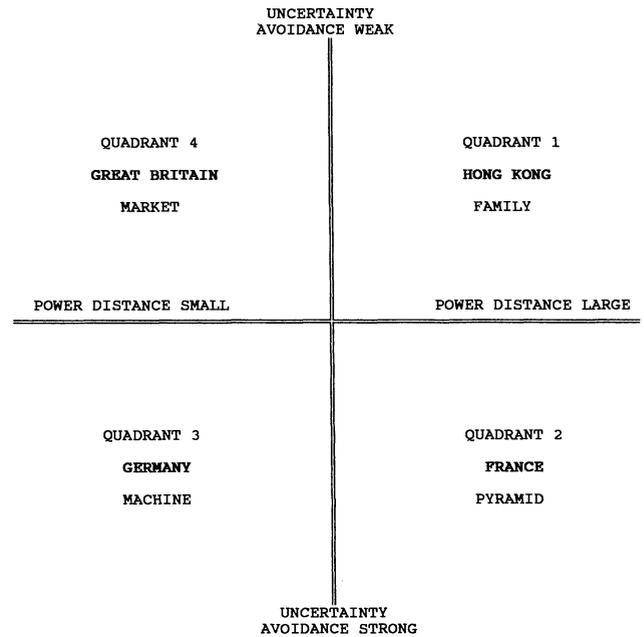
Stevens found that the French in majority diagnosed the case as negligence by the General Manager to whom the two department heads reported. The solution preferred by the French was for the opponents to take the conflict to their common boss, who would issue orders for settling such dilemmas in the future. Stevens interpreted the implicit organization model of the French as a "pyramid of people": the Chief Executive at the top of the pyramid, and each successive level at its proper place below. This corresponds with large P.D. and strong U.A.: quadrant 2 in Figure 1.

The Germans in majority diagnosed the case as a lack of structure. The competence of the two conflicting department heads had never been clearly laid down. The solution preferred by the Germans was the establishment of procedures. Ways to develop these could be calling in a consultant, nominating a task force, or asking the common boss. The Germans, Stevens felt, saw an organization ideally as a "well-oiled machine" in which management intervention is limited to exceptional cases because the rules should settle all daily problems. This reflects the combination of a strong U.A. with a smaller P.D.: quadrant 3 in Figure 1.

The British in majority diagnosed the case as a human relations problem. The two department heads were poor

negotiators, and their skills in this respect should be developed by sending them to a management course, preferably together. "Transactional analysis" had not yet been invented at that time, but it would be a good term to describe the kind of training recommended. The implicit model of an organization in the minds of the British, Stevens thought, was a "village market" in which neither hierarchy nor rules, but the demands of the situation determine what will happen. This means small P.D. and weak U.A.: quadrant 4 in Figure 1.

Stevens' three implicit models leave quadrant 1 in the P.D. × U.A. matrix unexplained: the combination of large P.D. with weak U.A. No European countries show this pattern, only Asian and African ones. People from these countries were rare at INSEAD, so that there were no sufficient data from this group. A discussion of Stevens' models with Indian and Indonesian colleagues led to the suggestion that the equivalent implicit model of an organization in these countries is the (extended) "family", in which the owner-manager is the omnipotent (grand)father. This is strongly confirmed for the case of the Overseas Chinese of Hong Kong, Singapore, Taiwan, and Indonesia by Redding (1990).

National Cultures and Organization Theories

Not only the people within organizations, but also those writing about organizing are children of a culture; they grew up in families, went to schools, and worked for employers. Their experiences represent the material on which their thinking and writing has been based. As stated earlier, organization theorists are as perfectly human and as culturally biased as other mortals.

For each of the four quadrants of the P.D. × U.A. matrix I have selected a classical author who described organizations in terms of the model belonging to his corner of the diagram: the pyramid, the machine, the market, or the family. The four are approximate contemporaries; all were born in the mid-19th century.

Henri Fayol (1841–1925) was a French engineer whose management career culminated in the position of Président-Directeur-Général of a mining company. After his retirement he formulated his experiences in a pathbreaking text on organization: *Administration Industrielle et Générale*. On the issue of the exercise of authority Fayol wrote:

"We distinguish in a manager his *statutory* authority which is in the office, and his *personal* authority which consists of his intelligence, his knowledge, his experience, his moral value, his leadership, his service record, etc. For a good manager, personal authority is the indispensable complement to statutory authority" (Fayol 1916, p. 21).

In Fayol's conception the authority is both in the person *and* in the rules (the statute). We recognize the model of the organization as a pyramid of people with both personal power and formal rules as principles of coordination.

Max Weber (1864–1920) was a German academic with a university training in law and some years' experience as a civil servant. He became a professor of economics and a founder of German sociology. Weber quotes a 17th century Puritan Protestant Christian textbook about:

". . . the sinfulness of the belief in authority, which is only permissible in the form of an impersonal authority" (Weber 1930, p. 224).

In his own design for an organization Weber describes the *bureaucracy*. The word nowadays has a distinctly negative connotation, but to Weber it represented the ideal type for any large organization. About the authority in a bureaucracy Weber wrote:

"The authority to give the commands required for the discharge of (the assigned) duties should be exercised in a stable way. It is strictly delimited by rules concerning the coercive means . . . which may be placed at the disposal of officials" (Weber 1921, p. 650).

In Weber's conception the real authority is in the rules. The power of the "officials" is strictly delimited by these rules. We recognize the model of the organization as a well-oiled machine which runs according to the rules.

Frederick Winslow Taylor (1856–1915) was an American engineer who, contrary to Fayol, had started his career in industry as a worker. He attained his academic qualifications through evening studies. From Chief Engineer in a steel company he became one of the first management consultants. Taylor was not really concerned with the issue of authority at all; his focus was on efficiency. He proposed to split the task of the first-line boss into eight specialisms, exercised by different persons. Thus, every worker would have eight bosses, each with a different competence. This part of Taylor's ideas was never completely implemented, al-

though we find elements of it in the modern matrix organization in which an employee has two (or even three) bosses, usually one concerned with productivity and one with technical expertise.

Taylor's book *Shop Management* (1903) appeared in a French translation in 1913, and Fayol read it and devoted six full pages from his own 1916 book to Taylor's ideas. Fayol showed himself generally impressed but shocked by Taylor's "denial of the principle of the Unity of Command" in the case of the eight-boss-system. "For my part", Fayol writes, "I do not believe that a department could operate in flagrant violation of the Unity of Command principle. Still, Taylor has been a successful manager of large organizations. How can we explain this contradiction?" (Fayol 1970 [1916], p. 85). Fayol's rhetoric question had been answered by his compatriot Blaise Pascal two and a half centuries before: there are truths in one country which are falsehoods in another ("Vérité en-deça des Pyrenées, erreur au-delà").

Whereas Taylor dealt only implicitly with the exercise of authority in organizations, another American pioneer of organization theory, Mary Parker Follett (1868–1933), did address the issue squarely. She writes:

"How can we avoid the two extremes: too great bossism in giving orders, and practically no orders given? . . . My solution is to depersonalize the giving of orders, to unite all concerned in a study of the situation, to discover the law of the situation and to obey that . . . One *person* should not give orders to another *person*, but both should agree to take their orders from the situation" (in Metcalf and Urwick 1940, pp. 58–59).

In the conception of Taylor and Follett the authority is neither in the person nor in the rules, but, as Follett puts it, in the situation. We recognize the model of the organization as a market, in which market conditions dictate what will happen.

Sun Yat-sen (1866–1925) is a scholar from the fourth quadrant of the Power Distance × Uncertainty Avoidance matrix, from China. He received a Western education in Hawaii and Hong Kong and became a political revolutionary. As China started industrialization much later than the West there is no indigenous theorist of industrial organization contemporary with Fayol, Weber, and Taylor. However, Sun was concerned with organization, albeit political. He wanted to replace the ailing government of the Manchu emperors by a modern Chinese state. He eventually became for a short period nominally the first President of the Chinese Republic.

Sun's design for a Chinese form of government represents an integration of Western and traditional Chinese elements. From the West, he introduced the "Trias Politica": the Executive, Legislative, and Judicial branches. However, unlike in the West, all three are placed under the authority of the President. Two more Branches are added, both derived from Chinese tradition and bringing the total up to five: the Examination Branch (determining access to the Civil Service) and the Control Branch, supposed to audit the government.

This remarkable mix of two systems is formally the basis of the present government structure of Taiwan, which has inherited Sun's ideas through the Kuomintang party. It stresses the authority of the President (large Power Distance): the legislative and judicial powers, which in the West are meant to guarantee Government by Law, are made dependent on the ruler and paralleled by the examination and control powers which are based on Government of Man (weak Uncertainty Avoidance).

In the previous paragraphs the models of organization in different cultures have been related to the theories of Founding Fathers (including one Founding Mother) of Organization Theory. The different models can also be recognized in today's theories.

In the U.S.A. in the 1970s and 80s it has become fashionable to look at organizations from a point of view of "transaction costs". Economist Oliver Williamson has opposed "hierarchies" to "markets" (Williamson 1975). The reasoning is that human social life consists of economic transactions between individuals. These individuals will form hierarchical organizations when the cost of the economic transactions (such as getting information, finding out whom to trust, etc.) is lower in a hierarchy than when all transactions would take place on a free market. What is interesting about this theory from a cultural point of view is that the "market" is the point of departure or base model, and the organization is explained from market failure. A culture that produces such a theory is likely to prefer organizations that internally resemble markets to organizations that internally resemble more structured models, like pyramids. The ideal principle of control in organizations in the market philosophy is *competition* between individuals.

Williamson's compatriot and colleague William Ouchi suggests two other alternatives to markets: "bureaucra-

cies" and "clans". They come close to what this chapter called the "machine" and the "family" model respectively (Ouchi 1980). If we take Williamson and Ouchi's ideas together, we find all four organizational models described. The "market" however takes a special position as the theory's starting point, and this can be explained by the nationality of the authors. Like Great Britain, the U.S.A. is in the small P.D., weak U.A. quadrant 4.

In the work of both German and French organization theorists, markets play a very modest role. German books tend to focus on formal systems—on the running of the machine (e.g. Kieser and Kubicek 1983). The ideal principle of control in organizations is a system of *formal rules* on which everybody can rely. French books usually stress the exercise of power and sometimes the defenses of the individual against being crushed by the pyramid (Crozier and Friedberg 1977, Pagès et al. 1979). The principle of control is *hierarchical authority*; there is a system of rules, but contrary to the German case the personal authority of the superiors prevails over the rules.

In China in the days of Mao and the Cultural Revolution, neither markets nor rules nor hierarchy, but *indoctrination* was the attempted principle of control in organizations, in line with a national tradition that for centuries used comparative examinations as a test of adequate indoctrination. Political developments after 1989 showed this principle still to be popular with Chinese leaders.

The Influence of Researchers' National Cultures on Research Outcomes

The IBM questionnaire was designed by a group of researchers from six different Western countries. This is better than having one single dominant researcher culture, but the group was still dominated by Western ways of thinking: other countries covered in the research, like those in East Asia, were not represented in the researcher team. Other comparative studies have been set up by even more narrowly selected researcher teams or individuals, virtually all Western.

Composing a research team from people of different national origin does not, in itself, guarantee the elimi-

nation of cultural biases in the research design. A lot depends on the interpersonal dynamics within the team: whose ideas dominate. Non-Western team members often have a junior status and, coming from (usually) large Power Distance cultures, they tend to show deference to the Western team leader whom they treat as their guru.

Michael Bond, a Canadian who taught first in Japan, then for many years at the Chinese University of Hong Kong, tested the effect of the Western bias in existing studies of national values by deliberately introducing an Eastern bias. He asked seven Chinese scholars to prepare, in Chinese, a list of values they considered important. This list was developed into a questionnaire, the Chinese Value Survey (CVS), which was translated into different languages and answered by 50 male and 50 female students in each of 23 countries in all five continents. Analysis of the CVS data produced again four dimensions, just like the IBM study. Twenty countries were covered both in the IBM and CVS studies. Across these countries, three of the CVS dimensions were significantly correlated with three IBM dimensions: power distance, individualism, and masculinity. Although the values measured in the CVS were different from those in the IBM study, the issues of inequality (for power distance), togetherness (for individualism), and social gender roles (for masculinity) were present in both studies. They represent fundamental human problems as important in the East as in the West. The problems are the same, but the solutions differ from country to country, and this is reflected in the different scores on each dimension for each country (The Chinese Culture Connection 1987).

However, none of the dimensions from the CVS study resembled uncertainty avoidance. The values related to this dimension did not seem to have been important enough to the Chinese scholars to be included in their list. Instead, the CVS study found a fifth dimension, unrelated to those from the IBM studies. Bond called it "Confucian Dynamism", because the values related to it, both on the positive and on the negative side, reminded him of the teachings of Confucius. On the "dynamic" side one finds values oriented towards the future, like thrift (saving) and perseverance. On the opposite side one finds values rather oriented towards the past and present, like respect for tradition and fulfilling social obligations.

The word "Confucian" does not mean that the new dimension is only relevant for countries with a Confucian past (China, Hong Kong, Taiwan, Singapore, Korea, and Japan). Students in Western, Latin American, and African countries were able to answer the questions just as well. I therefore preferred to rename the dimension: *Long-term* versus *Short-term Orientation* (Hofstede 1991). The last column in Table 1 lists the scores on the new dimension for eight out of the twelve countries, those in which student data were collected by Bond. Japan scores high: 80, that is at the fourth place out of 23. The other high scorers are also East Asian countries: from the top, China, Hong Kong, Taiwan, and directly after Japan, South Korea. Other Asian countries, like Thailand, score average; most Western countries, like the U.S.A. and Great Britain, low. It should be no surprise that Long-term Orientation is strongly correlated with a country's economic growth over the past 25 years, which was much higher for the East Asian than for the Western countries (Hofstede and Bond 1988, Franke et al. 1991). In fact, the cultural dimension of Long-term Orientation provides the only independent index so far providing an explanation for the East Asian economic miracle that took economists by surprise (Hicks and Redding 1983).

The dimension of Uncertainty Avoidance was missing from the research with the Chinese Value Survey, while the dimension of Long-term Orientation was not found in the IBM study. This difference was not due to the people who answered the questionnaires: college students or IBM employees (they answered all questions dutifully), but to the researchers who composed the questionnaires. The different results of the two studies are a clear illustration that academics who do research, too, are children of a culture.

The fact that the Western researchers who developed the IBM questionnaire included the questions which identified a dimension "Uncertainty Avoidance," shows their concern about certainty. This concern is based on the Western philosophical search for *Truth*, and Western man's attempt to find absolute Truths (Hofstede 1991, p. 170). The Chinese scholars who designed the Chinese Value Survey did not share this concern about Truth; the notion that man can posses absolute Truths is missing in Eastern philosophies. The Chinese, on the contrary, included questions related to Confucian ideas about Virtue, which Western researchers had not

thought of. In the West, Truth is considered more important than Virtue; in the East, the opposite is the case.

Eastern religions (Hinduism, Buddhism, Shintoism, and Taoism) are separated from Western religions (Judaism, Christianity, and Islam) by a deep philosophical rift. The three Western religions belong to the same thought family; historically, they grew from the same roots. All three assume the existence of a Truth which is accessible to the true believers. All three have a Book. In the East, Confucianism, which is a nonreligious ethic, but also the major religions are not based on the assumption that there is a single Truth which a human community can embrace. They offer various ways in which a person can improve him/herself but these do not consist in believing in a Truth but in ritual, meditation, or ways of living. This is why a questionnaire invented by Western minds led to the identification of a fourth dimension dealing with Truth; a questionnaire invented by Eastern minds found a fourth dimension dealing with Virtue.

The Western concern with Truth is supported by an axiom in Western logic that a statement excludes its opposite: if 'A' is true, 'B' which is the opposite of 'A' must be false. Eastern logic does not have such an axiom. If 'A' is true, its opposite 'B' may also be true, and together they produce a wisdom which is superior to either 'A' or 'B'. This is sometimes called the complementarity of "yang" and "yin," using two Chinese characters which express the male and the female elements present in all aspects of the social reality. Human truth in this philosophical approach is always partial. People in East and Southeast Asian countries can rather easily adopt elements from different religions, or adhere to more than one religion at the same time. In countries with such a philosophical background, a practical, nonreligious ethical system like Confucianism can become a cornerstone of society. In the West ethical rules tend to be derived from religion: Virtue from Truth.

During the Industrial Revolution which originated in the West 200 years ago, the Western concern for Truth was at first an asset. It led to the discovery of the laws of nature which could then be exploited for the sake of human progress. It is surprising that Chinese scholars despite their high level of civilization never discovered Newton's laws: but they were simply not looking for laws. The Chinese script also betrays this lack of interest in generalizing: it needs 5,000 different characters, one

for each syllable, while by splitting the syllables into separate letters, Western languages need only about 30 signs. Western thinking is analytical, while Eastern thinking is synthetic.

By the middle of the 20th century, the Western concern for Truth gradually ceased to be an asset and turned instead into a liability. Science may benefit from analytical thinking, but management and government are based on the art of synthesis. With the results of Western, analytically derived technologies freely available, Eastern cultures could start putting these technologies into practice using their own superior synthetic abilities. What is true or who is right is less important than what works and how the efforts of individuals with different thinking patterns can be coordinated toward a common goal. Japanese organizational leadership, with Japanese employees, is famous for this pragmatic synthesis. The Chinese Value Survey research project has demonstrated that national cultures that can practice Virtue without a concern for Truth, held a competitive economic advantage during the past 25 years.

Conclusion

In the present article I tried to show that the search for a universal, timeless, worldwide management science is futile. Even the concept of management, invented in the U.S.A. at the turn of the century, is neither timeless nor endemic to all parts of the world. Peter Lawrence, a British university professor who earlier spent many years working in German business organizations in Germany, has aptly remarked that the German culture knows no managers (Lawrence 1980). Managers in the American sense are a special class of people whose presence is supposed to be a precondition for other people to do their work. In Germany, people will do their work anyway: it is hard to stop them. What they need are Chief Engineers and Chief Accountants who coordinate tasks and resolve technical difficulties, nothing more. In Japan, managers in the American sense do not exist either. In the Japanese culture, employees share the responsibility for common tasks, whether they are in leading roles or not. In France, personnel is primarily classified according to status (cadres vs. noncadres) based on their education, not according to managerial task.

In the U.S.A., the manager has developed into a culture hero of mythical proportions. My study of IBM subsidiaries used the answers to questionnaires by (mainly) ordinary employees, but in at least ten American books and articles on management I have been misquoted as having studied the answers by IBM *managers*. Reading the recent U.S. and U.S.-inspired management literature, I get the impression that the ordinary employee does not even count any more. Surveys of employees are rarely reported; Ph.D. students collect their data predominantly by surveys of managers. This to me is a deplorable and dysfunctional development: the manager derives his or her *raison d'être* from the people managed, and it is the latter who do the work that is the purpose of there being an organization in the first place.

If the concepts of "manager" and "management" are products of one particular culture, management science by definition cannot be universal. The only universal component is the employed person. Any system of leading and coordinating the work of employed persons should be geared to the collective mental programs of such persons, that is their culture. Culturally, managers are the followers of their followers. Assuming universality of management science means assuming everybody to think, feel, and act like oneself. It is ethnocentric and myopic.

The argumentation in books and journals on management for international use should therefore, much more than is presently done, pay attention to the nationality of authors and to the national environments from which they write. There are truths on one side of the Atlantic, Pacific, or Rio Grande which are falsehoods on the other.

This should not be bad news to management students, on the contrary. The cultural relativity of management science makes the field much more interesting and dynamic than it would be if we just had to search for one universal best way. Other ways are not inferior to ours; it all depends on the environment. This offers great possibilities for synergy and for learning from each other in a world which to an increasing extent demands intercultural cooperation.

References

Chinese Culture Connection (a team of 24 researchers), "Chinese Values and the Search for Culture-free Dimensions of Culture," *J Cross-Cultural Psychology*, 18, 2 (1987), pp. 143–164.

Crozier, Michel and Erhard Friedberg, *L'acteur et le Système: Les Contraintes de l' action Collective*, Editions du Seuil, Paris, 1977.

Fayol, Henri, *Administration Industrielle et Générale*, Dunod, Paris, 1970 [1916].

Franke, Richard H., Geert Hofstede, and Michael H. Bond, "Cultural Roots of Economic Performance: A Research Note," *Strategic Management J.*, 12 (1991), 165–173.

Hicks, George L. and S. Gordon Redding, "The Story of the East-Asian Economic Miracle," *Euro-Asian Bus. Rev.*, 2, 3 (1983), 24–32 and 4 (1983), 18–22.

Hofstede, Geert, *Culture's Consequences: International Differences in Work-Related Values*, Sage Publications, Beverly Hills, CA, 1980.

——, "McGregor in Southeast Asia?," in Durganand Sinha and Henry S. R. Kao (Eds.), *Social Values and Development: Asian Perspectives*, Sage, New Delhi, 1988, pp. 304–314.

——, *Cultures and Organizations: Software of the Mind*, McGraw-Hill, London, 1991.

—— and Michael Harris Bond, "The Confucius Connection: From Cultural Roots to Economic Growth," *Organizational Dynamics*, 16, 4 (Spring 1988), pp. 4–21.

Kieser, Alfred and Herbert Kubicek, *Organisation*, Walter de Gruyter, Berlin, 1983.

Lawrence, Peter, *Managers and Management in West Germany*, Croom Helm, London, 1980.

McGregor, Douglas, *The Human Side of Enterprise*, McGraw-Hill, New York, 1960.

Metcalf, Henry C. and Lyndall Urwick, *Dynamic Administration: The Collected Papers of Mary Parker Follett*, Harper & Row, New York, 1940.

Ouchi, William G., "Markets, Bureaucracies and Clans," *Admin. Sci. Quarterly*, 25 (1980), pp. 129–141.

Pagès, Max, Michel Bonetti, Vincent de Gaulejac, and Daniel Descendre, *L' emprise de l'organisation*, Presses Universitaires de France, Paris, 1979.

Redding, S. Gordon, *The Spirit of Chinese Capitalism*, Walter de Gruyter, Berlin, 1990.

Weber, Max, *Essays in Sociology* (H. H. Gerth and C. W. Mills, Eds.), Routledge & Kegan Paul, London, 1970 [1948].

——, *The Protestant Ethic and the Spirit of Capitalism*, George Allen & Unwin, London, 1976 [1930].

Williamson, Oliver E., *Markets and Hierarchies: Analysis and Antitrust Implications*, Free Press, New York, 1975.