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## AN ATTEMPT TO ELUCIDATE THE RELATIONSHIP BETWEEN BIOLOGICAL AND CULTURAL FACTORS IN PHILOSOPHY

**Abstract.** Today, we observe disturbing phenomena accompanying technical civilization's dynamic development. While noticing the great benefits and achievements of civilizational development, we also experience the challenges and difficulties that humanity and our planet face today. Konrad Lorenz with his "layered" concept of man is the key to analyzing civilizational changes and, consequently, identifying threats and indicating possible solutions. Lorenz's concept allows him to identify eight "deadly sins" of civilized humanity, which challenge human civilization and even threaten humans' very humanity. Three of Lorenz's eight "sins" seem particularly important for the practice of philosophy: (1) overpopulation, (2) man's race against himself, and (3) indoctrinability. As a result of the significant acceleration in the development of our civilization that we have observed since the Neolithic Revolution, we see both obstacles and catalysts to the development and practice of philosophy – this specifically human ability. While in the initial period of civilizational development the consequences of the Neolithic revolution contributed to the development of philosophy, now they make it challenging to practice philosophy. Lorenz's "sins" contribute to human loneliness, neurotic hyperactivity and to the unification of culture. All these factors constitute obstacles to philosophy. The answer to these threats is to create communities where people can establish deep interpersonal relationships and share their life experiences. Another helpful factor is contact with nature, which helps slow the pace of life and escape from the overwhelming noise that prevents reflection on the meaning of human existence.

**Keywords:** Neolithic Revolution; civilizational development; Konrad Z. Lorenz; deadly sins; layered concept of man; ability to philosophize

1. Introduction. 2. The Neolithic Revolution. A brief outline. 3. Konrad Lorenz's "layered" concept of man. 4. The "deadly sins" of civilized humanity. 5. Philosophy and Lorenz's "deadly sins". 5.1. Overpopulation according to Lorenz. 5.2. Overpopulation and philosophy. 5.3. Man's race against himself according to Lorenz. 5.4. Man's race against himself and philosophy. 5.5. Indoctrinability according to Lorenz. 5.6. Indoctrinability and philosophy. 6. Conclusion.

## 1. INTRODUCTION

The development of human civilization is nonlinear and episodic. From time to time, we observe revolutionary changes in human lifestyle. We can point out several such revolutions. Apart from revolutions caused by national and social problems such as the French Revolution or the Proletarian Revolution, it is worth mentioning the following revolutions that significantly influenced the lifestyle of humankind and the way humans think and perceive the world:

- The Upper Paleolithic Revolution (50 to 12 thousand years ago): characterized by the emergence of “high culture,” new technologies and regionally distinct cultures, abstract thinking, and symbolic behavior (e.g., art, music, dance, burial customs, etc.) – the most famous example of this revolution is the Lascaux cave painting in France (Gilman, 1996, 220-239; Bacon *et al.*, 2023).
- The Neolithic Revolution (started about 13 thousand years ago): characterized by the transition from gathering food to food production and from nomadic to sedentary lifestyles (Sadowski, 2017; McCarter, 2012; Cowan *et al.*, 2006).
- The Scientific revolution (16th century): a modern transformation in scientific ideas, and great developments in mathematics, physics, astronomy, biology which radically transformed human views about nature (Principe, 2011; Dear, 2019; Henry, 1997).
- The Counterculture Revolution of the 1960s (1960 to 1973): originated in the US and UK and spread to other Western nations. The motives behind this revolution included the anti-war protest, the American civil rights movement, the rebellion against conservative norms, drug liberalization, and the sexual revolution (Anderson, 1995; Brownell, 2010; Chaplin *et al.*, 2017).

- The Industrial Revolutions. They are usually divided into four stages of industrial development:
  - First Industrial Revolution (1760 to 1840): characterized by the transition from hand production methods to machines through the use of steam power and waterpower (Deane, 2000; Barham, 2013).
  - Second Industrial Revolution (1871 to 1914): characterized by the construction of extensive railroad and telegraph networks, which allowed for faster transfer of people and ideas, as well as electricity (Jull, 1999; Mokyr, Strotz, 1998).
  - Third Industrial Revolution (after the second world war): known as “Digital Revolution” for its transition from mechanical and analogue electronic technologies to digital electronics (extensive use of computer and communication technologies in the production process) (Rifkin, 2013; Wilkie, 2021).
  - Fourth Industrial Revolution (21st century): characterized by an industrial change that joins technologies like artificial intelligence and gene editing to advanced robotics that blur the lines between the physical, digital, and biological worlds (Philbeck, Davis, 2019; Schwab, 2016).

Each of the revolutions mentioned above had an impact on philosophy, and it would be interesting to research them according to their implications for philosophy. It seems that there is a feedback loop here. On the one hand, civilizational revolutions influence philosophical thought. On the other hand, philosophical ideas cause civilizational revolutions. However, it seems that the beginning of humanity’s great philosophical adventure is associated with the Neolithic Revolution. Therefore, this paper is focused on the impact of the Neolithic revolution on the development of philosophical thinking.

The foundation of humanity is the ability to reflect on reality, which fully manifests itself in philosophizing. Humans acquire this type of ability at a particular stage of their development. We cannot determine exactly when this happened. In a distant prehistory, humans started to ask philosophical questions such as: What happens after death? Does God exist? What is the meaning of life?<sup>4</sup> (Anzenbacher, 2010, 17).

The factor that significantly changed the situation of humans was the Neolithic revolution. This revolution caused an unprecedented acceleration in the development of human civilization. With it, new conditions appear that make it both easy and difficult for people to philosophize.

This paper aims to investigate how the change in humanity's lifestyle caused by the Neolithic Revolution impacted philosophical reflection. To this end, it will begin by considering Konrad Lorenz's<sup>5</sup> layered concept of man and the so-called deadly sins of civilized humanity. I hold that this influence was ambivalent. On the one hand, the changes related to the Neolithic Revolution favored the development of philosophical reflection; on the other hand, they hindered it. Analyzing these changes will allow us to understand

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<sup>4</sup> In my opinion, prehistoric man asked such questions, although there is, of course, no material evidence to support this thesis. Prehistoric arguments in favour of an afterlife associated with some kind of deity include burial customs, in which the deceased was provided with food and tools necessary for life in the afterworld.

<sup>5</sup> Konrad Zacharias Lorenz (1903-1989) was an outstanding Austrian scientist and co-founder of comparative ethology, the science of animal and human behavior. In 1973, he received the Nobel Prize in Medicine and Physiology. Lorenz studied zoology, medicine, and philosophy in Vienna and taught comparative anatomy and animal psychology there from 1937. From 1940, he lectured in comparative psychology at Königsberg. In 1949, Lorenz founded the Institute of Comparative Ethology in Altenberg, near Vienna. He was then a director (1951-1973) at the Max Planck Institute for Behavioral Physiology (Szewczyk, 1994, 282). Lorenz supported psychophysical unity, rejecting psychophysical dualism and the independence of the physical and spiritual components of human beings. Moreover, he believed that contemporary culture is experiencing a severe crisis. He proposed self-reflection as an antidote to this crisis (Breś, 2005).

the processes taking place in human lifestyle throughout history and the resulting opportunities and limitations. In addition, specific solutions will be indicated that, to use Konrad Lorenz's terms, will help protect the humanness of civilized man.

## 2. THE NEOLITHIC REVOLUTION. A BRIEF OUTLINE

The history of mankind confirms that in its first stage of development, which lasted hundreds of thousands of years, man led the life of a hunter and gatherer. At this stage, humans constantly moved in search of food sources. Recent research shows that *Homo sapiens* appeared in Africa around two hundred thousand years ago (*Human History Timeline*, 2024). In comparison, the Neolithic Revolution did not begin until around ten thousand years ago.

The Neolithic Revolution caused changes that enabled the development of the first cities and state-like structures. Admittedly, there is still scientific debate about whether a settled lifestyle led to the invention of agriculture or whether the invention of agriculture enabled a settled lifestyle. However, there is no doubt that the spread of a settled lifestyle coincides with the Neolithic Revolution and its consequences in the form of an increase in the amount of food available and, consequently, the growth of the human population. All these factors, in turn, led to the formation of the first cities. This is confirmed by archaeological findings, which reveal a geographical and temporal coincidence between the appearance of the first cities and the beginnings of the Neolithic Revolution (Sadowski, 2023, 1-2).

## 3. KONRAD LORENZ'S "LAYERED" CONCEPT OF MAN

Konrad Lorenz's concept of man enables a better understanding of both the civilizational changes that helped humans think philosophically and those that made it more difficult. Lorenz believed that humans consist of three layers (elements): (1) body, (2) soul, and (3) mind

(spirit). Body and soul are humans' biological depository, and their development follows the principles and pace of biological evolution. In this view, the soul is the element responsible for emotional life, which humans share with many representatives of the animal kingdom. On the other hand, the mind (spirit) is a specifically human disposition that manifests itself in various cultural expressions and, therefore, develops according to the rules of cultural evolution. The mind (spirit) is that "layer" through which humans are capable of conceptual thinking and verbal speech. These capabilities, in turn, enable man to create and participate in the world of culture (Lorenz, 1988, 55-57; cf. Sadowski, 2023).

Konrad Lorenz further claims that while the human body and soul have hardly changed for dozens of thousands of years, the human mind (spirit) has changed remarkably over this time. It is a consequence of the difference in the pace of biological and cultural evolution. In addition, Lorenz indicates that while biological evolution proceeds extremely slowly, cultural evolution has constantly been accelerating to a dizzying speed in modern times (Lorenz, 1977, 181). Consequently, humans' biological layer cannot keep up with their cultural layer. This leads to a kind of "stratification" in humans, which destroys humanity (waning of humaneness) (Lorenz, 1988, 55; cf. Sadowski, 2023).

Thus, civilized humans are experiencing entirely new, unprecedented challenges. They threaten humanity not only at the level of the biological survival of an individual or a local community, but also lead to the regression of specifically human capabilities. Hence, they pose a threat to the very humaneness of man (Lorenz, 1973, 12).

#### 4. THE "DEADLY SINS" OF CIVILIZED HUMANITY

Konrad Lorenz calls these challenges "deadly sins." However, he understands them not as sins in a religious sense but in a cultural and civilizational sense. Just as religious deadly sins violate God's

commandments and bring spiritual death to humans – breaking friendship with God –, so the “deadly sins” of civilized humanity violate the laws of nature and threaten humans, on both the biological and cultural levels. According to Lorenz, “deadly sins” result from different biological and cultural human development component rates. Many of the sins he identified are, to a greater or lesser extent, linked to the Neolithic Revolution and have some consequences to the human ability for philosophy. Lorenz lists the following “deadly sins” (Lorenz, 1973, IX): 1. overpopulation; 2. devastation of the environment; 3. man’s race against himself; 4. emotional entropy; 5. genetic decay; 6. the break with tradition; 7. indoctrinability; 8. nuclear weapons.

It seems that the fundamental source of human problems related to philosophical thinking is that the history of *Homo sapiens*, lasting hundreds of thousands of years, prepared humans at the biological level for a hunter-gatherer lifestyle, while the last ten thousand years have been too short for the biological component in humans to adapt to the settled lifestyle. Thus, humans successfully adapted their cultural layer (mind/spirit – Ger. *Geist*) to the settled life over the past few thousand years; however, humans face numerous challenges to adapt their biological layer (body – Ger. *Leib* and soul – Ger. *Seele*), which they have been unable to adapt during such a short time. Consequently, humans live in conditions which their biological component is entirely unprepared for. Therefore, Lorenz’s analysis of the “deadly sins” is crucial for understanding the civilizational changes that influence philosophical thinking.

## 5. PHILOSOPHY AND LORENZ’S “DEADLY SINS”

Some of these “deadly sins” favor, whereas some hinder philosophical reflection. In this paper, we would like to examine three of Lorenz’s sins and explain their influence on the human ability to philosophize. We will focus on 1. overpopulation, 2. man’s race against himself,

and 3. indoctrinability, because we believe these very “sins” condition the human ability to philosophize.

### 5.1. OVERPOPULATION ACCORDING TO LORENZ

Konrad Lorenz, pointing out the danger of overpopulation, leaves the natural and economic consequences of the ever-growing human population aside; he believes them to be self-evident. According to Lorenz, far more dangerous to humans are the emotional consequences of overpopulation. He notes that the ever-increasing population density does not result in the establishment of deep and mature human relationships. On the contrary, it leads to an increase in aggression, on the one hand, and, on the other, to indifference to the fate of neighborhood people. This is because humans are evolutionarily (in their biological layer) adapted to living in small groups, where close relationships develop naturally. When living in a crowd, however, humans must curb their desire for close ties, which they cannot establish with many people around them. Hence, the mentality manifested by distancing oneself from others and the lack of emotional involvement is common among the residents of large cities. Indeed, the inability to establish meaningful relationships leads to various forms of selfishness and hostility to others, which are expressions of the loneliness and apathy of a man lost in a faceless crowd (Lorenz, 1973, 13, 22).

Lorenz also draws attention to the phenomenon of “neophilia” observed among residents of large cities. He connects this phenomenon with overpopulation. In his opinion “neophilia” involves the lasting need for new experiences but is not limited to the compulsive acquisition of ever-new, non-essential goods. This phenomenon is increasingly extending to people as well. Relationships with fellow human beings are seen as temporary, as they are easily replaced. Hence, for example, the widespread attitude of indifference to neighbors and reluctance to invest time in contacting them. For we



never know how long they will continue to be our neighbors (Lorenz, 1973, 40–41; cf. Sadowski, 2023). This challenge intensifies with the increasing numbers of city dwellers and the constant crowding they experience. Such a modern human lifestyle is also described as a “cult of superficiality,” which has its sources in spiritual poverty on the one hand and the unreflective pursuit of material goods on the other (Francis, 2015, no. 225, 204).

## 5.2. OVERPOPULATION AND PHILOSOPHY

Overpopulation in Lorenz’s meaning favors philosophy, on the one hand, and, on the other hand, hinders it. It is favorable because, with food production and the adoption of a sedentary lifestyle, there is a dynamic increase in knowledge, social structures, and educational institutions. All these inspired the development of science and philosophy. In addition, humans living in society can confront their ideas with the people around them. The Neolithic Revolution resulted in the widespread adoption of a sedentary lifestyle, which is the basis for constant interpersonal contact, exchange of views, and persistent exposure to the opinions of others. All this is an impulse to philosophize because it presupposes different approaches to a given issue by various people. Living in cities has created such an excellent opportunity for philosophy (Lorenz, 1973, 13, 22; cf. Sadowski, 2023).

On the contrary, overpopulation makes philosophizing difficult because experiencing life in an anonymous crowd makes it difficult to establish deep relationships, leading to loneliness, aggression, and apathy. Humans are biologically prepared to develop deep interpersonal relationships only with a group of a dozen or so people because they have lived in such groups for hundreds of thousands of years. Their emotional sphere (changing at the pace of biological evolution) did not have enough time to adapt to the radically changed living conditions, transforming at the much faster pace of cultural evolution. Many citizens of developed countries experience loneliness

and emotional isolation nowadays. They seemingly function well in their society but often suffer from various mental ailments. This makes it difficult to maturely perceive themselves, others, and the world. It is difficult to ponder fundamental human life issues in noisy and crowded surroundings. Such a situation does not help philosophical thinking.

### 5.3. MAN'S RACE AGAINST HIMSELF ACCORDING TO LORENZ

Man's race against himself means that humans live at an ever-increasing pace of life, because of the constantly accelerating development of our cultural component. In developed countries, this pace often reaches a level that exceeds the capacity of the human biological component. Humans experience a neurotic pursuit of success, which, even when achieved, never fully satisfies them and forces them to keep setting new goals. In turn, this prevents reflection on the meaning of their activity (Lorenz, 1973, 26; cf. Sadowski, 2023).

Living in the so-called "rat race," an important factor accelerating the pace of life is a form of competition commonly inspired by modern Western culture. Humans are afraid to see the consequences of the rush and competition they are engaged in from an early age. By surrendering to the rush of life and lack of reflection on the meaning of activity, people lose perspective on their life, its joy, and the chance to slow down and rethink life priorities.

All this means that nowadays, the average representative of the Euro-Atlantic civilization lives so fast that alarming effects are widely visible in terms of their physical and mental conditions. Some studies indicate that up to 25% of adult Westerners suffer from various mental ailments. The number of illnesses caused by stress, depression, and burnout is systematically increasing. The commonly accepted Western model of success, measured solely by economic criteria and the "rat race," means that the average Westerner spends

long periods of their life operating at or exceeding the limits of her/his body's capacity (Wuketits, 2012, 9).

#### 5.4. MAN'S RACE AGAINST HIMSELF AND PHILOSOPHY

Such a lifestyle threatens the very human humanness due to the blindness caused by greed and the exhaustion caused by competition. Both phenomena are accompanied by deep fear. Humans fear failure in constant competition, falling into poverty, and making wrong decisions. The fear that constantly accompanies them affects their health conditions. Haste and fear lead to the deprivation of one of the most critical human abilities – reflection. That is why modern man lives in omnipresent noise, which, according to Lorenz, is supposed to “protect” humans from reflecting on their lives. People are afraid to see the consequences of haste and competition. According to Lorenz, omnipresent music, as well as radio and television sets that are constantly on, are meant to keep people from reflecting (Lorenz, 1973, 28-29).

Those who fail to keep up with the rat race end up panicking, and those who dictate the pace might see how many of their predecessors ended their lives prematurely. Such a lifestyle makes it impossible to philosophize because it does not allow for reflection on the sense of human activity. Humans thus deprive themselves of one of their most peculiar abilities – deliberation and self-reflection (Lorenz, 1973, 26).

Humans' failure to reflect on the race against themselves leads to their destruction. Humans are inspired to participate in this race by the mind (spirit), which is developing at the dizzying pace of cultural evolution. On the other hand, the body and soul, subjected to the slow process of biological evolution, cannot keep up with this pace, which in turn leads to increasing medical problems at the somatic and psychological levels. Therefore, people become victims of excessive activism and cannot reflect on their lives anymore.

### 5.5. INDOCTRINABILITY ACCORDING TO LORENZ

According to Konrad Lorenz, another challenge faced by people in the information age is the growing susceptibility to indoctrination. It becomes perilous when large human societies, entire continents, and even humanity as such try to be convinced of one erroneous and bad idea (Lorenz, 1973, 83-84). Lorenz claims that modern humans are more susceptible to complex manipulation mechanisms than their ancestors. "Never were such large human masses divided among so few ethnic groups; never were mass suggestions so effective; never before have the manipulators had at their disposal such clever advertising techniques or such impressive mass media as today" (Lorenz, 1973, 88).

Susceptibility to indoctrination is so dangerous for a person's humanity that it unifies culture and disturbs the natural interplay of diversity, which is the essence of cultural development. Modern culture blurs differences of opinion and destroys independence of thought. People who distance themselves from commonly held opinions or refrain from using mass media escape the influence of manipulation. They thus become a threat because they could present alternative positions to the "officially binding" views, which are forced into entire societies thanks to sophisticated indoctrination techniques (Lorenz, 1973, 103).

### 5.6. INDOCTRINABILITY AND PHILOSOPHY

This specific "deadly sin" of civilized humanity differs from the two mentioned above. While it makes philosophizing more complicated, it does not contribute to creating better conditions for philosophizing. Philosophical thinking is a unique attempt at a personal approach to an issue and is far from a universally applicable pattern/model of thinking. Philosophy, by its nature refers to personal experience, which results in wonder and often leads to doubt. The value

of a philosophical concept lies in its originality, both in terms of asking questions and providing answers. Therefore, the “deadly sin” of indoctrinability indicated by Lorenz can be considered a denial of the philosophical approach.

There is an ongoing academic dispute on the threats related to biodiversity loss and its dramatic effects. However, we are also dealing with a threat to cultural diversity, which is no less dangerous than losing biodiversity. The indoctrinability denounced by Lorenz confirms this diagnosis. The loss of cultural diversity is hazardous for philosophy because its birth occurred at the meeting point of different cultures, and its development requires the confrontation of various approaches and positions. Therefore, caring for diverse thoughts and standpoints seems particularly important.

## 6. CONCLUSION

The above remarks only point to the consequences of the Neolithic Revolution and the currently dominant model of Western civilization, which, although in the initial phase of its evolution, contributed to the unprecedented development of humanity (including its intellectual realm) and enabled lasting achievements (in science, art, philosophy, etc.). However, in the current phase of civilization development, we observe disturbing phenomena that threaten humans’ very humanity.

Konrad Lorenz’s layered concept of man provides the key to analyzing phenomena in which modern humankind participates. This concept also helps identify problems and solutions to contemporary challenges. Lorenz’s concept highlights the need to take specific actions that will enable people to live humanely, as the civilizational challenges identified by Lorenz concern both the biological and cultural human structures. There are many indications that the most dangerous threats in this regard are:

- The inability to create deep interpersonal relationships.
- The constantly increasing pace of life and unification of opinions.
- The loss of cultural diversity and limitation of philosophical thinking.

We know it is impossible to stop the current civilization trends, but we can do our best to reduce the threats related to civilization challenges. It is necessary to do everything possible to prevent the human structure (as Lorenz understands it) from splitting. Nowadays, we experience that humans' biological component cannot keep up with their cultural component. The biological component of humans (body and soul) is currently exposed to stresses for which it is not evolutionarily prepared, as that takes hundreds of thousands of years. As a result, the physical and mental conditions of people are currently negatively affected.

It seems that a solution to these problems can be found in the creation of small communities in which people can establish deep interpersonal relationships, find friends with whom they can share their life experiences, and inspire each other to perceive themselves, others, and the world from an ever-changing perspective. Another vital antidote to the consequences of Lorenz's "deadly sins" is to slow down the pace of life, at least temporarily. We can achieve that by creating a space of silence that allows people to rethink their life priorities and the meaning of their current activities. Religions and the forms of meditation and reflection they have developed help to achieve this goal. The religious perspective allows people to look at their lives from a diachronic, eschatological perspective and is a remedy for short-sighted and *ad hoc* actions. Contact with nature also seems essential in this respect. Exercising outdoors and getting away from the noise creates conditions that calm human thoughts, slow the pace of life, and enable people to reflect on the purpose of their immediate and further actions. Hence, it seems that philosophy provides hope for the successful development of human civilization.

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