

rides were curtailed in the 1910s by regulated capitalism (*Progressivism*). It is a question in the 21st century: Can the U.S. repair itself and return to *regulated capitalism*? How much damage will be done to the domestic industries and labor force until the greed-driven executives will be looking for solutions that are optimal in the long term for their citizens?

What about progressive ideas, as the product of Yankee ingenuity? One answer is offered by Christopher Hill (2007) in the very prestigious periodical *Issues in Science and Technology*, published by the National Academy of Sciences, National Academy of Engineers, Institute of Medicine, and The University of Texas in Dallas. He suggests that Americans live now in a post-scientific society which does not need many scientists and engineers. This is because it will be “cheaper” to do basic research abroad, particularly since young Americans express a declining interest in mathematics, science, and engineering. Americans should rather concentrate on innovating organizational, social, art and business processes, taking examples from Google and eBay innovators. Is this the future of American progressive ideas? In fact, this is rather a surrender of complex new thinking to offshore researchers on behalf of the fun society idea, which many in our young generation would certainly like.

These bad examples of international activism and innovation ideas mean that the U.S. in the 21st century is at the stage of self-poisoning. Whether it will overcome this syndrome is a question for the future history of America and the world. Another question is whether the political system can reform managerial capitalism soon enough to stop the country’s march into drastic economic decline and unrest, like used to be in the 1930s.

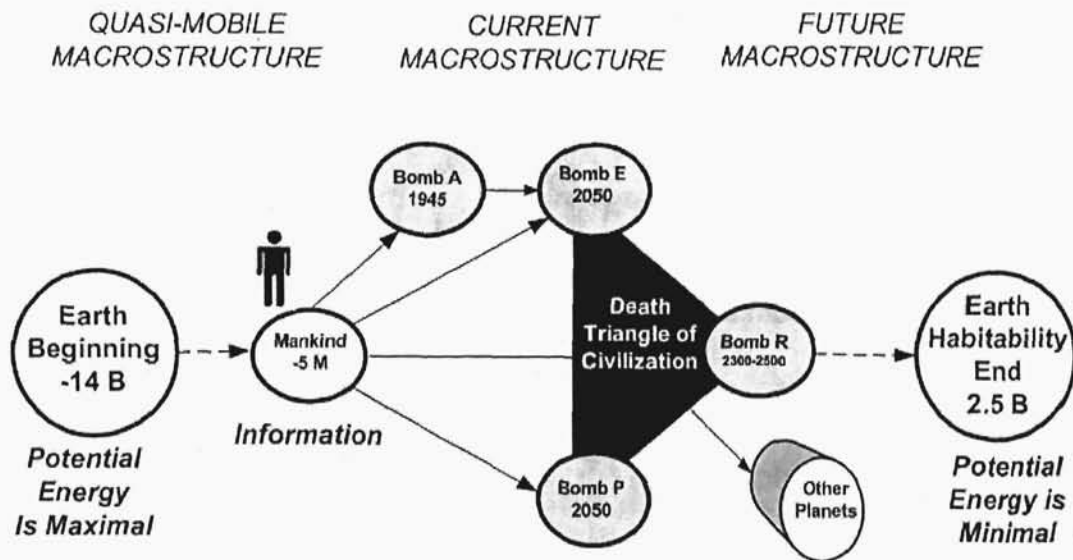
GRAND MODELS OF THE CIVILIZATION CTH

As a rule, each generation thinks that it lives in the critical time of the whole civilization. For example, let us examine our own generation’s time. Figure 8-7 depicts the CTH Grand Model of “Big and Mini Bangs.” This model shows that according to the state of our knowledge one can distinguish seven Big and Mini Bangs of civilization. Three are obvious Big ones: they concern the beginnings of Earth and of mankind and one that will mark the end of the planet. The remaining four Mini-Bangs have been happening in the current and future historic macrostructures: Atomic Bomb (1945), Population Bomb (2050), Ecology Bomb (2050), and the depletion of strategic Resources Bomb (2300). The association of the last three Mini-Bangs may suggest that the years of 2050-2300 will be very critical for humankind and therefore we can call this time the Death Triangle of Mankind (or Civilization I). This case is how the Future CTH may play a vocal role in guiding the development of civilization.

The next CTH Grand Model, Info-Energy, is shown in Figure 8-8 and is organized according to two criteria: energy and information. Based upon its synthesis one may notice several following observations about the development of civilization:

- Four inventions, print, the steam (internal combustion) engine, the computer, and the Internet have decided the direction of civilization’s development in the last 500 years. Print liberated thinking, and as a result, the internal combustion engine was built, which gave more time for humans to spend on education. Consequently, they designed the computer, which helps in improved control of processes and utilization of resources. Thus, each step toward the development of the Internet has revolutionized communication among humans.

Figure 8-7. The big & mini bang model of CTH of civilization



- Every 400 years, a great curiosity occurs which leads toward discoveries of lands, inventions, and cosmic and life science-oriented undertakings. In shorter segments of time a civilization's development passes through two phases, design and analysis, alternately as it is shown in Figure 8-8.

Based on this model, a historian in his public role may enrich our knowledge and awareness about more derivative observations, which may be priceless indicators for curious people on how to act today and in the future. One may mention that Snyder (1999) found that culture systems evolve in 300-400-year historic cycles, but he perceived the political factor (dynastic cycle) as the main cause of this duration.

The subsequent CTH Grand Model of Autonomous Civilization's Development, shown in Figure 1-2, is designed with the Toynbee approach, which states that the development of societal, cultural and infrastructural civilizations occurred in response to the challenges of nature, social life, beliefs, and technology. This model facilitates opinion on the

so-called "clashes of civilizations" mentioned by Huntington (1993) and allows for the measurement of those "clashes" by the civilization index (see Chapter III).

The CTH Grand Model of Regional Initiatives, depicted in Figure 8-9, allows for the investigation of *critical* processes and events that decide which region of the world leads the others in civilization's transformations. Finding that type of critical solution may help achieve better equilibrium in the world. In such a manner, historic research may be applied in the planning of international policies.

The Future History Model of CTH illustrated in Figure 8-10 identifies the current state of civilization, which in addition to the "Death Triangle of Mankind" possibility indicates the bifurcation between the developed states (Electronic Global Village) and those developing states that prefer the *status quo* (Tribalism-INFOCO-3, pre-electronic). Among the former, one may perceive another bifurcation among states which promote techno-globalism (e.g., the United States) and

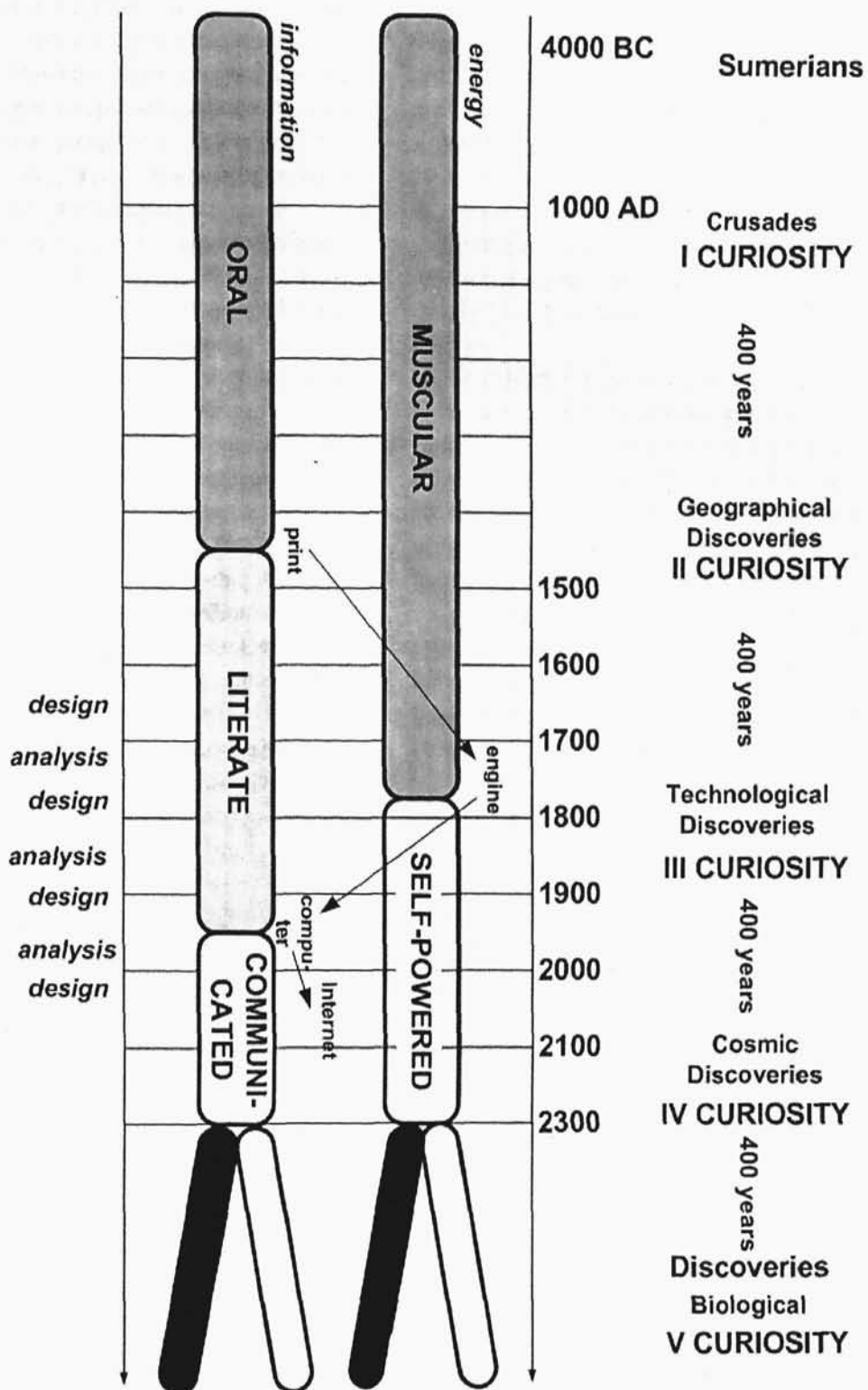
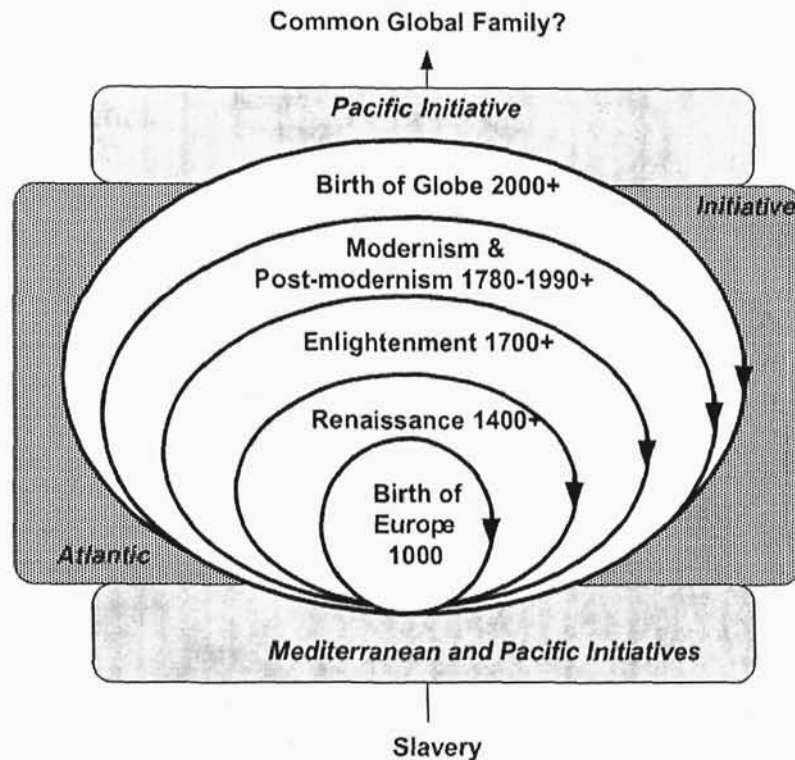


Figure 8-8. The info-energy model of CTH of civilization

Figure 8-9. The CTH grand model of regional initiatives



states which promote techno-nationalism (e.g., South Korea).

A more careful investigation of those bifurcations in the historic context may influence the development of international economic policies. Countries which primarily promote open market policies will be interested in how to cope with countries that promote the concept of the "fortress nation," and vice versa.

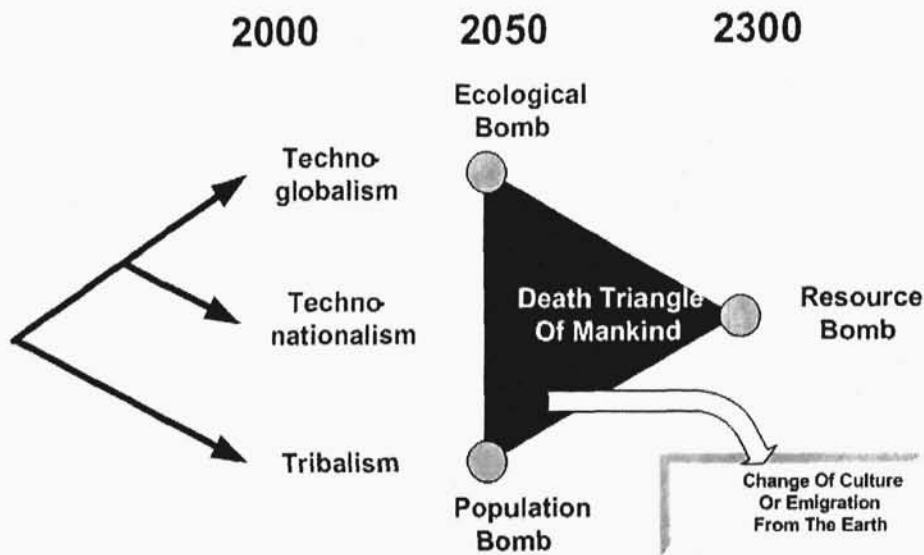
MODELS OF THE STATE CTH OF CIVILIZATION

This section will particularly use the recent history of Poland as an example. One can ask: Why Poland? Poland's 1,000-year-long history is full

of events and interesting contradicting process. The Solidarity movement in the 1980s put Poland on the world map again. In the 18th and 20th centuries, Poland was the sick man of Europe, and Winston Churchill said that when "Poland is sick then Europe is sick." The Poles always ask: Why did the Polish state, which was the largest state in 16th-century Europe, suddenly disappear from the map at the end of the 18th century? In view of this fact, one may ask the next question: Was the fate of Poland convergent with the fate of the World?

These are questions about which the CTH should seek answers. The model of Poland's CTH periods is shown on Figure 8-11. The graph shows that Poland's strength begins to wane in 1572 when the election of kings was introduced,

Figure 8-10. The future history model of CTH



then again in 1652, when the *liberum veto* at the Polish parliament Sejm was introduced.

The fate of Poland compared to the fate of the world is illustrated in Figure 8-12, when at the moment of significant civilization bifurcations Poland was moving away from the West toward the East. As a result, Poland's political fate in 1023 years (966-1989) was 25% divergent from the Western world (in which Poland had belonged since 966) and its economic fate was 50% divergent from the West's (Targowski et al., 2000).

According to *The Fate of Poland and the World* (2000), Poland's fate can be characterized by its key success and failure factors (pseudo-rules), as represented in Table 8-6.

MODELS OF THE WORLD CTH OF CIVILIZATION

The idea of civilization's bifurcation can be applied to illustrate the dynamics of the history of Western civilization. The CTH model of Western civilization is shown in Figure 8-13. This model

indicates that in the years between 1000-1500 Europe was born and consolidated, and in the years from 1500-2000 Atlantic Europe had divided its resources and prevailed. History's bifurcation was decided by the emergence of new monarchies in England, France, Spain and Germany (in such individual princely states as Prussia), where monarchies ruled absolutely.

This polity paved the way for the ideas of the Reformation, Enlightenment (education), Democracy, and Industrialization. Those countries which were in a state of anarchy (Poland) or practiced undifferentiated absolute monarchies (Russia, Prussia) have been left behind because later in the 20th century they practiced "red" (communism) and "black" (Nazism) totalitarianism.

The formal application of CTH rules or principles is illustrated through the example of the Cold War Model in Figure 8-14. This model depicts the critical processes and leaders for the years 1945-91.

Based on this model one can offer the following rules:

Figure 8-11. Poland's model of CTH periods (The Samsonowicz-Targowski Model)

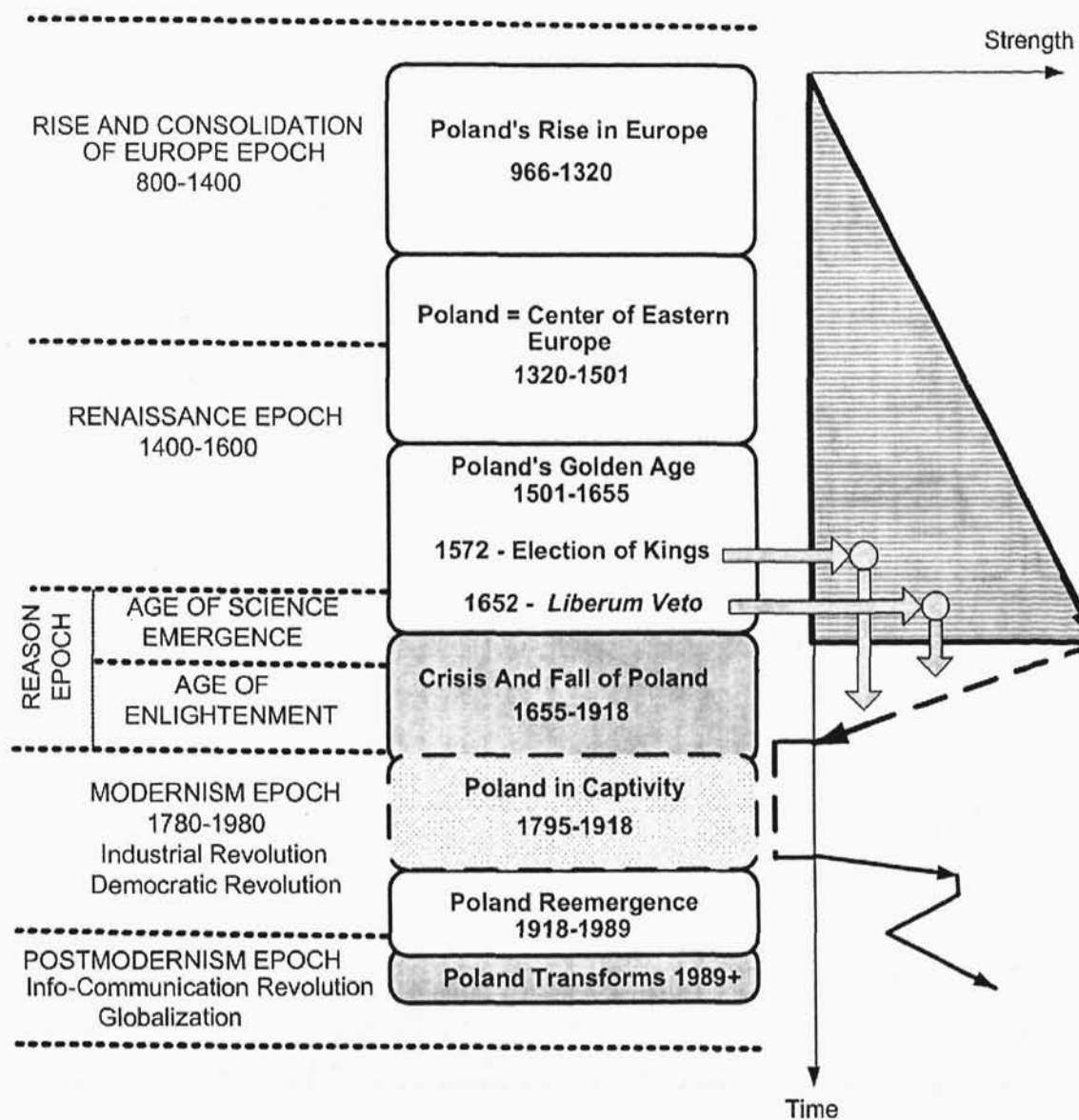


Figure 8-12. Grand civilization biofurcations and Poland

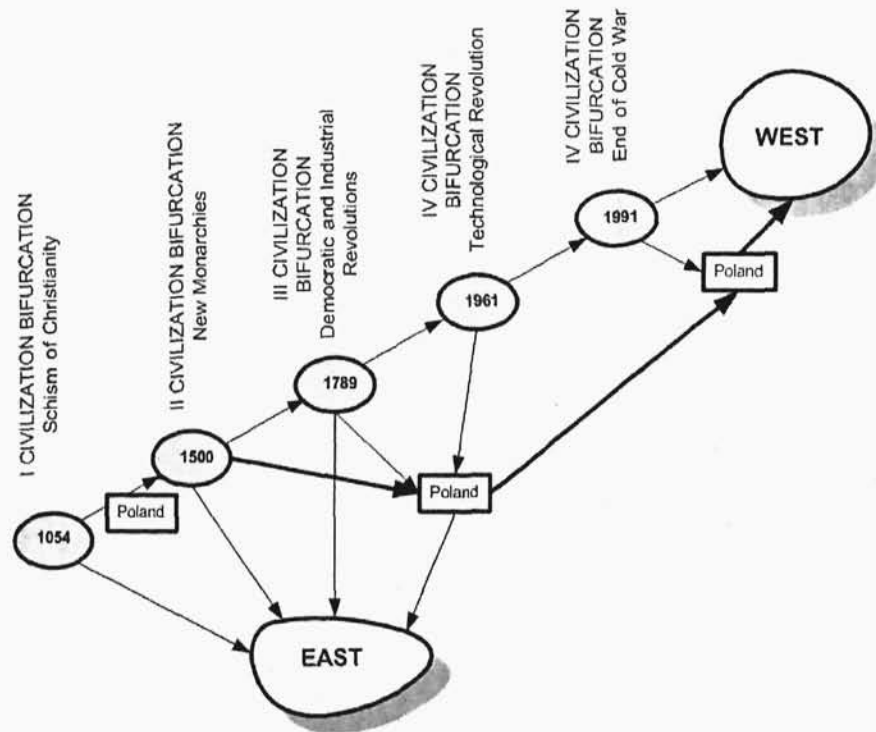


Table 8-6. Poland's key success and failure factors

KEY SUCCESS FACTORS	KEY FAILURE FACTORS
Long statehood	Privileges for few
Strong tradition	Weak leaders
Strong Religion (Catholicism)	Low education
Meaningful cultural center	Excessive self-sacrifice ("blind patriotism")
	Wasted time

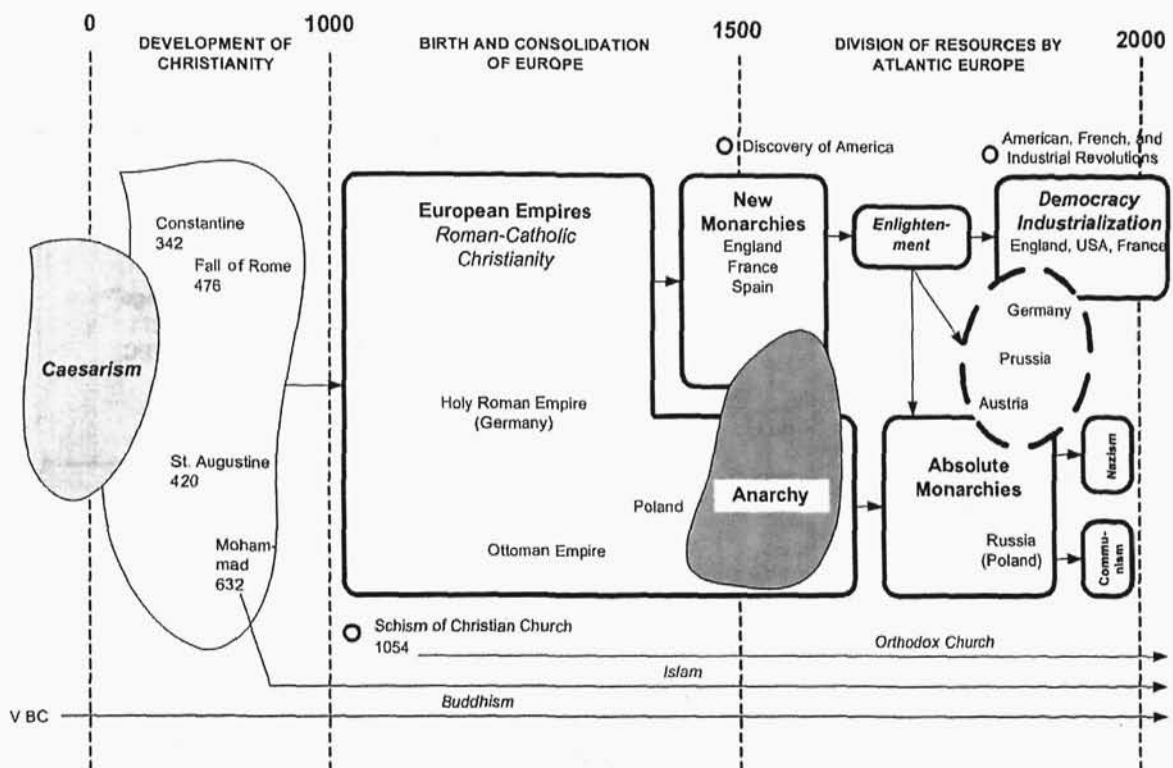
- *Totalitarian Rule: A totalitarian regime is based on extended control and falsified information and coercion.*
- *Totalitarian Failure Rule: A totalitarian regime as a closed system evolves into a chaotic structure and cannot succeed in the long term.*
- *Affluence Rule: A person achieves affluence through enterprising, his/her own*

motivation, and the ability of the society to self-organize.

- *Non-Aggression Rule: The best tool to minimize international aggression is the ability to communicate cross-culturally and understand others.*

Based upon the models of Western civilization, the Grand Laws of Western civilization CTH will be formulated.

Figure 8-13. Western civilization bifurcations and Poland



THE GRAND LAWS OF WESTERN CIVILIZATION CTH

In traditional historical research the search for rules and laws is avoided, because it is assumed that it is not appropriate to make generalizations about the past. Such past rules may not apply to the present and future. Tilly (1984) argues that the search for universal historical laws cannot be left to political scientists, sociologists and other social scientists; it is a task for historians. It is possible to define false rules and laws, or one can state that proposed regularities were correct in the past only and do not have to be correct in the future or even in present times. Such an approach is obligatory in science. For example, in physics, there is a strong tendency to define a universal theory, but with the understanding that such a theory has been

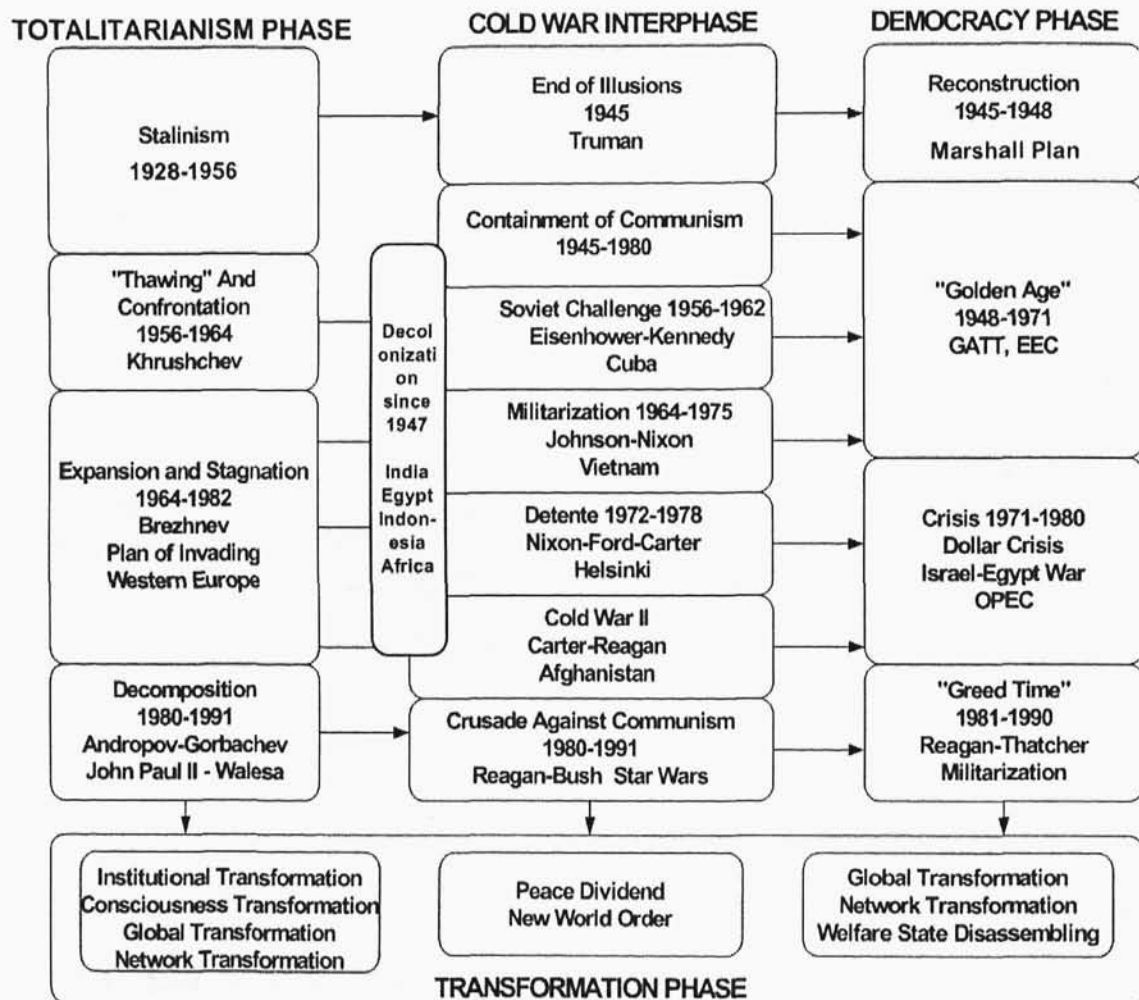
evolving and will continue to evolve according to the state of scientific knowledge.

In management there is no intention to develop a universal theory, but a contingency theory for a given period may be offered. Otherwise, if a historical investigation is not completed with conclusions or attempts to define rules or even laws, then such a work is not a strong contribution to scientific knowledge, since it contains merely data and information.

Taking into account the above comments, and based on the CTH Models of Western civilization, one can offer the following four Grand Laws of CTH⁸:

Law I: People have seen themselves as entering the world with a potential of many gifts, and they

Figure 8-14. Cold War model of CTH



hope to fulfill these gifts in the development of their own lives (Bronowski & Mazlish, 1962).

Law II: People constantly aim for freedom; the range of this freedom depends on the level of the entity's knowledge and communication ability and the knowledge of the international community.

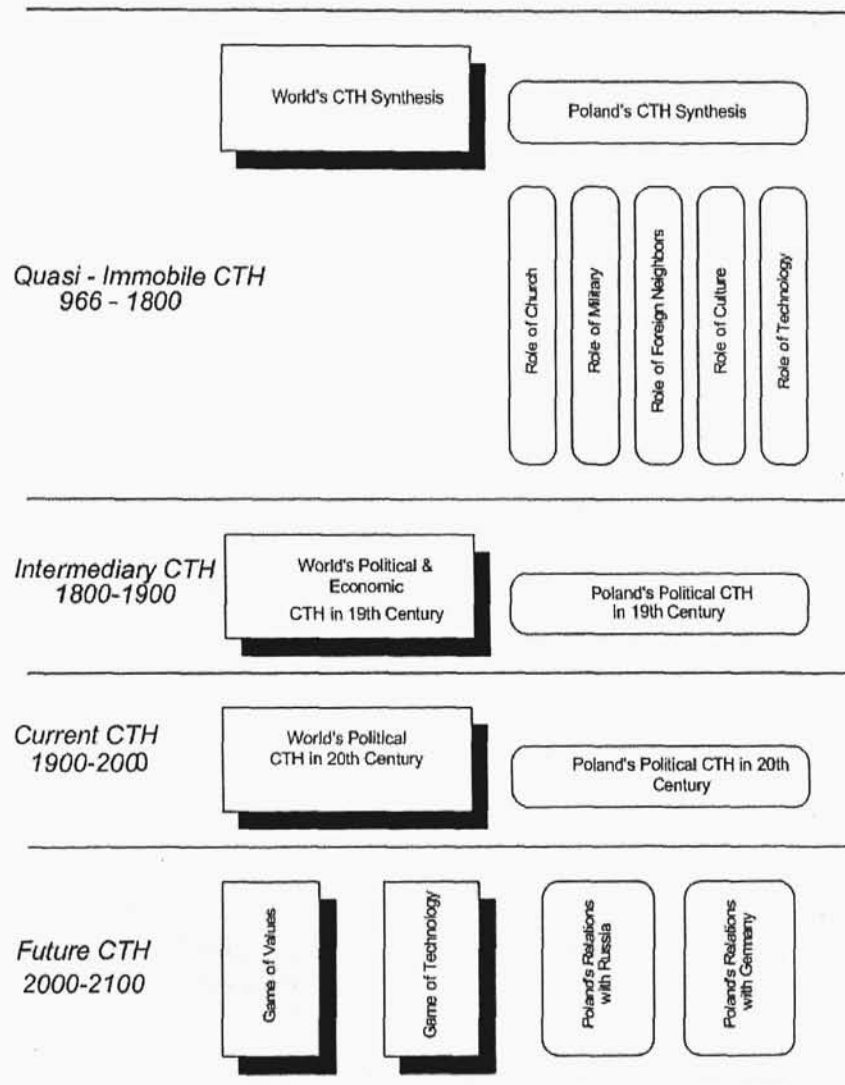
Law III: Mankind consciously steers the development of civilization through the formulation and

implementation of the main ideas and values of a given epoch.

Law IV: The degree of a country's historical success is proportional to a level of harmony among political, social, and economic domains.

Of course there are many other laws of civilization, but these seem to be the most *critical* laws that are used to guide the development of civilization. The question for historians is whether these laws are universal for all civilizations.

Figure 8-15. A model of the book



A. Targowski et al (2000). *The Fate of Poland and the World*. 2000. Warsaw: Beliona.

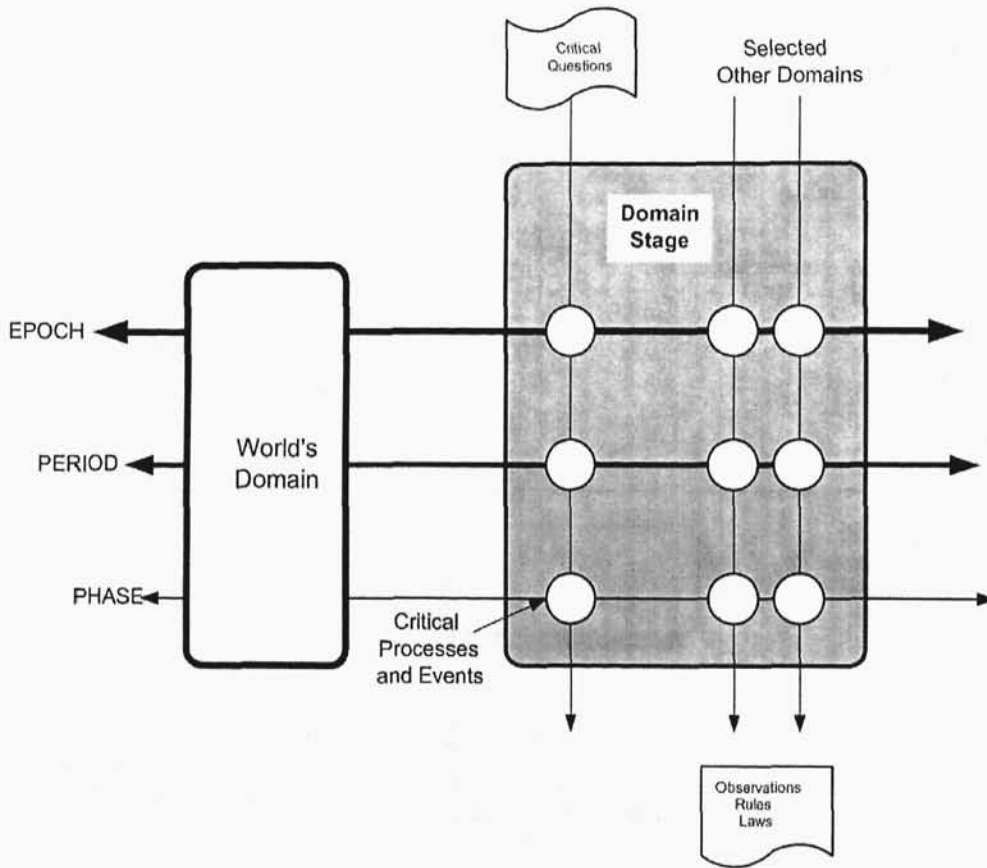
HOW TO INVESTIGATE CTH OF CIVILIZATION

The Fate of Poland and the World (2000), is a prototype for the CTH approach. Because the book was written by 15 authors, it was not easy to apply all CTH rules to its first written expression. But the main author hopes that in the sub-

sequent editions, Poland's CTH will gradually be better formulated. The 1,000 years of Poland's CTH have been written according to the rules of historical macrostructures and in the context of the world's CTH. The book's model is shown in Figure 8-15.

The generic *informed* model of CTH that can be applied in the majority of historic writings

Figure 8-16. The CTH generic model



is presented in Figure 8-16. It indicates the main elements of this approach.

understanding and influencing the present and the future.

CONCLUSION

1. The emergence of the CTH method is the result of the Information Wave's impact upon the development of scientific methods in the 21st century.
2. The effects of that impact are to *informate* the study of history and to present its results in a more "user friendly" manner.
3. The purpose of CTH is to grasp the *critical* historical processes and events in order to better understand their influence upon civilization and to play a public role in

A. Further Research Directions

- Investigate how classic narration of history can be transformed into a model of historical events in order to define more general rules or observations which can be applied in other comparative periods of human history.
- Investigate how huge volumes of historical narration can be synthesized by applying graphic models and paying attention to key factors.
- Investigate major historic events by applying graphic modeling and comparing the conclusions achieved by the old and new methods.

B. Research Opportunities

- Application of graphic modeling of historical events should lead to a better definition of learned lessons from the past for the current and future generations.

C. Additional Ideas

- The Critical Theory of History of Civilization should lead to better awareness of historical, current and future challenges, since it focuses on the most important issues, rules, and observations. The study should provide examples of how a new approach can change the traditional approach and what should be the right conclusion and its consequence for human action.

D. Rationale

- The history of civilization is huge and very important for human actions, since one can expect that a proper appreciation of the lessons of history should lead to fewer errors when making decisions about the well-being of humans in the future. In order to learn such lessons, history should be easily understood by common readers and by leaders. Unfortunately, histories written by professional historians are so long and full of detail that the reader is soon lost and cannot learn any lesson from the past. The historical narrative is usually sequential, from "January to December" and "from Monday to Sunday," full of footnotes but modest in conclusions, particularly at the level of defined laws, rules, or even distinctive observations. This kind of thinking is usually left to a reader. Therefore, if history is to be useful not only for the historian or intellectual (as it was in the 19th century) but for the public also, as medicine is intended to be useful not only for physicians but primarily for patients, then

it should concentrate on key events/issues and include a definition of laws (if possible), rules (if applicable), or, at least, observations, well itemized and prioritized. The graphic approach to modeling complexities of history is an application of information technology which may facilitate the task of modernizing historical narratives. It is not true that the modeling approach simplifies history by generalizing too much. This happens in every science which applies models. The constant progress in science gradually improves early models. History should follow the paths of other sciences for the sake of better service for a wide and curious public, perhaps ready to learn from the past successes and failures of human journeys.

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