

the Crusades of the 12th and 13th centuries. In the past, they were considered as expeditions to loot the pagans. Contemporarily, we believe that the Crusades had a religious character and the crusaders were genuinely interested in converting the pagans (Riley-Smith, 1995).

Therefore, the logic of the arrows should not cause doubts regarding the dependency of future structures on the previous ones. It is obvious that particular macrostructures of the history of world civilization have a dynamic character. As time goes by, especially periods measured in hundreds and thousands of years, the time scope of these four structures will modify and move forward along with the calendar.

GRAND LAWS OF THE WORLD CIVILIZATION

The idea of laws of the world civilization history is controversial, especially after an assumption of a developmental course of history. History does not have to repeat itself according to the laws regarding the past. From studies of the fate of the world in the last 6,000 years, which are contained in this book, three rather important laws result:

The First Grand Law of the World Civilization is the Ability of Man to Develop:

People have seen themselves as entering the world with a potential of many gifts, and they hope to fulfill these gifts in the development of their own lives (Bronowski & Mazlish, 1962).

The Second Grand Law of the World Civilization is the Right of Man to Freedom and Reason. We formulate it as follows:

People constantly aim for freedom; the range of this freedom and reason depends on the level of a nation's knowledge, communication ability and knowledge of the international community.

During 6,000 years of civilization, man steadily increased his freedom, to some extent, as an achievement of knowledge about social life. In practice, man was liberated from political, economic and social discrimination by the end of the 20th century, when many dictatorships fell, including Communism and other oppressive regimes. People started to increase their freedom only in the 2nd millennium. Examples of this occurred during the Renaissance when print was widespread and during the beginning of the development of natural sciences. Moveable type and natural science gave birth to the Enlightenment, which created the American Revolution and the French Revolution. This led to democracy, in other words the rule of the people. In the process of the development of knowledge, the Industrial Revolution strengthened democracy by a gradual economic liberation of mankind. Further reinforcement of the development of knowledge is happening during the Information Revolution, which reverses the former human path toward knowledge. During this time, people do not need to seek out the information because the computer networks bring data to them wherever they are.

The Third Grand Law of the World Civilization is the Law of Conscious Historical Evolution, which we formulate in the following way:

Mankind consciously steers the development of civilization through the formulation of main ideas and values in each given epoch.

The Renaissance, the Enlightenment, and Modernism each left a permanent mark on the course of history in their particular periods, phases, and stages. Formulating those ideas or values can often happen in a sharp conflict or even in a social revolution.

The law emphasizes a sphere of conscious culture, which guides the remaining spheres of social life. This way, one pulls out of the "oppression" of the economic field which, according to Karl Marx, justly and solely directs the awareness

and the action of man. More and more people in the world are convinced that consciousness comes first and that the brain or even the soul is metaphorically comparable to material subjects, which contradicts the Marxist Theory (Herman, 1988; Cook, 1991; Rotschild, 1991; Renesh, 1992).

The Fourth Grand Law of the World Civilization is the Historical Right of a Country's Success, which develops in the following way:

The historical degree of a country's success is proportioned to the level of harmony among its political, social and economic domains.

If a country lacks this harmony, sooner or later chaos will manifest itself, which will lead to collapse. The history of Poland during the last 350 years is proof of this law. Poland, however, is not the only example; another would be the breakdown of Russia, Yugoslavia, Somalia, Rwanda and Burundi. The next possible candidates for this kind of collapse would be Belarus and even Canada (Quebec) or Belgium. This law can also be applied to the present situation in the Central European states, when it is said that these states have their own prosperous economies and political systems in disarray. A lack of harmony between these two spheres, for example, could lead to a collapse of Poland for the third time.

FROM WORLD TO PLANETARY CIVILIZATION

At the beginning of the 3rd millennium, the emergence of the global civilization is taking place. This sets new standards in business communications, international travel, world products, and international behavior based upon common fashion, food, pop music, and movie "taste."

Thus, a citizen of any civilization has to cope with two civilizations' challenges: one set by his/her own civilization and one set by the global one. The global civilization should not replace an

autonomous (vertical) civilization as it is perceived by many leaders of "invaded" civilizations. On the contrary, it is necessary to develop behaviors which can cope simultaneously with these two civilizations. It looks like this will be one of the biggest challenges of the 3rd millennium for all inhabitants of the Earth.

The emergence of the global civilization creates the second layer of the world civilization, above the first one represented by each autonomous civilization. The third layer of the world civilization is created by the universal civilization. Three layers of the world civilization increase the degree of civilization complexity, which is a new difficulty for all civilizations and their participants who have to formulate intelligent responses to challenges (Figure 1-14). Needless to say, all three levels of the world civilizations are inclusive. However, the universal civilization is the guiding one, which generalizes and popularizes the best of all civilizations and influences them in a feedback manner. Perhaps, in a *tres longue duree*, all the autonomous civilizations will converge into the universal-central civilization.

Another major challenge of world civilization is the accelerated development of technology that attacks the well-being of people. At first glance such technologies as robotics and computerization improve productivity and lower prices of products and services. This is, however, a short-term view. In a long-term view, this type of technology eliminates jobs and shrinks the consumer base, which in turn will weaken the strength of the economy. Its consequences may lead to social unrest and crises for the Western and Japanese civilizations or all those civilizations that copy this strategy as they modernize.

A general model of the planetary civilization as a set of vertical and horizontal civilizations is shown in Figure 1-15. The planetary civilization has been developing by "division" into *vertical* (autonomous) civilizations through the last 6,000 years. However, "some of these civilizations have been or are more dynamic than others and are

Figure 1-14. Four layers of the Planet Civilization

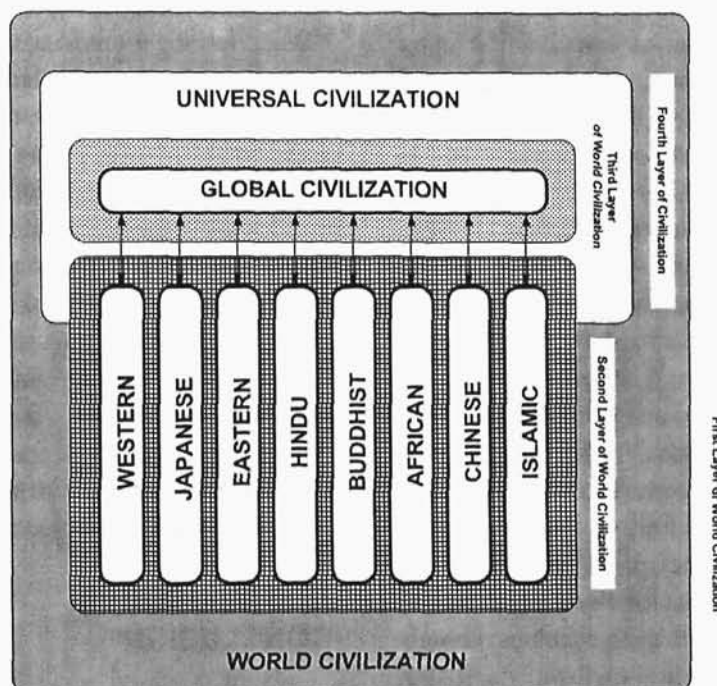
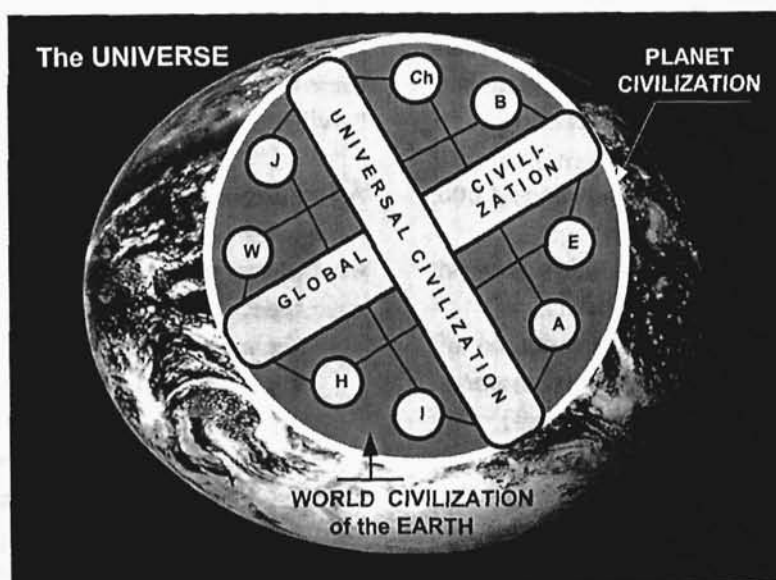


Figure 1-15. The 21st century planet civilization of the earth as a set of vertical civilizations (A-African, B-Buddhist, Ch-Chinese, E-Eastern, H-Hindu, I-Islamic, J-Japanese) and horizontal civilizations (Global and Universal)



outgoing and bringing their outlook...to others” (Melko, 1987). In such a manner, the planetary civilization develops into *horizontal* civilizations such as world civilization, global and universal civilizations, which step by step embrace the vertical civilizations and even some horizontal ones (from global to universal civilization).

A human entity or entities of vertical civilizations, or strictly speaking—people—nowadays, live in several civilizations simultaneously as shown in Figure 1-16. In these kinds of interactions, people from given human entities (social organizations) act based on the foundation given by the World Civilization, which began 6,000 years ago and provides certain common solutions to all civilizations, which accept them (e.g., good vs. bad, music, the wheel, paper) and becomes a storage memory of humankind’s common experience. As the world civilization develops through interactions among vertical civilizations, it also specializes in global solutions, eventually evolving into the global civilization. This civilization has an ambition to include all vertical civilizations under its wings, but due to many factors it can so far touch only certain segments of these civilizations. The same role would likely play out in the universal civilization, but it is now only a discussion among intellectuals. Consequently, nowadays one can recognize three levels of horizontal civilizations belonging to the planetary civilization:

1. World civilization (old habits since 4,000 B.C.)
2. Global civilization (as a mutation of world civilization), 20th-21st centuries
3. Universal civilization (as a mutation of world and global civilizations) yet in *status nascendi*

The full classification of civilizations of the Earth is provided in Figure 1-17. This classification includes a possible civilization created by ETI—Extraterrestrial Intelligence, which nowadays is beyond human comprehension. Is humankind alone

in the universe? Or are other intelligent beings out there somewhere in the hugeness of space? Recent investigations in cosmology indicate that there are probably many planets hospitable to life. The planets with hydrogen-rich gases, water, and sources of energy may form life. Perhaps this life can be older than ours, and one can believe that an alien intelligence may attempt to communicate [4] with us and can be more advanced than we are. Astronomer Frank D. Drake (1962) guesses that about 10,000 to 100,000 advanced civilizations exist in the Milky Way galaxy alone. Opponents maintain that we humans are unique and alone in the universe. The U.S. supports the SETI project, the Search for Extraterrestrial Intelligence, which so far has had limited results.

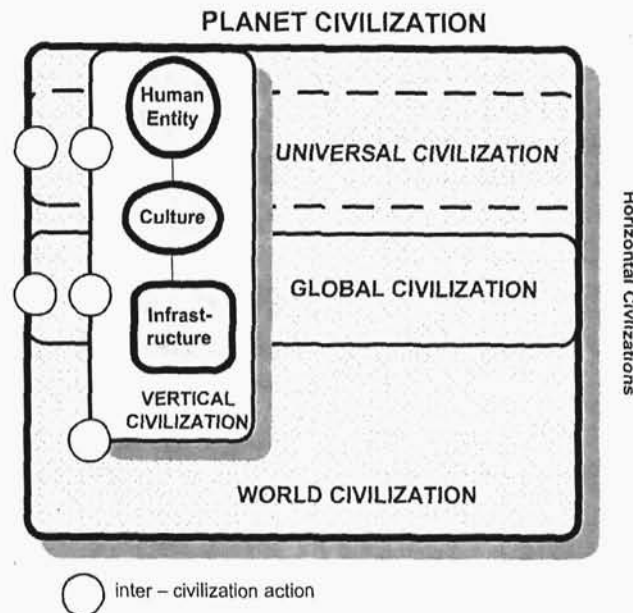
CONCLUSION

At the beginning of the 21st century the idea of “civilization” becomes more popular as we are facing terrorism, which is de facto a war of civilizations. At the same time the concept of a “state” changes, when for the sake of *globalization* some states are ready to minimize their roles and look for a concept of self-supporting citizens and growing business in a world without borders. Both these two factors emphasize the growing role of “civilization” in world affairs.

A. Further Research Directions

- Investigation of relationships among human specializations, culture, and infrastructure (technology) developments as the determining factor in civilizations’ advancement or decline
- Investigation of human entities and their dynamics in transformations within a community’s ladder
- Investigation of different world-systems and their impact upon civilization development or regression

Figure 1-16. A vertical civilization among horizontal civilizations



- Investigation of civilization dynamics characterized by different configurations of key indicators
- Investigation of civilization characters by application of different configurations of key indicators
- Investigation of the world civilization and its impact on international relations

B. Research Opportunities

- The research opportunities are in the interdisciplinary studies of history, political science, technology, anthropology, medicine, and others

C. Additional Ideas

- How civilization concepts impact the globalization processes in the 21st century and lead to a new kind of civilization—perhaps a global one

D. Rationale

- To understand the world dynamics in the 21st century one must understand the paths of civilization. The contemporary Western civilization is seen not only as the promoter of comprehensive globalization but also—due to the multifaceted impact of growing information, medical, electronic, and transportation technologies—as the seed-bed of anthropological mutation. Yet contrasting demographic and ecological developments in other civilizations of the world may turn the apparent trend in another direction. Human history is relatively short, since civilization is only 6,000 years old. However, it is very complex in societal, cultural, and infrastructural relations. Furthermore, different religions create different mindsets and complicate civilization issues even more. One such issue is the Civilization War in the 21st century, which is called the War on Terrorism. One can imagine

what would happen if this war were called the Civilization War. In almost every community we would face a war and the human fate would be even worse and tragic. Therefore, it is important to discuss a concept of civilization and apply the modern graphic technique of modeling complex, large-scale processes. The traditional narrative is too simplistic for defining the dynamics of the current state of civilization.

E. Additional Reading

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ENDNOTES

¹ This definition is a generalization of A.L. Kroeber's (1952) approach to culture.

² For some civilizations, the idea of world-systems is not clear; however, this author concurs with Wallerstein and Wilkinson's idea that this kind of approach is valid in tracing civilization development.

³ The current climate pattern consists of brief interglacials, or warm periods, lasting about 10,000 years, and much longer cool periods. The most recent ice age began about 100,000 years ago, and lasted until about 10,000 years ago. For the last 10,000 years, the earth has been in a warm, interglacial phase of these cycles (Christian, 2005, p. 131).

⁴ Provided in a letter to the Author.