

The failure of Communism: a case for evolutionary rationalism and evolutionary humanism

Ladislav Kováč

Center for Cognitive Biology, Faculty of Natural Sciences, Comenius University, Mlynská dolina, 842 15 Bratislava. E-mail: kovacl@fns.uniba.sk

Summary

Communism, as a political and social system and an ideology, appears not to be a historical accident but a logical culmination of two streams of European thought, classical rationalism and romanticism. At a definite stage of evolution of science, three impossible beings had been invented: Laplace's, Maxwell's, and Marx's demons. The former two demons have been exorcised from natural sciences, but Marx's demon may continue to survive under different guises including, paradoxically, postmodernism, antiscientism and ultraliberalism. Just as the Holocaust has dramatically recasted the problem of theodicy – why evil and suffering is present in the world if gracious God is omniscient and almighty? – one hundred million victims of Communism have raised a new problem, the problem of logodicy: how could such a tragedy happen in the name of Reason? In parallel and independently of the results of natural sciences of the 20th century, the experience of Communism substantiates a new rationalism. It has been named evolutionary rationalism, since it may be conceived of as a generalization of Darwin's evolutionary theory. Applied to human affairs, it involves evolutionary humanism. The experience of Communism calls for reevaluation of the role of science, with massive support given to upsurge of cultural (*i. e.* human and social) sciences. It justifies the constitution of humanistics as a domain of culture: activities aiming at ascribing human relevance to discoveries of science and explicitly formulating values that may be implied by the discoveries and that implicate specific norms.

Introduction

Communism, at its peak days in the second half of the 20th century, existed as a social and political system and as an ideology in almost a third of the world. Why? Communism may be conceived of in two different manners: As a manifestation of contingency of history, an accident that afflicted humankind just as a traffic accident may befall an individual. Or, alternatively, as a phenomenon that arose at an appropriate stage of human economic and spiritual progression. The two alternative views assign to the experience of Communism two different bearings upon the present. Conceived of as a historical accident, Communism could be relegated into the repository of history, just as for instance the plague that devastated Europe in the 14th century, reducing the population to a half, or the great earthquakes in 1975 and 1976 in China to which one and a half million humans fell victims. If, however, Communism had been more than just a chance event, if it had been a step of cultural evolution, unique in its concrete appearance, yet unavoidable in its general features, it would remain a structural element of cultural evolution similar to Renaissance, Inquisition or the Enlightenment. Its thorough analysis would serve to affect, by innumerable feedbacks, the direction of the future progression. This holds for countries that were spared Communism no less than for the afflicted ones.

The present study is based on the assumption that Communism, with its theoretical foundation, Marxism, has been a logical culmination of certain streams of European thought. Long persisting theories of humans and of society, dear to speculative philosophers and intellectuals, got the opportunity to be exposed to an unintended colossal experiment. The fall of Communism in Eastern and Central Europe and in Eurasian Russia means that the experiment failed and thereby the theories that had been submitted to testing have been falsified. It has been shown in two parallel studies on the natural history of Communism how the failure of the Communist experiment has provided important lessons concerning explanations of human nature (Kováč 2001a) and of dynamics of social processes (Kováč 2001b). The present study indicates that the experience of Communism, in parallel with, but independently of, the implications of natural sciences of the 20th century, questions two

theoretical sources of Communism, classical European rationalism and romanticism. It also calls for a reevaluation of the role of science and for the explicit establishment of humanistics.

Elaboration of conceptions

1. The legacy of Communism: A gold mine for scholars of post-Communist countries

Disregarding Russia, most of the European countries that went through Communism had belonged, in the past, to the Austrian-Hungarian Empire. Even though the Empire was playing an important role in the political events of Europe and made a significant contribution to European arts, its contribution to the treasury of ideas had been relatively meager – with the possible exception of the last three decades of its existence. In the section dealing with modern philosophy (from Renaissance upwards) of his book *History of Western philosophy* Bertrand Russell (1946) has analyzed work of 26 philosophers who may be considered as pillars of European modern philosophy. From the 26 philosophers, 9 belonged to the Great Britain, 7 to Germany, 5 to France, 2 each to the Netherlands and the USA, one to Italy, but none to Austrian-Hungarian *Mitteleuropa*.

One contribution of this region to European culture may have been underestimated. From 15th to 19th century it was a region of conflicts, both spiritual and military, of different religions. An equivalent of such long persisting unresolved fighting could hardly be found in history of England, France, Spain or even Germany. At a price of innumerable sacrifices and much suffering, religious tolerance was slowly coming into being in the region. The human species is a mythophilic animal (Kováč 2000) – the certitude of one's own truth and the truth of one's group and the aggressive aversion to the views of members of alien groups seem to be part of human nature. Hence tolerance towards other views appears to be a matter of cultural evolution. From many cultures, European culture may be one of the few that have hitherto achieved it. Tolerance may be the main prerequisite for what appears to be the most prominent trait of European culture, its polymorphism (Kováč 1999). **The major contribution of countries of the former Austrian-Hungarian empire to asserting religious tolerance and through it tolerance in general may await a fair appreciation by historiography of European thought.**

Nowadays, these hereditary countries of Austria-Hungary have got the opportunity to make a new substantial contribution to world culture. Scholars of post-Communist countries, from natural and cultural sciences and from humanistics, should exploit the unique data for drawing consequential conclusions from the Communist experiment.

This appeal does not aim at annulling share of the analysts of Communism from countries that had not been directly affected by Communism. Yet, some skepticism may be justified by the essentially controversial experience of the post-Communist countries with a number of foreign experts who had been eager to come and advice how to transform the social system and to build capitalism. Rudolf Tökés's (2000) use of the term *hubris* to characterize attitudes, and competence, of some of them, however impolite, may not be exaggeration. Much criticism has been voiced with respect to their achievement. One of the causes of their apparent failure has been the very nature of recommendations of how to transplant into the disintegrated society at a lightning speed the system and institutions which had evolved in their own countries spontaneously, by trials and failures, in the course of decades or centuries. The lesson appears unambiguous: **establishing capitalism by rational design may be a utopia comparable to the Communist utopia of scientifically managed society**. Another reason was the underestimation, if not plain ignorance, of the implicit preconditions which enable the very functioning of capitalism and republicanism: the existence of evolutionary established institutions of law, morals, republican virtues, even etiquette, important ingredients of social capital. Naive have turned the assertions that the introduction of market would automatically moralize people and reestablish the state of law. Post-Communist hardships indicate that the opposite may be the case. It is tempting to designate this simple-minded doctrine the “**neo-Marxism**”. It is surprising that it has not been met with sturdier opposition in the countries in which the Marxist dogma of the determination of “superstructure” by “basis” had been so convincingly falsified.

Communism, by laying bare human nature in reducing human beings to their biological core (Kováč 2001a) and by disclosing the autonomous dynamics of memes and institutions (Kováč 2001b), has well pointed out to the existence of these implicit preconditions. It appears that those who know Communism from their personal experience and daily perceive its consequences are much better qualified for seeing the undistorted face of Communism and post-Communism than those who, thanks to their personal history of imprinting and reinforcement, need know nothing of the preconditions, as the preconditions form part of their “second nature”.

Transformation of post-Communist countries has been often compared with political transitions to democracy of other countries (*e. g.* Huntington 1991, Volten 1992, Linz and Stepan 1996, Larsen 2000). One can certainly find some parallels with transition from dictatorships to democracy, for instance in Spain or in countries of South America. Yet, making from post-Communist transition a partial problem of research of some general “transitology” seems unjustified. The Hungary-born political scientist Rudolf Tökés (2000) has provided an excellent criticism of such an endeavor. Stephen Cohen (2000) has shown the failure of the universal “transitology” with reference to Russia. It should be added to these concrete analyses that sweeping generalizations in studies of social phenomena meet a principal obstacle: **In contrast to natural sciences, it seems to be virtually impossible in cultural sciences to focus on just one variable, keeping the other variables constant (as parameters)**. Distinctions between variables and parameters are mostly fuzzy. Functions of multiple independent variables cannot be reduced to a function of a single variable. Politics appears to be inseparable from economy, sociology, psychology and even biology. A natural scientist would be inclined to observe that to research meaningfully in such a complex space may still be more a matter of art rather than of science.

Communism, with its paratotalitarian stage even more than with its orthototalitarian one, afflicted human beings so profoundly and damaged traditional institutions to such extent that we are dealing with a phenomenon which may have no homology, not even analogy, in history. The post-Communist changes of ownership, extensive and fast, have also no match in all human history and are creating a unique, unprecedented social environment. The post-Communist privatization is probably one of the most iniquitous redistribution of affluence and penury in history. In the situation when the gross national product has not been growing, the total wealth has been simply redistributed in a **rude zero-sum game**: some could get rich at the expense of those that get poor (Kováč 2001a).

This is why the post-Communist transition should be considered as an additional unique social experiment. Ironically paraphrasing Lenin, post-Communist transition has been called “the highest stage of Communism” (Kováč 2001a). In the closed Communist society, it was not permitted to use all the possibilities for monitoring the experiment. These possibilities are now freely disposable in the post-Communist countries. Regretfully, one does not make full use of them. Even the simplest monitoring, public opinion surveys, are being mainly ordered by entrepreneurs or politicians and serve their interests rather than being exploited by scientists for testing fundamental hypotheses on the nature of humans and society. Instead of

basic research, rather doubtful activities flourish that may be labeled as “**applied social parasience**”. This phenomenon will be later analyzed in more detail.

2. The meaning of scientific endeavor: scientists, humanists, intellectuals

Why should be the data from the Communist experiment subjected to a thorough scrutiny? To satisfy curiosity? To enlarge human knowledge? To better human situation? To prevent repetition of the same history? To describe or to prescribe?

Totalitarisms of the 20th century, Nazism and Communism, have reopened with new urgency the old Weber’s question on the relationship of science and values. They call for reevaluation of traditional views and a redefinition of science and its role (Kováč 2000a). At the description of totalitarianism itself two different views encounter, typified by Friedrich’s empirical comparative politics on the one hand and by Arendt’s normative political philosophy on the other hand (Siegel 1998, p. 24). The former approach strives to be a cool, dispassionate analysis of historical events, with no valuation; the latter operates with the notions of good and evil, it evaluates, advises and warns. The former reminds working of an anatomist who examines a human corpse, a complex anatomic and physiological system that does not perceive, think and feel pleasure and pain. The latter is the approach of a surgeon who treats a living person, takes regard for his/her emotions and intentions and has a single aim: sustaining or restituting his/her health. Is the former approach scientific and the latter has nothing common with science? Is the word “philosophy” the appropriate name for the latter? Hardly so. Medicine is not considered to be a branch of philosophy but a discipline of science.

The problem of the relationship between science and values will be treated in detail in another study. Only the main points are summarized here. The first reason of vagueness and confusion has been due to a too coarse graining of description – a single word is being used to describe different things and events. Axiology, the science of values, and ethics, the science of moral behavior, have been turning in a vicious circle, without making any substantial progress, since antiquity, partly because of this coarseness of concepts. Just as in biology unspecificity of receptors does not allow a finer discrimination of entities, the use of just few and too broad terms does not permit description of complex phenomena otherwise than in a most simplified manner. Another reason is the reification of the concept of science, instead of

considering science as a process, time- and context-dependent, inseparable from human actors. But simplified is also the characterization of science as a single process of falsification of hypotheses: it is a description of science as an ideal type, a description useful for a formalized analysis but not grasping in full the real science. It is analogous to the description of ideal gas or of a non-dissipating equilibrium process in thermodynamics. As any conceptual system, science is built up from conceptual primordials (primitives), from which just one may be universal, even if demarcated in a negative way: whatever contains conscious lie is not science. The conceptual description of contemporary science is a phenomenon *a posteriori*; the present state of science is the result of preceding, often unintended and unconceptualized processes. The present dynamics of science, still largely spontaneous and outside human control, may once result in a description, *a posteriori* again, that may be quite different from the present one.

It has been remarked that one of the achievements of science, not necessarily intended, has been a continual reduction of human worries: pain, distress, labor, misery, anxiety (Kováč 2000). Science has become the main instrument in human efforts to minimize pain and to maximize pleasure. It appears reasonable to make out of this implicit and largely unintended result an explicit value primordial (primitive) of science, equivalent to another one, the search for truth. Willing it or not, without value primordials science as a real process is unconceivable.

This results from the fact that **science is an evolutionary system**. It is an object of selection. It has a teleonomic character: it pursues its permanence, its onticity. **Teleonomy automatically implicates some basic values – if they are not observed, the object ceases to exist. The value primordial of truthfulness** enables the practical application of science and thus selection for persistence by intermediary of economy. **The value primordial of reduction of suffering** ensures the continuous acceptance and support of science by human subjects.

The existence of value primordials notwithstanding, science in making is descriptive and not normative. It can describe necessity, but does not prescribe norms. As science is progressing and as its impact upon human affairs is increasing and may even be decisive, it appears useful to single out from a category of descriptive statements a special type of statements and make of them a separate category: **the category of stipulative statements. They have the form: “if...then”**. They express, in the specific form, necessity or, at least, probability of consequences. In contrast to normative statements, stipulative statements belong to science.

However, in addition to the growing importance of stipulative statements, the progress of human understanding of the world seems to substantiate and to require, ever more urgently, normative statements. The statements not belonging to science, but nevertheless founded on science. **A special domain of culture, neither science, nor religion, law, or morality, should be recognized which may be called humanistics** (it should not be confused with the common English term humanities): activities aiming at ascribing human relevance to discoveries of science, explicitly formulating values that may be implied by the discoveries and that implicate specific norms, and communicating the results of this intellectual work to pupils and to the general public. Humanists may be the name for those involved in such activities. Humanists may complement and gradually replace old-fashioned intellectuals: those who also strive to impose values upon the public, but values less restrained, with little discrimination between knowledge and unjustified assumptions, beliefs or prejudices.

In one of the papers dealing with the natural history of Communism, behavioral options of educated people subjected to the Communist rule have been analyzed in a section carrying the shorthand title “the dilemma of the Communist scientist” (Kováč 2001b). Any scholar who had passed through this most distressful experience can hardly escape the conclusion **that scientists should use stipulative statements as often as possible. And that they should also be engaged as humanists, complementing their dual duty of researching and sciencing** (Krohn and Kúpfers 1989). Moreover, in areas where knowledge is sparse, scientists should not shun to assume the role of intellectuals. Firmly sticking to one’s own convictions, not compromising and opportunistically calculating, with a risk of erring and straying. In democracy, it is this polymorphism of views, struggle of ideas, which, under conditions of limited knowledge, increases fitness of society. Along with other functions, the main function of intellectuals in society is to be collective consciousness. **A society without intellectuals is a society in the state of unconsciousness.** Such a society, suffering from “treachery of clerks”, would be miserable and unstable. This has been borne out by the experience of the societies afflicted by Communism in a most convincing manner.

After the collapse of the Communist utopia it has become customary to speak of a crisis of intellectuals (Lévy 2000). In some quarters, the word “intellectual” is getting a pejorative connotation, or one erroneously identifies intellectuals with technocrats. Yet, intellectuals have always been just phrasing the achieved state of society’s knowledge; where knowledge has been sparse they have complemented it by myths and prejudices. What has been said of science (Kováč 2002) applies as well to intellectuals: Totalitarianism and hecatombs of the 20th century could not be accomplishable without science. However, totalitarianism could appear not

because of too much science but because of its insufficiency, because of the disproportion between human knowledge of Nature and ignorance of humans and society. The more extensively and more quickly will humankind progress in this respect, the more will beliefs and prejudices be replaced by knowledge. Within individuals and within society. Intellectuals will turn humanists.

3. Logodicy: Exorcising Marx's demon

It has been argued in another study that Marxism, the theoretical basis of Communism, was a logical outgrowth of two branches of European thought: rationalism and romanticism (Kováč 2001a). Rationalism as a conviction that the world is ordered, ruled by laws, and that human Reason is able to grasp this order and the laws and exploit them. Rationalist roots of Marxism have been generally recognized and can easily be accounted for by the “Zeitgeist” of its origin: If human Reason was able to reveal the laws of Nature and on the basis of it to foresee processes of Nature – for instance to calculate the eclipse of the Sun with a precision of seconds – and exploit them – the beginning of the 19th century, the years of Marx's and Engel's youth, was the start of the victorious path of technology – why should it not be able to reveal likewise the “laws” of society and, by using them, foresee and manage social events? In his masterpiece *The Capital* Marx aimed, according to his own words, “to lay bare the economic law of motion of society”. **Along with Laplace's demon of mechanics and Maxwell's demon of thermodynamics another demon appeared on the European stage of the 19th century – Marx's demon** (Kováč 1991).

The fact that, in addition to rationalism, romanticism was another source of Marxism is less known and acknowledged. Roger Garaudy, himself a Marxist when he was writing his book on Marx (Garaudy 1964), has justly pointed out how important inspiration had found Marx in German romanticism, in particular, Fichte. Indeed, in a sense, there is a similarity between Marx and Rousseau in blending elements of rationalism and romanticism in their respective doctrines. In Marx's case, the Enlightenment's enthusiasm about the potency of individual human Reason was amplified by the Fichtean creed that man is what he makes of himself. For Marx, human nature, apart from a few elementary needs such as food and sex, was plainly made of social relations. Once the relations of production change, human nature changes as well. When human freedom is no longer cramped by capitalist relations of production it will meet no boundaries in its deployment. It has been pointed out that **the**

whole Marxist conception of the unrestricted potential of humans has as its foundation a biological nonsense, the elementary one: the conviction that the properties acquired in the course of individual's life are inherited and transferred onto progeny (Kováč 2001a).

Physics of the 20th century exorcised from the world both Laplace's and Maxwell's demons. It has been proved that Newton's dynamics is an idealization. The boundaries to human Reason for anticipation and control of events are imposed not only by its evolutionary constraints, in the form of Aristotle's and Kant's barriers (Kováč 2002), but also by the very nature of natural processes. Unforeseen, and in principle unforeseeable move, chance, is no longer an "unrecognized necessity" (Spinoza 1986), "something that is contrary to Reason" (Aristotle 1972). It is the inevitable constituent of existence. "It is there, where trajectories are no longer determined, where *foedera fati*, which rule an ordered and monotonous world of the determinate change, are failing, that begins Nature" (Prigogine and Stengers 1981, p. 292). The world abounds in unstable dynamic systems. Only a fraction of mathematical functions that describe natural processes are continuous and have derivatives (Mandelbrot 1975). **Being is becoming** (Prigogine 1980). **The world is a game consisting in dicing, in which the laws of Nature are the rules of the game** (Eigen and Winkler 1975).

It is not difficult to apply the concept of unstable dynamic systems not only to Nature but also to society. Dynamics of society is barely formalizable and that's why mathematical models in economy or sociology are founded on too simplified assumptions. What remains is to watch the events and to describe them. Or, to do experiments. The application of Marx's ideas became such an experiment. It has been a tragedy that the experiment was undertaken at such a large scale. Some smaller-scale experiments were not permitted, as for instance the attempt at the "Socialism with the human face" intended by actors of the Prague Spring in 1968. As a suit, in the course of the big experiment, one hundred million of human lives were sacrificed (Courtois *et al.* 1997). Moreover, immeasurable was the suffering of those who had not been killed but could not develop their talents, could not choose and enjoy their work and wasted their lives in penury and frustrations.

In the Nazi Holocaust, about 6 million of Jews perished. After the Holocaust the old question of theodicy, how loving kindness of God could admit suffering, has got a new dimension. It has become a distressful preoccupation of Jewish post-war theology and philosophy (Fackenheim 1978, Cohen 1981, Jonas 1987, Rubenstein 1992, Braiterman 1998, LaCapra 1998, Haynes and Roth 1999). Theodicy has also been a subject of European rationalism. It succeeded, at least in one case, to put up with it: according to the well-known solution of Leibniz, the presence of evil and suffering in the world had a rational explanation.

In his essay on the principle of the least action Max Planck (1958, pp. 91-101) suggested that Leibniz's theodicy is analogous to this variational principle: the world created by God is such that it contains, besides the inevitable evil, the maximum of good. **Facing the horror of the Holocaust, any attempt at rational theodicy would appear absurd.** As a matter of fact, the only rational solution appears the **radical theology** of the death of God: God had existed, but he died in the Holocaust and does not exist anymore.

Communism had been intended to be designed in conformity with human Reason, as the realization of a scientifically managed society, humane, equitable, minimizing injustice and suffering. To account for one hundred million of victims and the enormous suffering of countless innocent human beings is no less a challenge than has been the Holocaust. **Not as theodicy, but as a "logodicy": how such a tragedy could take place in the name of Reason?** The post-Holocaust theodicy has its analogy in the post-Communist logodicy. Even with the analogous solution for some intellectuals: **the death of God has its parallel in the death of Reason.** Well-known has become the assertion of Václav Havel: "The fall of Communism can be regarded as a sign that modern thought based on the premise that the world is objectively knowable, and that the knowledge so obtained can be absolutely generalised has come to a final crisis. (...) I think that the end of Communism is a serious warning to all mankind. It is a signal that the era of arrogant, absolutist Reason is drawing to a close and that it is high time to draw conclusions from that fact" (Havel, 1992). The attitude has also engendered a singular conception of politics: a politician must trust not only an objective interpretation of the world, but also its soul; and he must trust his own instincts, his intuition (Havel 1992, 1994).

It has been argued that this kind of logodicy is wrong and misleading (Kováč 2002). No less than the obstinacy of those posthumous children of Marx who continue to profess that Marx's ideas have not lost their pertinence and had only been unjustly discredited by incompetent application. The careless, ignorant or vague attitude of a number of intellectuals, lack of insight into the real cause of the tragedy that was inherent to the Marxist conception of the world, contributes to persistence of nostalgia for Communism in a considerable part of the population in the post-Communist countries.

The discovery of unstable dynamic systems and of the constitutive role of chance in Nature and society has not heralded the end of the era of Reason. It has inaugurated a new rationalism (Nicolis and Prigogine 1987). In their analysis of historical types of rationality a team of Slovak scholars have reached the conclusion that the classical (both ancient and modern) type of rationality is undergoing transformation into the nonclassical one (Černík *et*

al. 1997). Communism, by its irrational barbarity and cruelty is, paradoxically, another, independent substantiation of this new rationalism. And post-Communism is also rendering its share. **Chance, the constitutive element of world dynamics is “beyond good and evil” and beyond rationality and irrationality. It is a generator of novelty.** Without it, it would be no evolution; there would be only eternal tautology of being (Prigogine and Stengers 1981, p. 280). Indeed, the prime determinant of irreversibility of events, the second law of thermodynamics, may be conceived of as an expression of ubiquity of chance. Chance enables birth and rise of the most various systems. Only some of those systems are relatively stable, either inherently or because of their withstanding competition with other systems. “Reasonableness” of political and social systems is not primarily determined by how fair or just they are and how close they resemble ideal, but mainly how stable they are. **Evolutionary arising dynamic systems become rational *a posteriori*, not on the basis of a project but by selection from variations** – those variations persist that are relatively the most stable. In this way, by decades of trials and errors the institutions of democracy and market economy have come to being. Far from being ideal, remote from any utopia. As has been stressed (Kováč 2001b), one of the most devastating thesis of Marx has been the assertion that the revolution should not take over the existing institutions but should smash them up. In fact, however, there have been these institutions, selected for stability, that were imposing the rules of game, canalizing chance and giving the system its reasonableness. Rationality of evolutionary constituted systems is superior to rationality of individual Reason. In contrast, the institutions of Communism, the illusory creations of individual Reason, were the very cause of its irrationality. A case in point may have been the extensive purges in the Communist Czechoslovakia in 1970-1971 that followed the Soviet invasion. Along with individual pettiness, complexes of inferiority, malice, stupidity of executors, it was chance, blind, not bridled and not canalized by rationality of institutions, that decided the fate of hundred thousands of innocent, senselessly persecuted citizens. Even the members of the Central Committee of the Communist Party that had ordered and instituted the purges – the institution that should have been the very embodiment of the Supreme Reason – were not spared the lottery that was sorting people for salvation or damnation.

The post-Communist development can be accounted for along the same line. Evolutionary constructions, which were being assembled over centuries and which assure persistence of democracy and capitalism in the countries of Western Europe and the USA, cannot be reestablished by an illusionary rational design within a few years. Already at the beginning of the post-Communist transformation, some political analysts predicted that it

would be a very difficult period full of injustice and irrationality. Dahrendorf (1990) prophesized a passage through the “vale of tears” with the full restitution being achieved in no less than 60 years. According to Offe (1991) the post-Communist transition poses the paradoxical Münchhausen problem (to pull oneself up from a swamp by one’s own bootstrap). Elster (1993), an expert on rationality, has applied to the transition an “impossibility theorem”: simultaneous economic and political reforms are both necessary and impossible. Impossible rationally, one would infer. Which does not exclude the possibility, in fact, inevitability, of an irrational path – unforeseeable, incalculable, inconsistent, contradictory. And ruthless and iniquitous, of course. The nostalgia for Communism would not be so pervasive if this explication of the transition mess were generally known and accepted with serenity, patience and wisdom: rationality will appear *a posteriori* as an outcome of selection.

It may be apparent to biologists that the description of dynamics of the world in terms of variations produced by chance and selection is generalised Darwinism. **Darwinism, the greatest breakthrough in European thought, enriched by the more recent concept of self-organisation, is the essence of contemporary rationalism.** This may be the main conclusion drawn from the analysis of Communism. Even though the term “evolutionary” has become a fad, overused and misused, it is the most appropriate in this case: **the new rationalism should be dubbed evolutionary rationalism.** Darwinian evolutionary dynamics is entirely different from the dynamics of society in Marx’s (and Hegel’s) conception. **It has no inherent rationality – its rationality is an *a posteriori* phenomenon.**

This general characteristic does not underrate or plainly dismiss the share of human knowledge, individual and collective, in the evolutionary game. Steadily accumulating human knowledge is more and more reducing biased random walk and changing in into straightforward pursuit of goals. It is a way of permanently relaxing the limits of human “bounded rationality” (Simon 1990). Growing knowledge of Nature makes possible rational design of technical artefacts, machines, drugs, chemicals. In market economy, the vagaries of blind forces of the market are being tamed and controlled by rational interventions based on growing knowledge. **But the achieved state of knowledge is still far from being sufficient to allow a large-scale rational design of a society.** Yet, in its rationality, the *a posteriori* outcome of trials and failures, the constitutive part of invested human knowledge is becoming more and more important.

In contrast to Laplace’s and Maxwell’s demon, Marx’s demon has not been fully exorcised from the world. Cultural sciences remain the main refuge of the demon. It is no

longer fashionable to declare oneself a Marxist. Yet, Marx's demon keeps tempting those searching for "social laws" or eager to design large-scale social projects and new brands of social utopias. Moreover, paradoxically, the demon is mainly acting as its negative copy, under the guise of doctrines which were strengthened after the fall of Communism as overreactions to it, postmodernism, antiscientism, ultraliberalism (the extreme and naive form of which has been named paraliberalism). A common denominator of all of them is ignorance, sometimes combined with contempt, of natural sciences. **Ignorance or misunderstanding of the evolutionary theory by scholars in cultural sciences is no longer a professional insufficiency. It is, as it will be stressed again later, a genuine intellectual and moral sin.**

4. A pivotal role of cultural sciences

As it has been already hinted at, totalitarisms of the 20th century were made possible, to a considerable extent, by the great progress of natural sciences and lagging behind of cultural sciences (Kováč 2002). Natural sciences were providing knowledge. By applying it, technology furnished effective tools of power, killing and indoctrination. In contrast, cultural sciences were mainly providing myths and prejudices. They produced ideology. The bitter experience notwithstanding, cultural sciences continue to lag behind the triumphant natural sciences.

The present state of cultural sciences may remind the state of chemistry in the 18th and early 19th centuries with its phlogiston theory of fire and caloric theory of working of heat machines. **At the threshold of 21st century, the repertory of cultural sciences may still be replete with all brands of phlogistons and calorics.** In such a situation, the bulk of intellectual and material resources appropriated to this domain of inquiry should be invested into building up a new theoretical groundwork of cultural sciences. This holds particularly for the situation in the post-Communist countries. Laying foundation for psychology, sociology, political sciences, economics firmly rooted in contemporary biological knowledge, analyzing the conceptual basis of Communism, delving deep in the causes of economic, legal and moral corruption – this should be priorities in this field. This should also be preferentially funded from foreign aid.

Instead, the landscape of economic, social and political sciences in the post-Communist countries abounds with exuberant flora that thrives under the name "social programs" of all conceivable kinds. They may be of some avail; yet, a skepticism is justified: **what would be**

expected from applied chemistry operating with the concepts of phlogiston and caloric?

Could application of knowledge of the level of the Stone Age produce anything more than just additional, even if refined, stone axes? Better than nothing, sure. But is this support of “applied social parascience” really the best investment? This lucrative business may function as a powerful attractor for educated specialists, diverting them from what has been indicated as the unique challenge for scholars of post-Communist countries: pervasive theoretical analysis of Communism and its lesson to humankind. The rich gold mine continues to be neglected and largely unexploited.

It is, of course, possible to argue against the idea that cultural sciences should model themselves on the natural ones and measure their achievements accordingly. Such a view, in fact opposite to that just expressed here, has been vindicated in a recent book (Flyvbjerg 2001): “...attempts by social science to become a “real” theoretical science [are] doubly unfortunate because such efforts draw attention and resources away from those areas where social science could make an impact and instead into areas where they do not have, never have had, and probably never will obtain any significance, that is, as genuinely normal and predictive sciences.” Perhaps, the author of the book, a Danish professor of planning and adviser of politicians and civil servants in matter of urban planning, would see the potential and priorities of social (and psychological) studies differently, had he had his own personal experience with Communist “planning” and with post-Communist muddling-through.

For the present author, the main lesson (of a stipulative character) to be drawn from Communism and from its failure is just this: In order not to repeat the bleak history, in order to bar upsurge of new myths and new utopias, in order to surmount the imminent critical period brought about by a dizzy rate of progress of technoscience and technology, **humankind is facing a need of massive reorientation of scientific research and its priorities, with emphasis upon cultural sciences.** Cultural sciences should get rid of phlogistons and calories and catch up with their much more successful partner, natural sciences (Kováč 2002).

5. Dolorodicy: evolutionary humanism

Hypotheses that Communism had falsified have been analyzed in two other papers (Kováč 2001a, 2001b). It would be a mistake to claim that all ideas of Marxism have been plainly refuted. A thorough analysis of Communism should also include those stimuli that

have survived its death. Still more erroneous would be to pretend that, in turn, all the opposite views have got justification. Such a pretense may be present in backlash after the fall of Communism. **Mainly in the form of excessive, distorted and dilettante liberalism that may be called paraliberalism.** Paraliberalism simplifies Smith's idea of the "invisible hand" of market and Hayek's idea of "spontaneous order", it deifies market as sort of absolute rationality and excludes state interventions into economy. **In a sense, it is a resurrection of Hegelianism.** For paraliberalism, products of culture are merchandise, just as are material products of industries. Education is also considered to be a kind of merchandise. The most absurd feature of paraliberalism is the promulgation of a simple moral tenet which is being, quite erroneously, attributed to Adam Smith: the more an individual pursues his/her personal, selfish interests, the more does he/she serves society. In the post-Communist society, afflicted by disintegration of values, paraliberalism is a lamentable phenomenon that complicates healing and regeneration. If Marxism was, in the shorthand description of E. O. Wilson (1978, p. 191), sociobiology without biology, **the simplex liberalism may be denounced as anthropology without biology. The recurrent deficiency again: ignorance of the evolutionary theory.**

The evolutionary theory is the basis of a **doctrine to which the lesson of Communism gives a new substantiation: evolutionary humanism.** Julian Huxley (1964) coined the name. As the first Director General of UNESCO, Huxley made of it the constitutional doctrine of this international organization. Unfortunately, his successors at UNESCO abandoned his project.

Evolutionary humanism is a component of the new rationalism. Its starting points are straightforward: For hundreds of thousand of years natural selection was shaping humans to make them group animals fitted adequately to the environment of their natural habitat, the savanna, as hunters and gatherers. Survival of an individual depended of the ability to coexist peacefully with members of his/her own group and to maintain antagonistic relations toward members of alien groups. **Humans have evolved as social, indeed hypersocial, animals.** In the last ten thousand years, cultural evolution has been pushing humans with steadily increasing speed into unnatural environments for which they lack adequate biological matching. The discrepancy between the biological limitations of humans and exigencies of cultures generates intergroup tensions, which, in our days, have assumed global dimensions.

Because of this steady acceleration of "evolutionary weaving", importance of knowledge is continually increasing. Growth of knowledge proceeds by the universal manner of any progression: by trials and errors and selection. Society should provide the largest

possible space for trials and errors. **Instead of an illusory “moral of Truth”, the “moral of erring”, well known to scientists, should be proclaimed and promoted.**

Communism has provided the convincing proof that human nature, a product of biological evolution, is immutable (Kováč 2001a). Yet, genes determine human nature in a considerably abstract manner, largely in the form of “cultural loci” which are being filled in by culture (Kováč 1999). Contemporary culture, itself a product of evolutionary experimentation, tends **to transform human beings into humane beings. The transformation may be a prerequisite for sustainability of modern civilization.**

Evolutionary established institutions are important parts of a successful culture. At the contemporary level of scientific knowledge, the institutions exceed, by their complexity and their *a posteriori* rationality, the capacity of individual understanding. If the evolutionary institutions are abolished and replaced by arbitrary ones that had not passed the selection process – and that precisely was the deed of Communism – a decline of humans ensues, back to the level of the savanna, and the society loses stability. **Institutions impose limitations on, and to a considerable extent prescribe, human behavior. In addition, they provide to humans, fearful animals, security.** The need of security is one of the most elementary human needs. In the era of post-Communism, uncertainty, the loss of security, the failure of frail institutions to ensure safety seems to be the main threat to the arising labile democracies.

The most intriguing feature of the evolutionary established institutions is their faculty to enforce conjugation. Any human individual is naturally pursuing his/her own interests. When the institutions are well functioning, the pursuit of personal goals is rather tightly coupled, conjugated with activities of the individual that are beneficial to society. The famous example of Adam Smith’s baker, who gets his living by selling his products on the market, is the case in point. A tight coupling of respiration to synthesis of ATP in biological systems is an appropriate metaphor for this socially effective conjugation.

The human being is a hyperemotional animal, probably the most sensitive to pain and the most tenacious in craving for pleasure among all animals. As any other animal, the human individual strives for minimization of one’s own pain. Evolution has equipped humans with empathy. Because of empathy, a human person can experience suffering of another person almost as intensively as one’s own. It has been claimed that the pivotal role of human conscious emotional experience, in combination with empathy, has consequences that may be a revolutionary flash in evolution (Kováč 2000). **For a human person, transformed by culture into a humane person, experiencing fully developed empathy, reduction of suffering in the world becomes his/her personal (“selfish”) need, and hence intrinsic**

value. This makes of the reduction of suffering the constitutive axiological commandment.

Evolutionary humanism recognizes the value of cultural polymorphism. Science, however, is not a culture among other equivalent cultures. Science is the single product of cultural evolution having intercultural, supracultural status: it is a process of continuous reduction of ignorance, growth of objective knowledge. Evolutionary humanism can neither be indifferent to discrediting science nor indulgent to fanaticism. Seen in this way, Marxism, as a theoretical basis of Communism, was, on the one hand, a product of enormous ignorance of human nature and, on the other hand, a manifestation of the arrogance of individual Reason. Under this arrogance, however, a primordial human trait, associated with ignorance and fear, was hidden: **mythophilia** (Kováč 2000). **This is why education, reduction of ignorance and dissemination of knowledge is one of the supreme public goods.** From the evolutionary point of view, knowledge is the objective good, and hence a positive value – after all, biological and cultural evolution in its entirety is growth of knowledge. Eschewing knowledge, denying knowledge, merchandizing with knowledge, is a sin. Sin, a religious term, gets a secular meaning.

Discussion

Human inherent, intuitive interpretation of the world is circumscribed by a boundary that has been called Aristotle's barrier (Kováč 2002). A model of the world, reality, within Aristotle's barrier is simple, easy to human comprehension; yet probably far away from capturing the intricacies of the world. Sheer contemplation, however ingenious, has not allowed humans to cross the barrier. Experimentation (which nowadays also includes computer modeling) may be the only way of how to overcome the limits.

The imposing progress of natural sciences in the 20th century was made possible by innumerable ingenious experiments accomplished in innumerable laboratories all over the world. These experiments gave rise to theories that have shattered the very foundations of traditional intuitive thought that had lasted for centuries. For the purpose of the present study, the countless experiments of natural sciences may be considered as having been poised by a single, huge, unintended experiment of cultural sciences – Communism. The experiment with Communism should have induced a similar conceptual revolution in cultural sciences. It has been attempted by this study and two parallel papers (Kováč 2001a, 2001b) to show that, in

fact, the data from the Communist experiment may be complementing the data of natural sciences and lead to the same general conclusions. The concept of evolutionary rationalism may be backed up by millions of deaths and immeasurable suffering of victims of Communism no less than by discoveries in the domains of dissipative structures and complex dynamic systems.

This study has been based on the assumption that Communism was neither arbitrary historical event, nor an aberration, but a logical step of cultural evolution. For the human animal, a unique mythophilic species, equipped with curiosity and craving for order and harmony, which has occupied a specific habitat created by modern European culture, the vision of a “scientifically managed” society was too fascinating for not being tried. This is not to advocate a sort of historical determinism – it would obviously contradict the whole argumentation of this paper. It would be naive to claim that the occurrence of Communism was just as inevitable as an eclipse of the Sun. Small, apparently insignificant changes, chance events, could lead to a cascade of wildly diverging trajectories. In the case of Communism, alternate, virtual histories, allohistories, “what ifs”, counterfactuals (Ferguson 1997) would be especially exciting pastime for both writers and historians. The Russian type of Communism had surely its own idiosyncrasy. Essential for the present argument is the fact that it was not a unique attempt and not a single one that collapsed because of its inherent instability. The Commune of Paris of 1871 may have been terminated because of external pressure. But another case, the Swedish Socialism, apparently failed due to its internal decay. The scientific dictatorship, devised by August Comte in his *Système de politique positive*, with a ruling group of bankers and the best scientist in the head position of the Grand Priest, would likely have been no less irrational and cruel than was Lenin’s dictatorship of the proletariat, had had the contingencies of history provided the opportunity for the trial.

It has been pointed out that just as the phenomenon of the Holocaust has given a new dimension to the uneasy religious problem of theodicy, hundred million of human deaths, caused by the social system that had claimed to be the embodiment of Reason, have posed a similar problem, a new problem of “logodicy”. The immense human suffering of the 20th century should remain a conspicuous mark of the “century of science”, on a par with the marvelous gadgets of its technological glamour. It calls for still another kind of secular theodicy, “dolorodicy”. Minimization of suffering has been installed as one of the fundamental principles of cognitive biology (Kováč 2000), as well as of evolutionary humanism that itself may be considered as „applied cognitive biology“. Evolutionary humanism combines elements of both science and humanistics.

According to the epistemic principle, evolution of the entire universe is the evolution of knowledge (Kováč 2000). At any place in the universe with specific thermodynamic conditions, focuses arise in which self-replicating systems come into being. Automatically, Darwinian selection between them sets in, pushing some of the systems to increasing their complexity up to the level of consciousness and self-consciousness. In analogy with the term “black holes”, the focuses in which cognition processes are underway culminating in consciousness have been named “white holes”. At one of the white holes, in which our Earth is placed, at a certain stage of evolution of knowledge the restless inventive human mind overestimated the amount of available knowledge. It infringed Jaynes’ principle of minimal prejudice (Jaynes 1957, Kováč 2000) in attempting at building up a “scientifically managed” society. The attempt failed: human ignorance is still enormous. Evolutionary humanism may be the viable option, conformable to Jaynes’ principle, corresponding to the attained level of knowledge, and promoting continual growth of knowledge along with continual reduction of human suffering.

Acknowledgment. This study was supported in part by Howard Hughes Medical Institute Research Grant No. 55000327. Thanks are due to Jozef Nosek and Ľubomír Tomáška for interest and valuable discussions. The outline of this paper was laid down at Konrad Lorenz Institut für Evolutions- und Kognitionsforschung at Altenberg/Donau, Austria, in the stimulating atmosphere of conversations with Rupert Riedl and other colleagues. Supplementary material is available at author’s web site <http://www.fns.uniba.sk/~kbi/kovlab>.

References

- Aristoteles (1972) *Physics*, II, 5. In Martinka, J. (Ed.): *From Aristotle to Plotin. Anthology from works of philosophers*. Pravda, Bratislava (in Slovak)
- Braiterman, Z. (1998) *God after Auschwitz*. Princeton University Press, Princeton
- Černík, V., Viceník, J., Višňovský, E. (1997) *Historical types of rationality*. Iris, Bratislava (in Slovak). The English synopsis is available at www.bu.edu/wcp/MainScie.htm
- Cohen, A. A. (1981) *The tremendum. A theological interpretation of the Holocaust*. Crossroad, New York
- Cohen, S. (2000) *Failed crusade: America and the tragedy of post-Communist Russia*. Norton, New York

- Courtois, S., Werth, N., Panné, J. L., Paczkowski, A., Bartošek, K. and Margolin, J.-L. (1997) *Le livre noir du communisme. Crimes, terreur, répression*. Laffont, Paris
- Dahrendorf, R. (1990) *Betrachtungen über die Revolution in Europa*. Deutsche Verlags, Stuttgart
- Eigen, M., Winkler, R. (1975) *Das Spiel. Naturgesetze steuern den Zufall*. Piper, München
- Elster, J. (1993) *The necessity and impossibility of simultaneous economic and political reform*. In: Greenberg, D., Katz, S. N., Beth Oliviero M. and Wheatley S. C. (Eds.) *Constitutionalism and democracy*. Oxford University Press, Oxford, pp. 267-274
- Fackenheim, E. L. (1978) *The Jewish return into history: reflections in the age of Auschwitz and a new Jerusalem*. Schocken Books, New York
- Ferguson, N. (1997) *Virtual history: Alternatives and counterfactuals*. Basic Books, New York
- Flyvbjerg, B. (2001) *Making social science matter*. Cambridge University Press, Cambridge
- Garaudy, R. (1964) *Karl Marx*. Edition Seghers, Paris
- Havel, V. (1992) *The end of the modern era*. Speech at the World Economic Forum, Davos
- Havel, V. (1994) *The need for transcendence in the postmodern world*. Speech in the Independence Hall, Philadelphia
- Haynes, S. R., Roth, J. K. (Eds.) (1999) *The death of God movement and the Holocaust*. Greenwood Press, Westport
- Huntington, S. P. (1991) *The third wave: Democratization in the late twentieth century*. University of Oklahoma Press, Norman
- Huxley, J. (1964) *Essays of a humanist*. Chatto and Windus, London
- Jaynes, E. T. (1957) *Information theory and statistical mechanics*. Physical Review 106, 620-630
- Jonas, H. (1987) *Der Gottesbegriff nach Auschwitz. Eine jüdische Stimme*. Suhrmap, Frankfurt
- Kováč, L. (1991) *Geist und Ungeist in der Wissenschaft seit 1900*. In Peterlik, M., Waldhäusel, W. (Eds.) *Geist und Wissenschaft im politischen Aufbruch Mitteleuropas*. Böhlau, Wien
- Kováč, L. (1999) *European culture in the global conflict of cultures: The view of a biologist*. In: Fukač, J., Chlup, Z., Mizerová, A., and Schauerová, A. (Eds.) *The crossroads of European culture 1998*. VUTIUM Press, Brno, pp. 435-445
- Kováč, L. (2000) *Fundamental principles of cognitive biology*. Evolution and cognition 6, 51-69

- Kováč, L. (2001a) *Natural history of communism. I. Pliability of human beings and immutability of human nature*. To be submitted
- Kováč, L. (2001b) *Natural history of communism. II. Autonomous dynamics of memes and institutions*. To be submitted
- Kováč, L. (2002) *The two cultures revisited: new widening gaps*. *World futures*, 58, 1-11
- Krohn, W., Kűpfers, G. (1989) *Self-organization: A new approach to evolutionary epistemology*. In: Hahlweg, K., Hooker, C. A. (Eds.) *Issues in evolutionary epistemology*, pp. 151-170. State University of New York Press, Albany
- LaCapra, D. (1998) *History and memory after Auschwitz*. Cornell University Press, Ithaca
- Larsen, S. U. (2000) *The challenges of theories on democracy. Elaboration over new trends in transitology*. Columbia University Press, New York
- Lévy, B.-H. (2000) *What good are intellectuals?* Algora, New York
- Linz, J. J., Stepan, A. (1996) *Problems of democratic transition and consolidation: Southern Europe, South America and post-Communist countries*. John Hopkins University Press, Baltimore
- Mandelbrot, B. (1975) *Les objets fractals. Forme, hasard et dimension*. Flammarion, Paris
- Marx, K. *Capital*. Vol. I, 10
- Nicolis, G., Prigogine, I. (1987) *Die Erforschung des Komplexen*. Piper, München
- Offe, C. (1991) *Das Dilemma der Gleichzeitigkeit. Demokratisierung und Marktwirtschaft in Osteuropa*. *Merkur* 45, 279-292
- Planck, M. (1958) *Das Prinzip der kleinsten Wirkung*. In: *Vorträge und Reden*. Vieweg, Braunschweig
- Prigogine, I. (1980) *From being to becoming*. Freeman, San Francisco
- Prigogine, I., Stengers I. (1981) *Dialog mit der Natur*. Piper, München
- Rubenstein, R. L. (1992) *After Auschwitz. Radical theology and contemporary judaism*. John Hopkins University Press, Baltimore
- Russell, B. (1946) *A history of Western philosophy*. Allen & Unwin, London
- Siegel, A. (Ed.) (1998) *The totalitarian paradigm after the end of Communism*. Rodopi, Amsterdam
- Simon, H. A. (1990) *Invariants of human behavior*. *Annu. Rev. Psychol.* 41, 1-19
- Spinoza, B. (1986) *Ethics*. Pravda, Bratislava (in Slovak)
- Tőkés, R. L. (2000) *"Transitology": Global dreams and post-Communist realities*. *Central European Review* 2, No. 10

Volten, P. M. E. (Ed.) (1992) *Bound to change: Consolidating democracy in East Central Europe*. CEWSS, New York

Wilson, E. O. (1978) *On human nature*. Harvard University Press, Cambridge