

What happened to Humans on Earth, and Why?  
A novel view from fundamental science

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I WHAT

Something wrong is in the air with the Humanity. What is this and how this should be fought with before it is too late, is the issue which bothers millions of people around the globe. Here we will argue, without much preface, that the essence of the catastrophe is that Humans have lost some major rights, implied by their biological and ecological design.

Apparently, all living beings are designed to eat and to drink. Accordingly, the rights to food and water are the primary rights reflected in the Convention on Human Rights.

Thus, if we look at the Humanity on a global scale, we will see that some biological rights are largely preserved, although increasingly threatened:

Right to breathe  
Right for comfortable ambient temperature  
Right for food  
Right for water

But we will give scientific evidence that several more rights, as biologically inherent as the above, have been GLOBALLY lost. We have labeled them as

Right for territory  
Right for significance  
Right for virtue

Generally, rights of living creatures follow directly from, and are dictated by, their design.

A bird is designed to fly, a fish is designed to swim. Accordingly, they have the right for the sky and for the river, respectively.

## **What is the biological design of humans?**

To know what are the rights of the human being, one has to study carefully the human biological design. The power of human body is equal to approximately 100 Watts. This is the power of two reading bulbs.

This power, which is called metabolic power, is used to support all the biological processes within the human body. The energy comes with food. Food is provided by the biosphere.

The biosphere receives all energy from the Sun. Green plants convert some part of solar energy into organic matter, which is used as food by humans and other animals. The productivity of the biosphere is about half a Watt per square meter. This is a very low power. It cannot satisfy a human body, which demands thousands times more per the same area.

From these two fundamental parameters, the metabolic power of human body and the productivity of the biosphere, we conclude unambiguously that human beings must move and collect organic matter that is produced on a very large territory. Obviously, this territory must be protected against competitors. In other words, humans are designed to move and possess a large individually controlled territory.

## **Right for individual territory is respected in all natural animals**

Humans are not unique in this design. Right for individual territory is invariably respected in all natural species of animals. There is a fundamental dependence between the body size and the size of individual territory in animals. Home range area grows approximately proportionally to body mass.

Small animals like mice and shrews are granted with small territories of several hundred square meters. The largest animals like elephants or rhinoceros or some large predators defend individual territories of the order of one hundred square kilometers.

## **But not in humans**

And only in humans this right has been dramatically violated. The unprecedented explosive growth of human population during the last two centuries has resulted in the situation when an average human being can control a territory of no more than a hundred square meters. Of such an individual territory only the smallest mammals like mice can pride themselves.

## **Right for territory penetrates all aspects of human existence**

The fundamental nature of the right for individual territory can be traced in all aspects of human existence.

What is the main punishment used for Homo sapiens? Territory deprivation.

Vice versa, the highest peaks of human spirit can be reached in solitude under the conditions of an individual command of a large territory. Not incidentally, many saints and sacred figures in world religions are known to have reached their perfectness in solitude, like, for example, the famous Russian Saint Sergij Radonezhskij.

Another sign of the vital importance of territory for the human beings is manifested in the love of humans for travelling. Whenever free from their work, the majority of people choose to travel. They try to compensate lack of individual territory by the illusion of vast, although shared, space available to them when they travel.

## **Lost right for territory: consequences are similar in animals and humans**

Given the vitality of territory for the human design, it can be expected that the global loss of this inherent right will profoundly affect human performance and well-being. To realize how many terrible features in the modern civilization stem from the loss of this right, one can trace the same consequences in natural animals deprived of their territory.

The fact that one does not have a sufficient individual territory signals to the individual about his low social status, results in humiliation and reduced biological performance.

A comprehensive study of captive black rhinoceros that are notorious for their poor reproduction in captivity revealed the following. Those rhinoceros who were kept in closed cells with non-transparent walls reproduced worst of all. Both male potency and female reproductive capacity were the lowest.

In contrast, those animals who could at least see a large free territory from their enclosures with transparent walls — all reproduced better. These findings, confirmed in many other species, including, for example, the tiny jerboas, indicate that the command of individual territory has a profound physiological significance which can be communicated by visual signals.

Looking at the modern humanity, do not we notice a very similar pandemia of sexual disorders? People world over are losing the happiness of sexual life. The parallel with zoo animals is straightforward.

## **Lost right for territory: consequences are similar in animals and humans -2**

Another manifestation of the global loss of the right for territory, and this manifestation cries out, is the unnatural aggressiveness of our species.

Massive killing of conspecifics is absent in any other species except *Homo sapiens*. *Homo sapiens* is an unbeaten and unrivaled champion of atrocities in the animal world.

Terrorism, extremism all drink from this source.

### **Humans are not mice**

To conclude, humans are not mice and cannot normally exist and implement their design on tiny spots. We are not bad, we are unhappy.

The natural territory that is prescribed by the human design is of the order of 4 square kilometers. Four square kilometers of friendly and beautiful nature, four square kilometers of quietness and relaxation, of solitude, of communication with nature. Are there many people among us in this room who has experienced this at least once in their life? Are there many birds among us who could fly at least once?

## **Right for significance**

Right for territory is tightly connected with other human rights, the information about which can also be gained from the biological design of humans.

We notice that while per capita individual territory of humans is about four square kilometers. At the same time our voice is so powerful, that we can vocally mark a much larger territory. If one screams at full voice, it can be heard over a territory of a few hundred square kilometers.

Since normally no alien intruders are tolerated on individual territories, this means that the normal social group of humans consisted of about 100 individuals, who were closely correlated with each other. In such a natural population every human being had an average  $1/100^{\text{th}}$  impact on the life of the society. Individual significance on average equalled  $1/100$ . In modern overpopulated societies individual significance is shrunk by millions of times, producing unsatisfaction, humiliation, and anxiety.

Most people feel they do not produce any impact, do not decide anything. Those people who are on the top of the society, naturally, desperately defend their significance against any possible rivals. As we know, in each country the number of real decision-makers can be counted in hundreds. This exactly corresponds to the size of the natural social group of human beings.

Note that such people cannot be straightforwardly blamed, as cannot straightforwardly be blamed people defending their rights for food, water or other life resources.

## **Right for significance penetrates all aspects of human existence**

That the right for significance penetrates all aspects of human existence can easily be seen from many aspects of modern life.

People try to invent ways of re-gaining significance:

Professional societies organize at sizes close to the size of natural human groups ~ 100-1000 individuals (sportsmen, scientists, musicians etc.)

Many religions try to compensate the lack of significance by sending the message of each person being individually valuable and important for God

Internet communication competes with religion for this function; people are able to create web societies close in size to natural human groups and get a feeling of influencing life of the society

## **Right for virtue**

Ultimately, people have even lost the right for human virtues.

Biological design prescribes every normal human being to possess a certain set of behavioral standards (virtues), which ensure stable existence of the natural population,

People have to be clever, kind, honest, capable etc. and competitive, i.e. socially active. In the normally-sized population all these qualities in each individual are monitored by the other individuals with high precision. Those who possess all these qualities, the most harmonic human beings, get to the top of the society.

### **Right for virtue lost in huge populations**

Unnaturally high intensity of competitive interaction in huge populations makes human beings choose AMONG human virtues; nobody can afford retaining all of them.

The individual has to choose to be either clever or competitive, either kind or competitive, etc. This choice among virtues can be compared to a forced choice between eating and drinking, breathing versus sleeping etc.

In the result, only those get to the top who spend all their time on competition. They no longer are the most harmonic individuals in the human society.

This situation leads to dissatisfaction and moral sufferings in both those decent people who cannot get to the top, as well as in those who ultimately get there, for different reasons. Needless also to say, that this critically destabilises the civilisation, because the best virtues remain undervalued.

### **Conclusions**

Is our planet inhabited by human beings? Or by pathetic fragments of what once could have been conceived as a majestic design?

Science and religion, together, joining their knowledge, must find a way out of this truly global humanitarian catastrophe, of universal scale. Not for this generation, it is too late. But for the new human beings to come.

## CONCLUSIONS

As Anastassia has shown, all problems of modern civilization are the consequence of global overpopulation. Not only is this problem unresolved, but it has not even been set up properly. Usually human population growth is considered as an inevitable law of nature that cannot be modified. It is assumed that all civilization processes must be adapted to this law. Free market economy strongly relies on population growth. Mass-media not only ignore the overpopulation problem, but advertise the need to mitigate the demographic crisis in some developed countries.

In natural species, overpopulation is strongly suppressed and practically is never observed. It destroys the ecological community. But under some rare conditions overpopulation does exist in nature. What are these conditions? It is the abundance of some environmental characteristics used by life. Such abundance arises for species introduced on new territories, like rats and rabbits in Australia, or after volcanic eruption. In all such cases we observe expansion of the population.

The reasons for this expansion are not obvious and must be explained. Life cannot be stable without competitive interaction of individuals inside each population. Without competition and selection of defective individuals, the number of the latter increases. The species loses its organization and goes extinct.

Under conditions of abundance, defective individuals can occupy free territory and claim free resources, and thus avoid competition with normal individuals. In order to switch on competition, it is necessary to expand the population to occupy all available territory and resources, in other words, to do away with abundance. Life in continuous abundance is impossible. Therefore, expansion is a genetically programmed characteristic of life.

Human brain and thinking put the humanity under the illusion of continuous abundance, which arises during continuous development of the civilization. This very dangerous situation must be realized and seriously analyzed by the humanity.