

Lost in the Quest for Novelty (Remarks on the Role of Openness of the Culture to Repetitions)

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ABSTRACT

Repetitions can be analysed from various perspectives: historical, moral, legal, commercial etc. Their evaluation varies depending on the point of view one chooses to adopt. For instance, plain repetition (copying) can be considered a theft from moral perspective, while in the same time it can be considered beneficial from the perspective of culture propagation. Repetitions, even those which are not innovative, are crucial for the propagation of culture. Moreover, they show that the idea, the tune, the composition and other elements of cultural objects have a real impact on the development of the culture.

From the perspective of memetics, such repetitions are necessary for the memes to survive and the tendency to repeat those “memes” constitutes their fitness to cultural environment. To be closer to biological analogy one should recognize those repetitions as replications. From such perspective the program of reducing replications through the means of “prohibition” becomes not only absurd and unreachable but also it would significantly slow or even push the process of evolution backwards. One should notice that any restrictions on copying were absent in various historical periods. For instance, one of the most important ideals of culture in Middle Ages was exact copying and preserving the works of the Antique, obviously without any permission of the authors or their successors. Not much later hermeneias constituted the canon of the icon painting; without which the latter lacked their “natural” value. There is a lot of similar examples. It is not until the time when the artistic value becomes reduced to its commercial value that the problem of an intellectual theft arises. Whatever the concept of an intellectual property should mean it is an example of self-contradicting definition. No artist works in an intellectual vacuum, thus no one has the full rights to the composition. There are two main reasons for such introducing the concept of an intellectual value. The first is the liberalization of the society leading to its decay into individuals aiming at their own interests. The other is the rapid growth of the “new media” technology, which allows for mindless copying – disregarding any justification or understanding. The latter is not a big problem due to the error elimination in the process of evolution. The former, however, as leading to the disintegration of society is really dangerous. In the nature it would result in the species extinction. In the culture some similarities can also be seen and will be analysed in the present paper. One should make a clear distinction between the plain copying and educational practice which helps to preserve the most important “memes” from disappearing but it covers only a small space of cultural developments.

On the other hand innovations are the equivalent for genetic mutations, which allow

for the creation of new species. Thus a well-kept balance, which we observe in the natural environment is also necessary within the culture itself. Unfortunately we live in the period when the copyright law dominates the social development of culture. Artists, musicians, writers and scholars are forced to quest for novelty even when it does not bring any durable achievements. Short time trends, passing fashions are the marking features of our times. All that is accompanied by the ever growing commercialization of culture. It was supposed to serve the purpose of the adequate remuneration for the authors as people were assumed "to vote with their wallets" for the cultural achievements. The idea of a free market, although evolutionary justified, leads to the optimization which is minimal concerning the needs for adaptation. This is well known from biology and also from some general considerations, like Nicolaus Copernicus analysis of the money market. Better products are supplanted by the worse, at least until those worse products are able to satisfy the minimal needs. This is the case of consumer goods and such is the case of cultural products. The proper compensation for the creators of culture is necessary but commercialization of culture is not the right solution.

1.

The meaning of the term culture is ambiguous. Some think of "Culture" written with a capital letter as a collection of works addressed to the selected members of society, learned enough to absorb (understand, feel or get enchanted by) them. Such culture can be recognized as the joint property of the whole society forming the framework of life and understanding within some greater population, including the instructions of proper (cultural) behaviour of its members. Others, including the authors, try to think of culture similarly to the way biologists think of Nature. From such perspective, culture presents itself as a vast social area, governed by objective laws, which are more or less well recognized; similarly to the status of the discovered laws of natural evolution. Such laws are objective as they are independent of the discoverers both individual and collective. One can call such an approach a kind of naturalism, although the more precise would be the methodological recognition of it as an effort to construct the laws of culture in accordance to the paradigm of science rather than humanities.

Following the above declaration let us be more specific. According to the authors the culture evolves as a process governed by the laws of Darwinian evolution. We do not mean here just a simple analogy but rather but a deeper one including the analogy of genetic structure. Such a strong hypothesis cannot be proven within a short or even longer published article. It is even possible that a complete proof cannot be constructed from within the very system itself. The authors have been interested in this area for many years and have published some of their results (see Bibliography). Let us then treat the hypothesis as temporary and following it let us examine the conclusions to which it would lead us. This seems the only honest way to verify the hypotheses in science.

2. DEMYSTIFYING THE MYTHS ABOUT THE PROBLEM OF COPYING

Let us begin with the short reminder about the rules of evolution. We intentionally do not refer only to the natural evolution as we believe that the laws of evolution

govern not only the evolution of life but cover much greater range. One can as well speak of evolution of the universe, technology and obviously the evolution of culture. Although each of those areas is in its way specific, the general development of all of them shows such strong resemblance that the use of the term evolution seems justified for each of them. Still one should be careful as not every process is evolutionary. Let us than take a look on the rules of that particular process.

There are generally two principles:

1. The rule of replication, i.e. the rule of spreading the information which controls the individuals appearing as the result of the process
2. The rule of fitness to the environment within which the population of individuals exist. The latter is called by Darwin the rule of natural selection

Let us introduce the third rule, equally important – the rule of competitive game

The aim of replication, no matter what is the carrier of the information, is to convey correctly the whole information controlling the behaviour of the system. Such information is of a digital characteristics. The discovery of the digital character of the DNA was one of the greatest achievements in recognition of the laws of the natural evolution. On order to be serious in the evolutionary approach to other disciplines, one should quest the appropriate code, no matter how difficult the attempt is.

The crucial element in conveying the code is the its error free preservation. In any larger complex the transmission of the code is exposed to several distortions – mutations as we call them in biological evolution. From the point of view of replication they are the errors, though sometimes they can be “the blessed errors”. Which “sin” is fatal, and which is fortunate decides in the confrontation of the system with the environmental conditions and the competitors in exploiting that particular environment. Such is the first internal coupling of the code with the other conditions of the existence. The errors are unavoidable in the replication process and their role is unpredictable due to the influence of the external factors. The above two statements constitute the essence of the replication process. It is worth to remember that not every distortion of the original information is an error. For instance the word “cote” is an erratic version of the word “code” while „#\$\$%” is just a pure nonsense.

Let us take a look at one more important feature of replication. Usually, we associate the term with inheritance. It is partially justified, although the common understanding of the word inheritance is the vertical transfer of information, values, goods etc. Thus many people dealing with the memetics underline that the memetic transfer is rather horizontal than vertical. It is not necessarily true. The horizontal transfer is also found in the nature; for instance in the embryonic development, when the new cells gain information from the existing ones. That is not all. The horizontal transfer in the case of animals takes place during the processes of learning, which takes place beyond the genetic development. One should take it into account while talking about the analogy or even similarities in the process of the evolution of culture.

Not every deformation of the code leads to the progress. The latter shows rarely and only in the presence of favourable conditions. Such is the rule of fitness. For instance, Theilhard de Chardin’s thesis about the super-humanization, was at his times, met with the indulgent smile. Not long after, starting in the 90-ties and continuing at

present, the reference to super-humanization while talking about the internet society seems astonishingly adequate. Any code deformation has not only to survive but also to compete with other parallel deformations, which constitutes another example of mutual couplings.

Last but not least comes the rule of competitiveness. This rule prefers the solutions which are not the best but most economical. Evolution does not make plans but develops as it is made possible. Rarely do we meet the improvements of the existing solutions. Some elements appear many times; like the old successful ones have been forgotten completely. The examples can be found in biology: eyes -which were “discovered” differently about 40 times, in politics – political systems like dictatorship which developed and fallen in similar conditions many times. Multiple publications can be found pointing out similarities in political systems of states in Central America and in the delta of Mekong [3]. Here the key factor in understanding is the economy of the solution. From the perspective of physics evolution is branched process and transgression of the point of bifurcation determines the further development. There is however no turning back. It seems brutal or almost impossible. This is the way evolutionary process gains its memory.

3. COPYRIGHT – THE KEY TO CREATIVITY

Copyright infringement ban is the contemporary cliché of our legal culture. What does it really mean and what motivations drive its propagators? The law itself is a set of declarative norms aimed at providing the social order based upon the perfect order imagined by those who govern. Any attempts to justify the norms by religion, custom or ethics remain futile. Obviously all such factors participate in reception and observance of the legal conventions. Such observance can also be a stabilizing element in social life though one should remember that neither the genesis nor the interpretation of a norm go beyond the ability to execute it.

What is than the copyright? It started in XVI century England as the result of the privatization of the governmental censorship. There was no rise of the authors demanding a prohibition of copying their works. Not only did not they perceive the copying as a kind of theft but even felt flattered by it. Most of the creative activities depended, both long time ago and today, on the variety of financial sources: author’s fees, employment of teachers, grants and scholarships, patronage etc. Introduction of copyright into the legal system did not change the situation. It allowed, however, for the establishing of a specific business model – mass editions with centralized distribution system – making the certain most successful works available to the wider public for the significant profit for the distributors.

“The first copyright law was a censorship law. It was not about protecting the rights of authors, or encouraging them to produce new works. Authors’ rights were in little danger in sixteenth-century England, and the recent arrival of the printing press (the world’s first copying machine) was if anything energizing to writers. So energizing, in fact, that the English government grew concerned about too many works being produced, not too few. The new technology was making seditious reading material widely available for the first time, and the government urgently needed to control the flood of

printed matter, censorship being as legitimate an administrative function then as building roads.

The method the government chose was to establish a guild of private-sector censors, the London Company of Stationers, whose profits would depend on how well they performed their function. The Stationers were granted a royal monopoly over all printing in England, old works as well as new, in return for keeping a strict eye on what was printed. Their charter gave them not only exclusive right to print, but also the right to search out and confiscate unauthorized presses and books, and even to burn illegally printed books. No book could be printed until it was entered in the company's Register, and no work could be added to the Register until it had passed the crown's censor, or had been self-censored by the Stationers. The Company of Stationers became, in effect, the government's private, for-profit information police force.

The system was quite openly designed to serve booksellers and the government, not authors. New books were entered in the Company's Register under a Company member's name, not the author's name. By convention, the member who registered the entry held the "copyright", the exclusive right to publish that book, over other members of the Company, and the Company's Court of Assistants resolved infringement disputes.

This was not simply the latest manifestation of some pre-existing form of copyright. It's not as though authors had formerly had copyrights, which were now to be taken away and given to the Stationers. The Stationers' right was a new right, though one based on a long tradition of granting monopolies to guilds as a means of control. Before this moment, copyright — that is, a privately held, generic right to prevent others from copying — did not exist. People routinely printed works they admired when they had the chance, an activity which is responsible for the survival of many of those works to the present day. One could, of course, be enjoined from distributing a specific document because of its potentially libelous effect, or because it was a private communication, or because the government considered it dangerous and seditious. But these reasons are about public safety or damage to reputation, not about property ownership. There had also been, in some cases, special privileges (then called "patents") allowing exclusive printing of certain types of books. But until the Company of Stationers, there had not been a blanket injunction against printing in general, nor a conception of copyright as a legal property that could be owned by a private party."

The rather lengthy citation comes from the paper by Karl Fogel "The Surprising History of Copyright and The Promise of a Post-Copyright World". (Fogel 2013) It serves the purpose of illustrating the fact that the copyright is in no form related to the author's rights. They were not the authors who were protected by The Queen Ann Statute. Nor were they protected by any further attempts to commercialize the creative activities. Such regulations, even if somehow justified in the era of "old media", where the reproduction of a work required pretty large financial and material means, become ineffective in the present era of the "new media". The balance between the creators of the ideas and businessmen has changed drastically. Internet is revolutionary not only because of its availability and the very low costs of copying information but also in much deeper sense. It is as well the medium itself which was not the case in traditional copying.

One can suggest that the introduction of copyright plays stimulating role in the creativeness of society or that the abandonment of copyright would be fatal for the new creative activities. The answers are today obvious and based upon the empirical evidence. The free donation system or the threshold pledge system are very good examples. Both aim at solving the problem of distributed funding, where each of the participants, before investing his/her own money, requires some kind of warranty that the others should contribute as well. In the threshold pledge system the prospective author states the amount of money necessary in advance and this sum is the “threshold”. Another, more attractive and the most rapidly developing form of internet creativeness is “Free Programming” often known as the Open Source programming as the source is commonly available. The term “open source” was created by Richard Stallman, a programmer who developed the idea of distributing the programs which was intentionally opposite to the idea of copyright. Instead of prohibiting the copying of the code the open source licence explicitly allows it and even encourages the other programmers do to so. One should, however mention that the author’s rights are still protected. Any use of the code should be accompanied by the explicit revealing the original authors together with all other contributors whose work is used.

The detailed analysis of those “post-copyright” ideas goes beyond the scope of the present text. The most important fact is that the abandonment of copyright does not weaken the creativity. On the contrary, aimed at the actual needs of the society the “free” creativity benefits from overcoming the financial limits of the consumers.

4. COPYRIGHT – THE KEY TO MORALITY

“The justification for abandonment of the copyright and patents is the theoretical possibility of generating all such ideas by a powerful computer. Random mixing of all letters and characters can lead to the creation of all possible works in science and literature. Concerning the above the author is rather a discoverer not a creator as his creation existed already, at least, potentially in our universe. Ideas do not belong to their discoverers, as they are certain properties of this universe. The discoverer deserves the prestige and respect but cannot claim property rights for something that is not his/her. When we discover a new land or a new star they do not become our property. Even if there is the discoverer did not exist the potential for the same discovery by someone else would still exist. Additionally, the actual system promotes those who are first to announce the idea publicly or are the first to file it at the appropriate office. Still there is no surety that no one have ever discovered such idea before but failed to announce it. One cannot provide legal protection of something which is immaterial, as any legal decision will be subjective. If one tries to protect inventions by the means of patents, the decision what is and what is not the invention is decided subjectively. The time of protection and the rights of the owner of such patent are arbitrary decided by the legislator. At the same time the legal protection of a material property is explicit and permanent in time. The material property belongs to its owner unless he decides otherwise. One can possess an object exclusively, because it cannot be duplicated without an effort and material resources. An idea is not an object and cannot be stolen. Copying an idea does not violate the *status quo* of the discoverer.” (Michalak)

This quote comes again from the paper which postulates the abolishment of the

copyright for the benefit of the society as a whole.

The author of the above citation tries to be moderate in suggestions. We would go a bit further. The crucial element of the infringement of a property is the possibility to consume the object, which naturally deprives the owner of the ability to use it for his/her own purpose. Such goods as carrots, cakes or theatrical performance (concerning its a priori uniqueness) are disposable goods. Once consumed they cease to exist. A book, a film, a computer program or a musical recording are the goods of repeatable consumption and thanks to the older (print) or contemporary (Xerox, copying and other means of duplication) are also the goods available for parallel consumption. Apart from the negligible destruction of the carrier during the consumption, such goods preserve their value. This aspect states the decisive influence on the commercial value of cultural goods. Any work of material culture, like a tool or an ornament possesses one feature that enables to treat it as merchandise. In order to benefit from such material goods one must the material object possess. By stealing such an object, the thief deprives the owner of the ability to use it freely. The “spiritual” achievements of culture, however, are of the completely different nature. Copying the book or a musical recording we do not deprive the owner of his/her right to use it as the cultural achievement. We can, however, deprive him/her of the right of exclusiveness and all other profits such exclusiveness might provide. Evidently we are dealing with the secondary effect, which results from the commercialization of culture. It is the commercialization of culture that creates what is now called the intellectual property theft.

5. FROM THE PERSPECTIVE OF EVOLUTION THEORY. EVOLUTION AND “THEFT”

Are there thefts in evolution? Obviously yes, and in various aspects. Let us start with the phenotype. Mimicry is that kind of phenotype “theft” which is easiest associated to plagiarism. Pretending to be something or someone one is not brings certain benefits in fitness both in nature and culture. How long such benefits last? The answer is not easy; Mimicry in natural ecosystems can last very long. The Manchester Moth, thanks to the change of colour, survives much longer than with the original white colour of wings. Where such adaptation comes from? In the case of moths the answer is quite simple. The population always consisted of a certain amount of the individuals of grey colour. The change of the preferable colour was enforced by the change of the environment. Is it similar in the culture? Within the social population there have always been individuals not fully satisfied with their status. The improvement of the actual status could have been achieved by impersonating someone else and collecting “honey” belonging to that rightful person. The history brings us multiple examples, like impersonating Dymitri in the fight for tsarist throne. What caused that the problem of plagiarism became so important nowadays? Again the answer is simple. It was the “rat race”. Rising the requirements for originality, novelty inventiveness etc. caused that those who are less efficient try to use such means as plagiarism. Is it effective? Quite so. Were the situation of a plagiarist ineffective the economy of the effort would prevent such acts. Still plagiarism exists and blossoms in several social environments

starting with science, following through economy up politics and marketing. The mimicry fraud brings the real benefits in competition as long as it goes undetected, despite the efforts to introduce the stronger means of detection. It will last as long as the punishment becomes unavoidable and elimination of those committing the fraud is complete, which statistically seems impossible.

The other example of theft in nature is parasitism. There are at least two types of parasites. The reciprocated parasitism exists when the victim of a parasite gains some benefits as well. The example is the shoal of pilot fish accompanying a shark or editorial companies in the pre-internet period. Such situation does not endanger the stability of the system. The threat arises only when the balance of benefits between the donor and the parasite becomes upset. Both end badly. The donor becomes extinct and the parasite dies out. The African fig, which wraps its roots around the tree until the tree dies, is a good biological example. History of culture gives another examples, like the overextend breeding of sheep in Ireland that ended in killing of the flocks or the actual press of the broker corporations on holding the copyright. Evolution manages. The question is whether we can accept the evolutionary methods of eliminating the competitors.

Let us consider now the question of genotype “theft”, which is much closer to the question of copying information. Biology provides here a significant example. As it is widely known the identical twins come from the cell division in zygote. Sometimes, however, certain abnormalities appear. A type of conjoined twins (Craniopagus) has only one cranium and separate bodies. Sometimes such twins possess only one face. There are also examples of so called vanishing twins when one of the twins dies and becomes incorporated by the organisms of its twin and its mother. Parasitic twins slow down the development of their siblings and live on their cost. The most interesting biological example are genetic chimeras, that come to existence through the branding of the two different embryos and/or the exchange of the cells between the embryos. Latest specialist research helped to reveal such examples as the individuals being chimeras are just ordinary members of the species completely unaware of their uniqueness. (Suwara – Płazowski 2011) The above problem invokes a series of problems of moral or even religious nature.

Obviously other types of genetic copying, modifying the genotype etc. are also possible. The problem is not in the possibility of such effects but rather in our readiness to accept it. A student of one of the authors expressed her feelings about it quite significantly. “I would not agree to have a genetic copy of myself as would be afraid that my boyfriend falls in love in it”. This statement, quite rational, reveals our fear of potential competitors striving for the same goods we desire. Such apparently absurd statements are sometimes worth attention as they reveal the complex nature of arguments behind the apparent problem.

6. CAN COPYING BE PREVENTED OR AT LEAST RESTRICTED?

Replication process cannot be prevented unless one does not to stop the whole process of evolution, as replication (error free copying) of the information code, whether it is genotype or memotype^a is the essence of evolution. Still, despite the

well-known protective mechanisms RNA-DNA-protein, and much less known mechanisms in the evolution of culture, the mutations – copying errors – appear. The fate of a mutation depends on its placement in the genotype (memotype) chain. Some are apparently harmful and become eliminated within the range of one or two generations. The other are beneficial and lead to the rise of new species. The selective factor is the environment. Any interference into the process of elimination or enhancement of the mutations comes from the environment no matter whether the natural one or the projected, as in controlled breeding.

In culture the mechanisms of replication are less known than in biology. Some analogies still can be found. One is the analogy of RNA that mediates the transmission of information. In culture the teaching process plays the role of the transmitter. So pedagogy, which is formalized already) and the school itself, no matter, how one would understand the concept, are the essential elements in replication of cultural patterns. (Suwara – Płazowski 2011) The learning process unavoidably requires ability to copy knowledge, artistic patterns and skills. The important question is to what extent deformations can appear in such process and whether the information transfer can stop at all. In nature there are several possibilities like genetic diseases, viruses interference into the immunological system or even infertility.

It seems that similar examples can be found in culture: overwhelming censorship, interference of different systems of values into the social structure or even attempts to impose systems of values alien to the existing in the culture. The hybrids arising from such actions are unlikely to survive, concerning the historic aspect of the culture evolution. The mechanism of environmental selection, which is less dynamic than the variation of the mutations. Both mutations and the influence of the environment are to be taken into account when concerning the evolution of culture. We must also remember that evolutionary changes become visible not in the scale of individuals but populations and not in the scale of one generation but many.

Let us take a look at two examples of such interference into the mechanisms of culture. The first is the preference of a particular metaphysical vision of the universe. Metaphysics is one of the crucial elements in construction of the view on reality around us. Let us stress this it is a view not the description. Around the middle of the twentieth century philosopher Ludwig Wittgenstein published his second part of “*Philosophical Investigations*”, which were completely contradictory to his earlier “*Tractatus*” and which contained quite new and very close to the contemporary view analysis of language as a kind of a communication game. Today almost all, starting from physicists and ending with artists, know that the description of the world does not exist. What we really have at our disposal are the maps (models) of the world, which are sufficient enough to let us recognize basic elements of the world and to act effectively in such world. Clearly speaking the objective truth, as it was understood by Aristotle does not exist. There, however, more or less adequate “truths” that allow us to make predictions about the future states of the world and to act adequately. Some may find the awakening from the dream of the absolute truth discomfoting. One should note that, despite that discomfort, the perspectives for progress remain still open. In the same way as our senses do not provide us with the complete vision of the

world but only a partial insight into reality, science with its theoretical descriptions is equally limited. Metaphysics is thus the basis for constructing the sketch of a possible representation of the world. From the perspective of memetics metaphysics is the essential part of the memotype of culture. It also differs when we consider different cultures. In our European, Mediterranean culture it is represented by two allelic forms of metaphysics: system theory and set theory based. The first is holistic, like in the system constructed by Plato, the other is oriented on reductionism, which dominated the method of science development for centuries. Such metaphysics is not a singular meme but rather a complex of memes to be recognized and classified by the ongoing investigations into the memetics of culture. This is why there are no pure social or cultural structures. Which is, however, most important is the fact that metaphysics evolve historically although not because of the changing empirical data but under the influence of the higher order pressure like the inability to picture the world within a certain metaphysical plan.

The authors examined the problem with the use of computer simulations, which are very effective means in studying evolutionary changes. We assumed that after a long enough period of simulation one of the metaphysical systems (namely the system theory based metaphysics) should have appeared as more successful compared to the other one. We expected it to be the system theory based metaphysics concerning the latest successes of the concepts like synergy or chaos theory. The simulation was based upon the multi agent systems which seems to represent most closely the real social processes. The agents were able to cooperate in gaining the knowledge. They could transfer their knowledge to the next generation and were controlled both by the confrontation with the external environment and the internal evaluation by other members of the society. To our disappointment, or maybe to our luck the result was completely different than expected. After a long period the populations of the agents splattered into the two parts, each representing the different metaphysical world view. The balance between the two was independent from the initial conditions imposed by the proportions of initial populations. The conclusion was that there is no domineering metaphysical picture if one is ready to observe the evolution long enough.

Similarly, the ethical component of culture was studied. The aim of the simulation was to find out whether there exist the ethical system which is most beneficial for the survival and evolution of a population. The agents were provided with the threefold profile of activity. The first part, called rational, was to provide an agent with the picture of the world that would allow for predictions about the future states. Such mapping of the world can of course change according to the changes introduced by the successful and unsuccessful actions taken by the agents. Which is interesting the domineering are the deterministic views of the world. Determinism, although not always confirmed by the experience seems to be the important preferred hypothesis. The changes in the world view were to serve as analogy to our rational cognition enterprise. The second part of the cognitive system of an agent, called cultural or social profile was the most interesting part of the simulation. One has to realize that the members of a society, besides the knowledge transferred vertically, inherit “cultural

knowledge” - a system of acceptable behaviours, customs, and relations to the other members of the society. That is acquired by copying. Such knowledge is equally crucial to function within the cultural environment as is the scientific knowledge of the world. What is more, that cultural knowledge overlaps with the rational knowledge to such extent that sometimes it is impossible to separate the elements coming from the two sources. Here lies the origin of multiple symbolic meanings or metaphors. One should neither rationalize nor underestimate that source. Is the explanation that it is the father that plays the role of Santa Claus a way to enhance the way a child experiences the holiday? Or does it provide explanation for the archetype of the saint? The answer is irrelevant in understanding the multi-level structure of symbolism or ambiguousness of a metaphor. What does it matter that the cross was the symbol of dishonour and today is the symbol of cruelty, as for two thousand years it has been the leading sign of our culture. The last but not least interesting was the third part of the agent's profile – the ethic profile. We are aware that ethics determines people behaviour within the society. Whether there exist a preferable system or systems of ethics, which would be especially beneficial for the development of population is a question, which, once solved, would influence many fields of social existence: moral, religious etc. The simulation covered several traditional systems of ethics like cynic, epicurean, ethics based on the belief in the afterlife punishment and reward, Kant's ethics and the ethics free system. The only difference between that profile and the others was that ethical profile did not change during the simulation. The agent was able to convert into another system of ethics but was unable to modify the system itself. Both rational and social profiles could have been modified according to the knowledge gained by an agent. The result was a bit unexpected. The populations provided with the traditional systems of ethics slowly became extinct after several generations. The only stable, able to survive, populations were those which were presented with the Kant's ethics or no ethics at all. The latter seems rather unrealistic within the existing social systems.

The above described results of cultural development of populations are not an ornament for the discussion. They serve to illustrate that social functioning of culture, despite of its complexity can be studied objectively and that such studies can lead to certain conclusions.

7. CONCLUSIONS

Complex biological organisms as well as complex works of culture replicate through copying not just single genes or memes but whole systems of such entities, which bound together lead to certain biological phenotypes or cultural works. The decisive factor is the ability to exact copying or more precisely the balance between the exactness of copying and the incidence of mutations. One can easily observe in nature that the high rate of mutations is the optimal strategy for survival of primitive organisms, which are placed within fast varying environment. The more complex organism, the more important becomes the exactness of copying, as the complex character of an adaptation to the environment outweighs the balance of gains and losses. The similar effect is expected concerning the evolution of culture. The high

rate of mutations (innovations) is beneficial when dealing with the simplest, even primitive, solutions. This is most likely the reason that most of such innovations are of rather limited influence on the progress in culture whether material or spiritual. The more complex is the memetic structure of the product of culture the crucial for its productivity is the propagation of such work in the stable unchanged form. What is then the fate of the societies in which the natural evolutionary mechanisms get disturbed?

It depends on the kind of disturbance. The first kind of disturbance is the breeding. It is the way the breeder – government, legislator, the executive powers – impose the rules of selection that contradict the natural ones, which is to enhance the “desired”, planned goals. This can be very dangerous despite the intellectual potential of the “breeder”. No political system, no intellectual planning were, at last until now, able to function properly. The complexity of culture or social relations results in unpredictability of many factors that are of crucial influence on the evolution of the system, especially in the particular environmental conditions. The necessary corrective mechanisms were either used improperly or were not predicted at all. Instead of the progress towards the estimated goal, the population meets a catastrophic event, which can destroy it. The multiple examples are found in both nature and culture, Fast declines of well prospering societies confronted with unexpected invasions or consumption of the resources crucial for the actual development are the most evident ones.

The second kind of the disturbance are the “genetic” disturbances. They happen when, for some reason, the internal immune system of control weakens. Any disturbance in immunological system is fatal for an object. The political example are the states ruined by the cancer of corruption. The effect is stronger when the “lethal” gene is replicated within a system of other genes.

The third disturbance, fatal for the particular branch of evolution, is convergence, which finally and unavoidably leads to extinction of the converging system. Convergence in the present culture can be seen almost everywhere: in media, customs, value systems etc. What was easily seen in the simulations is that the convergence in the sphere of metaphysics or ethical norms led to the extinction of the populations. We either stand at the beginning of a new era which will change our way of understanding the universe or the culture have exhausted its vital forces and shall meet its end in melding all of its species into the final burning of convergence. The future will tell.

The “cancer” of the copyright, which eats away contemporary culture will show. If the culture is strong enough to prevail it and use its protective mechanisms to overcome all legally imposed restrictions it will blossom. If not, the culture will share the fate of dinosaurs.

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STRATENÍ V HLADANÍ NOVÉHO (POZNÁMKY K ÚLOHE OTVORENOSTI KULTÚRY VOČI OPAKOVANIU)

Opakovanie. Kopírovanie. Duševné vlastníctvo. Intelektuálna krádež. Nové médiá. Repetitions. Copying. Intellectual Property. Intellectual Theft. New Media.

Opakovanie je možné analyzovať z rôznych hľadísk: historického, morálneho, právneho, komerčného atď., od zvoleného uhla pohľadu závisí jeho hodnotenie. Napr. jednoduché opakovanie (kopírovanie) sa z morálneho hľadiska dá pokladať za krádež, kým z hľadiska kultúrnej propagácie ho možno považovať za prospešné. Z pohľadu memetiky je opakovanie nevyhnutné pre prežitie mémov, tie svojím opakovaním potvrdzujú spôsobilosť v kultúrnom prostredí. Bližšie k biologickej analógii: opakovanie by sa malo chápať ako replikácia. Cesta redukovania replikácií zákazmi sa stáva absurdnou a nedosiahnuteľnou, dokonca môže výrazne spomaliť či potlačiť proces evolúcie. Obmedzenie kopírovania nefungovalo v nijakom historickom období. (Napríklad jeden z najdôležitejších ideálov kultúry v stredoveku bolo presné kopírovanie a uchovávanie antických diel, samozrejme bez akéhokoľvek povolenia autorov či ich právnych nástupcov.) Rozporuplný pojem intelektuálnej krádeže vzniká až vo chvíli, keď sa umelecká hodnota diela zmení na obchodnú. Žiaden umelec nepracuje v intelektuálnom vákuu, teda nemá plné právo na dielo. Zavedenie pojmu duševného vlastníctva má dva dôvody. Prvý je liberalizácia spoločnosti s jednotlivcami zameranými na vlastné záujmy. Druhý je rýchly rast technológie „nových médií“ umožňujúcej kopírovanie bez ohľadu na akékoľvek zdôvodnenie alebo pochopenie. Druhý dôvod nepredstavuje problém, pretože chyby sa odstránia v procese evolúcie. Prvý však vedie k rozpadu spoločnosti a je naozaj nebezpečný. V prírode býva jeho výsledkom vyhynutie druhov. V štúdiu sa analyzujú tieto javy (nútené hľadanie nového, komercializácia umenia), ako sa ukazujú v kultúre.

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