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THE UNIQUENESS OF MAN IN NATURE AND SOME EXAMPLES OF ITS QUESTIONING^{*}

Among others, there are often mentioned specific features of human consciousness and culture: metaphysical reflection, ability of self-consciousness, moral sensitivity, aesthetic and religious experience. One can express the role of the similar contents, stressing the role of modern sciences in the human development or the worth of altruism in the acts of man, who—existing for others—transcends the biological struggle for existence, thus revealing the rich world of culture that warrants the assertion of his unique role in nature. On the other hand, man still remains an element of nature, by the corporeality subordinated to its physical and biological rules. Taking this fact into account, we are not permitted to speak about the absolute, but only the relative, transcendence of man over nature. The latter consists in the biological bond of man with the rest of nature and his cultural openness toward supernatural values.

The above-mentioned stand has been criticized by some intellectual circles depending on their methodological presuppositions or ontological declarations. As significant examples, I would like to present the concept of egalitarianism included in the bioethics of Peter Singer and the attempt at the reduction of human culture's essential elements to the level of genetic conditions in the radical version of sociobiology proposed by Edward O. Wilson. In spite of the passage of time both propositions still remain the point of reference to the modern anthropological debate presented in the second part of this text.

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^{*} These considerations are partially based on my book *Ewolucjonizm chrześcijański o pochodzeniu człowieka* [Christian Evolutionism on the Origins of Man] (Lublin: Gaudium, 2004).

QUESTIONING THE TRANSCENDENCE OF MAN OVER NATURE

Homo sapiens has many features adequate to its biological species, e.g.: dentition or vertical system of locomotion. The animals with matured brain (birds, mammals) can create symbols, some of them are able to symbolically imagine what was perceived by a particular sense. The abilities of some animals include compositions of associations from the iconic symbols; non-iconic ones—at least in their rudimental form—probably characterise the cognition of chimpanzees, gorillas and orangutans.¹ From a biological point of view, many representatives of the world of animals surpass man at the level of sight, motor skills or assimilation to changing conditions (for example: atmospheric ones). Therefore, some of philosophising scientists question the thesis on the unique position of man in the universe, regarding it as the example of uncritical self-satisfaction inspired by a strongly anthropomorphic view of nature.

Peter Singer thinks that each attempt at placing one biological species over another should be regarded as an expression of *speciesism*. It expresses the chauvinistic ideology similar to racism or sexism enabling the domination of one race or one sex.² Having his own anthropology that rejects the classic notion of the person, the professor of bioethics at *The Institute for Human Values* in Princeton expresses his solidarity with nature by a declaration of vegetarianism and a protest against the experiments on animals. Rejecting *speciesism*, he proposes the biological egalitarianism inspired by the thesis of "equal treatment of all living creatures."³

At the level of anthropology, Singer's proposal results in disputing the dignity of man, a new form of justification for abortion, the acceptance of euthanasia for the handicapped or children unfulfilling their parents' expectations. Assuming, as a prime axiom, the principle "do not discriminate on the basis of the species' differences,"⁴ the author of *Practical Ethics* replaces the traditional concept of the holiness of life with the concept of the quality of life. Questioning the opinions on the superiority of human reflection over that of animals, Singer formulates such pragmatic judgments as: "if we make

¹ See Władysław KUNICKI-GOLDFINGER, Znikąd donikąd (Warszawa: PIW, 1993), 15–16.

² See Peter SINGER, All Animals are Equal, in Unsanctifying Human Life: Essays on Ethics, ed. Helga Kuhse (Oxford: Blackwell, 2002), 81.

³ Ibid, 83.

⁴ Peter SINGER, *Ripensare la vita. La vecchia morale non serve più*, trans. S. Rini (Milano: Il Saggiatore, 1996), 205.

the comparison with a fetus of less than three months, a fish would show more signs of consciousness."⁵

The polemic with the pragmatic-behavioural view of Singer would require a detailed estimation of modern pragmatism. This issue has lived to see many critical monographs.⁶ The radicalism of the statement formulated by the well-known professor of bioethics from Princeton has resulted in his being treated as a fundamentalist and only his more-subdued theses have proven to be of interest in the circles of ecologists and defenders of animal rights.⁷

Within the group of evolutionary biologists the similar view was presented on the basis of Edward O. Wilson's sociobiology.⁸ This notable entomologist from Harvard University, claimed that biological classifications have a status similar to that of Mendeleyev's table of elements. There are no objective arguments to consider the element of atomic number 120 as better than that of 30. The same situation takes place in the classification of the species. The highest level occupied by man shows only that he was its author. Nothing enables us to raise man's characteristic features higher in the hierarchy of values than the velocity of locomotion or the power of muscles significant for animals.⁹

At the beginning of his intellectual career Wilson was widely respected and known as a valued entomologist. *The Insect Societies*¹⁰ was accepted favourably for the reliable analysis of the behaviour of insect groups included in it. A few years later, he decided to apply the same conceptual schemes to reflection upon man. His convictions from that time can be well expressed by the thesis that if ants had a developed brain and the ability to look at man

⁵ Peter SINGER, *Practical Ethics* (Cambridge: Cambridge University Press, 1993), 151.

⁶ See Bogusław WóJCIK, "Bioetyka praktyczna Petera Singera," in *System bioetyki*, ed. Tadeusz Biesaga (Kraków: Wydawnictwo Naukowe PAT, 2003), 71–92; see also Kevin WILLIAM WILDES, *Moral Acquaintances: Methodology in Bioethics* (Notre Dame: University of Notre Dame Press, 2000).

⁷ See Francesco VIOLA, *Dalla natura ai diritti. I luoghi dell'etica contemporanea* (Roma, Bari: Laterza, 1997).

⁸ See Edward O. WILSON, "Introduction: What is Sociobiology?," in *Sociobiology and Human Nature: An Interdisciplinary Critique and Defense*, ed. Michael S. Gregory, Anita Silvers, and Diane Sutch (San Francisco: Jossey-Bass, 1978), 1–12; see also John Paul SCOTT, *The Evolution of Social Systems* (London: Harwood Academic Publishers, 1989); see also Charles J. LUMSDEN, Edward O. WILSON, *Genes, Mind, and Culture: The Coevolutionary Process* (Cambridge: Harvard University Press, 1981).

⁹ See Edward O. WILSON, *Sociobiology: The New Synthesis* (Cambridge: Harvard University Press, 1975).

¹⁰ Edward O. WILSON, *The Insect Societies* (Cambridge: Harvard University Press, 1971).

their characterization of the human community would not differ from our descriptions of the society of ants.¹¹

The anthropology presented in Sociobiology: The New Synthesis, practiced from the perspective of an entomologist, included the theses both radical and not susceptible to falsification. It tackles especially the biological interpretation of the phenomenon of human culture and the methodological slurring of the differences between the world of man and irrational animals. It is little wonder that Wilson's concept of human nature met a strong critique from anthropologists, historians of science, methodologists and biologists. Some representatives of the social sciences at the meeting of the American Sociobiological Society wanted to condemn sociobiology as a pseudoscientific discipline but their proposal was rejected.¹² A similar example of extreme reactions was brought by the authors of the open letter that appeared in The New Yorker Book Review. Distinguished representatives of Science for the People, Sociobiology Study Group accused Wilson of spreading sexism, euthanasia and nearly fascistic social opinions legitimised by patent scientific nonsense.¹³ In epistemological discussions, the publications of Wilson's proponents were often qualified as a parody or academic pastiche.¹⁴ Contrary to this, the propagators of sociobiology not only strongly defended its scientific character but also found in it the future discipline that would contain political science, law, anthropology, psychology, psychiatry or economics.¹⁵

Treating human culture as a result of genetic determinants, Wilson truly wanted to prove that *Homo sapiens* does not substantially differ from its evolutionary ancestors. There are genes that at the level of human behaviour reveal their own presence in altruism as well as in egoism, depending on the need of the hour for the survival of the culture. Since sociobiology came into existence, it has not achieved any new empirical confirmations, becoming popular in the circles fascinated by the poetry of the relation between man and the rest of nature. It has been influential thanks in part to Wilson's literary skills. His ability of suggestive expression of nature's beauty affects a reader in such a way that he is relatively easily seduced by the style in which

¹¹ See Michał HELLER, Józef ŻYCIŃSKI, Dylematy ewolucji (Tarnów: Biblos, 1996), 215.

¹² See Józef ŻYCIŃSKI, *God and Evolution: Fundamental Questions of Christian Evolutionism*, trans. Kenneth W. Kemp, Zuzanna Maślanka (Washington, D.C.: The Catholic University of America Press, 2011), 214.

¹³ See Antoni HOFFMAN, "Socjobiologiczne uzurpacje," Znak 32 (1980), 10 (316): 1303.

¹⁴ See Edmund R. LEACH, "Biology and Social Science: Wedding or Rape?," *Nature* 291 (1981): 267; see also M. HELLER, J. ŻYCIŃSKI, *Dylematy ewolucji*, 216–217.

¹⁵ See David P. BARASH, Sociobiology and Behavior (New York: Elsevier, 1977), 5–10.

the form often dominates over the content. In the essayistic meditation of Wilson we can easily notice the testimony of the sensitivity to the secret beauty of living nature. He appears to be a cosmopolite revealing his own biological fatherland in the Amazon rainforest, on the wide steppes of Australia or while climbing the mountains of Cuba. Looking at the ants walking in the back streets of Jerusalem and at the olive trees of Gethsemane, he spins reflections on the passing of human cultures. Being fascinated by the play of the lights at the foot of Niagara, he asks why an avalanche of sand would not impress us in the way the waterfall does.¹⁶

The overgrowth of the poetic and visionary elements accompanied by the lack of a Basic concern for the justification of strong statements results in such a way that the author of *On Human Nature*¹⁷ is seen by contemporary critics much more like a prophet delivering his message to wide social circles than a responsible scientist concerned with the accuracy of details.¹⁸ Wilson himself, being aware that his theories convey no new predictions and are observationally unconfirmed, drew them up in a milder form paying more attention to ecology. Nevertheless, the radical explanations from the time of his youth are constantly recalled by the next generations of interpreters questioning the thesis about the deep cultural differences between man and irrational animals.

THE ETHICAL DIMENSION OF HUMAN ACTS

Only human behavior can be estimated in ethical categories. It results from man's ethical sensitivity which is manifested (among others) by the voice of conscience and the ability to make free moral choices including the differences between true and false judgments. In man's acts truth and falsehood can be subjected to the evaluation which is based on the relative freedom and the availability of the value system culturally originated. The behaviour of animals that are lacking in reason and deprived of freedom must be described quite differently. In spite of the fact that their behaviour is also subjected to the values, they gain the character of biological imperatives evolutionary conditioned. Among these imperatives Chmurzyński perceives three fundamental determinants of animal behaviour. They tend to:

¹⁶ See J. ŻYCIŃSKI, God and Evolution, 215.

¹⁷ Edward O. WILSON, On Human Nature (Cambridge: Harvard University Press, 1978).

¹⁸ See Barbara SZACKA, "Słowo wstępne," in Edward O. WILSON, *O naturze ludzkiej*, trans. Barbara Szacka (Warszawa: Państwowy Instytut Wydawniczy, 1988), 14.

a) survive at least to the moment of a descendant's birth

b) attain maximum pleasure and minimum pain;

c) do everything what helps to give birth to the offspring with the same genes.

The maximalisation of adapting (*fitness*) determines the behaviour of animals in such a way that they are directed toward profitable action, being respectable to profit and loss account.¹⁹ At the level of human activity, however, there appears disinterestedness and altruism that can't be subordinated to the principle of the biological struggle for existence. The attempt to interpret altruistic behaviours is carried out by the so-called theory of reciprocal altruism. It was formulated during the biological investigations on birds when the costs of altruism was considered. This problem was perfectly illustrated by the birds raising the alarm over an approaching enemy. Such a behaviour results in the danger of revealing their localization. There is hope that other representatives of the nature's world at the moment of danger will behave in a similar way enabling survival by emitting warning signals. In this perspective Robert Trivers writes about the theory of the reciprocal altruism characterised by a principle: behave in such a way that you expect from others.²⁰ The expansion of genotype remains the central criterion of the behaviour even when the kin selection theory does not suffice to explore the quasi-altruistic behaviours.²¹ Even if this interpretation is positively asserted, it still shows the essential difference between the altruistic behaviour of man and irrational animals. Neither Father Maximilian Kolbe nor Mother Teresa of Calcutta expected the reciprocal reaction from the people they helped. Their activity didn't come from biological pragmatics subjected to the principle: sometimes maybe I will be supported by others. It came from the spiritual rule of respect for others.²²

Without any doubt the ethical sensibility of man is connected with his intellectual development and the ability of the objective recognition of all

¹⁹ See Jerzy Andrzej CHMURZYŃSKI, "Prawda i fałsz z perspektywy biologicznej" (Materiały z konferencji *Tradycyjne i współczesne systemy wartości. Przeciwieństwo drugie: 'Prawda i Fałsz'* (Staszów 8-10.XII.2000)), *The Peculiarity of Man* 6 (2001): 403–404.

²⁰ See Robert L. TRIVERS, "The Evolution of Reciprocal Altruism," *Quarterly Review of Biology* 46 (1971): 35–57; see also Kevin M. KNIFFIN, David Sloan WILSON, "Altruism from an Evolutionary Perspective," in *Research on Altruism & Love: An Annotated Bibliography of Major Studies in Psychology, Sociology, Evolutionary Biology, and Theology*, ed. Stephen G. Post et al. (Philadelphia, London: Templeton Foundation Press, 2003), 117–136.

²¹ See A. HOFFMAN, "Socjobiologiczne uzurpacje," 1309.

²² Ibid., 1311.

phenomena that constitute the moral context of a given situation. However, the relation is not so simple and does not mean that more educated people have deeper ethical sensibility. Man's knowledge can be subordinated to pragmatic aims freed from any moral references. The uniqueness of man does not consist in his cognitive progress, even having wide knowledge he can appear as a tragically lost being turning himself away from his own Creator. The revelation of man's genuine domination over the world and his relative transcendence over nature lies in the respect for the priority of ethics over biology.

In the ludicrously reduced arguments the followers of evolutionism paid attention to the fact that the altruistic sacrifice of life can become a rational enterprise. Thanks to the group of saved relatives the same genes have got a bigger chance to survive than they would had in case their bearer alone had survived but would not have defended the endangered family. Similar interpretations of the ethical evaluations lose their power when they have nothing to do with any blood relations. No genes of St. Maximillian Kolbe's genotype did survive when he gave his life for the sake of Franciszek Gajowniczek. In such an attitude Christianity discovers the expression of altruism and holiness undetermined by the economy of genes. How to explain the genesis of such a behaviour within the evolutionary categories?

The most radical proposals of the interpretation for the genesis of man's ethical evaluations can be found in sociobiology. In the explanatory perspective proposed by the young Wilson and popularised by Michel Ruse, even ethics appears as the evolutionarily useful resultant of interactions between some form of the aesthetic and the nature taking care of the genes' well-being.²³ According to Ruse, the objectivistic way of doing ethics should be regarded as a relic from the past and sociobiology offers a complex analysis of man's moral senses.²⁴ In dominant, at that time, interpretations of Wilson it was suggested that the ultimate ground of Mother Teresa's activity can be identified with covert egoism because her bond with Christ, religious congregation or the Church community secures her psychical comfort representing an evolutionary suitable feature. Strong protests against such explanations caused Wilson to say that he doesn't know very much about Christian ethics, much less the principles of Catholicism or the rules of consecrated life. Such competences make us keep distance from his inter-

²³ See J. ŻYCIŃSKI, God and Evolution, 223.

²⁴ See Michel RUSE, *Taking Darwin Seriously*. A Naturalistic Approach to Philosophy (Oxford: Blackwell, 1986), 254.

pretations of the evolutionary explanations of the adaptation of moral principles in the life of religious people.²⁵

Later on Wilson and Ruse radically modified their original declarations. The former changed the subject of interest from sociobiology to less controversial ecology. Michael Ruse confesses nowadays that not all human ethical behaviours can be interpreted in the scope of the evolutionary struggle for existence. More than at the beginning of his intellectual activity he seems to perceive better that many presumptions confirm the hierarchically distinctive position of Homo sapiens. In the evolutionary view of development, human culture represents the essential discontinuity which eluded sociobiological explanation. Among others, there are the most often recalled arguments: the moral consciousness of man, experience of freedom of choices, the experiences of religious life, aesthetical fascinations, abstract thinking expressed in mathematics as well as in metaphysics, and the theoretical reflection in natural sciences. Raising the question of the existence of transcendent reality, Ruse proclaims: "I really do not see why a Darwinian should not hold to the Platonic vision as much as a Christian. The Darwinian already agrees that there is a world of physical reality, which may or may not have an ultimate explanation. Why should the Darwinian not also hold that there is a world of nonphysical reality, which likewise may or may not have an ultimate explanation?"²⁶ At the end of the same publication the author leaves no doubt: "Can a Darwinian be a Christian? Absolutely!"27

GENESIS OF SCIENCE IN SOCIOBIOLOGY

Many strong postulates were formulated in the initial part of Wilson's sociobiology. They accepted the possibility of the interpretation of human culture only on the basis of genetics, suggesting that in the future all human activities and moral inclinations will be scientifically analysed by such simple principles as the well-known laws used for the definition of a bullet's course.²⁸

²⁵ See Józef Życiński, "L'evoluzionismo secondo il pensiero di Giovanni Paolo II," *Euntes Docete* 56 (2003), 1: 64.

²⁶ Michel RUSE, Can a Darwinian be a Christian? The Relationship between Science and Religion (Cambridge: Cambridge University Press, 2001), 124.

²⁷ Ibid., 217.

²⁸ Por. Charles J. LUMSDEN, Ann C. GUSHURST, *Gene-Culture Coevolution: Humankind in the Making*, in: *Sociobiology and Epistemology*, ed. James H. Fetzer (Dordrecht: Reidel, 1985), 7;

For a short period of time the fans of such radical explanations claimed that sociobiology gives simple answers to difficult questions arising in our culture and concerning the interpretation of such various problems as presence of the metaphysical question about an *arche*, remorse, aesthetic admiration or mathematical controversies connected to infinite multidimensional spaces.²⁹

The above-mentioned declarations were successively ejected from the intellectual scene. Nowadays, the propagators of the sociobiological paradigm more carefully assert that the whole of knowledge is biologically determined and genetically conditioned. Only a small part of the early Wilson's followers still suggest that in the process of intellectual development these theories always win which give a privileged place to man in the evolutionary struggle. It's not too difficult to notice that what is essential to the sociobiological view of culture in such a general formulation is endangered by an equivocal interpretation because of many possible meanings of the terms: "determined," "conditioned" or "privileged." Consequently, one of possible models of the worldview under analysis will be limited to the banal assertion that the results of our reflection have genetic foundations. It's commonly accepted similarly to the proclamation of the necessary role of brain in human thinking. Nevertheless, such a model doesn't make room for the problem of the authenticity of those effects of mental activities which have no reference to the biological struggle for existence. Such intellectual acts are an important feature of *Homo sapiens* confirming the ability of overcoming the world of nature by culture, which specifically testifies to the uniqueness of a human being. The question about the possible influence of biological factors on the content of our opinions should be regarded at completely different levels.

Interesting investigations would notice the problem of the epistemological status of sociobiology, which tries to understand human nature in the society by conceptual instruments proper to biology. Nevertheless, the phenomenon of *animal rationale* cannot be fully understood on this level. Some biological elements may help us to detect many social aspects of human behavior and culture but their specificity requires another epistemological keys to perceive the whole picture. The epistemological status of sociobiology would demand detailed considerations at the separated paper.

In the perspective of Wilson's sociobiology, the problem of the authenticity of scientific theories is investigated to a great extent in a different way.

see also Edward O. WILSON, Charles J. LUMSDEN, *Promethean Fire: Reflections on the Origin of Mind* (Cambridge: Harvard University Press, 1983), 172.

²⁹ See J. ŻYCIŃSKI, God and Evolution, 182.

There is no place for the classical interpretation of truth and knowledge becomes exclusively the expression of a mythical desire of man. In the sociobiological view of the development of humanity myths are lifted up to the fundamental bearers of truth receiving pragmatic, social or cultural functions. Consequently, such disciplines as physics, mathematics or theology represent the domains generating myths which, as a result of knowledge, make the evolutionary struggle for existence easier. In our times mythical interpretations include most of all the epic of evolution. Stories about the expanding universe, black holes, superstrings and cosmic inflation contemporarily play a role similar to the one that in the past stories about dragons and enchanted princesses played. Illusions of new mythology written in the form of mathematical formalism account for the expression of a human eternal craving for mystery and adventure encoded in genes.

This mythical aspect of scientific theories doesn't mean that they *ipso facto* should be treated as epistemologically worthless. There are well known weighty philosophical concepts containing the elements of illusion, simplifications or partial truth. Moreover, critical realism with the classical version of the notion of objective truth seems not to automatically cancel sociobiological explanations. The situation becomes complicated when sympathisers of biological interpretations using equivocal language dispute authenticity of scientific theories.³⁰ On the other hand, however, they don't notice that their theory can also become a form of myth, especially when its main goal consists in the creation of myths.

In the sociobiological concept of science all theories mutually compete with one another and victory is always on the side of this one which more fully makes an adaptation possible. If as a criterion of truth we treat the utility determined by genes and the rules of epigenesis, it would be very difficult to expect that—according to the classic definition of truth—scientific theories will reveal the factual state of affairs unconditioned by pragmatics. Moreover, in this context sociobiology should be consequently regarded as a product of man's genetic determinants, as well. Similarly to other domains of knowledge, it becomes only the evolutionary result of the human genotype which can't pretend to reveal the ultimate truth about the nature of science. Therefore, sociobiology fails to explain not only the uniqueness of man's culture but also the very essence of science.

On the one hand, there is a place for the evolutionary interpretation of the origin and development of scientific reflection; on the other, one can not

³⁰ See J. ŻYCIŃSKI, God and Evolution, 218.

reduce the relations of the logical conclusions of statements to the biological principles of the struggle for existence. Much more justified than Wilson's reductionism is the proposition of Karl R. Popper.³¹

Before our species came into existence knowledge had been developing very slowly. The origin of Homo sapiens changed this situation profoundly, especially during the times of the Neolithic Revolution. Moreover, since the discovery of the plant cultivation and animal husbandry, the above-mentioned development has accelerated so quickly that sometimes it has been difficult for man to follow the changes. The constant enriching of knowledge about the physical world accompanied by the development of its practical implications became the factors thanks to which man dominated the milieus crucial for the life's preservation. Thus, man has become basically independent of changing climate and the natural sources of food, replacing them by the results of his own raising and cultivation, supplementing his limited strengths with external sources of energy, enriching his perceptual and manipulative abilities by constructing devices. The human population has overcome other species of living beings and without any doubt the main factor of this victory can be identified with cognition: common-sense at the beginning, then scientific reasoning and lastly on technology. All these elements constituted the powerful means of the species' adaptation.³²

At the level of scientific reflection differences between the psychical sphere of man and irrational animals are cognitively very interesting because the development of natural sciences leads to the gradual revelation of new manifestations of biological nearness. More than 100 years ago, the comparative anatomical research brought many unexpected results confirming the necessity to locate *animal rationale* within the anthropoidal monkeys. Much more can be read from the contemporary cytological, kariological and especially molecular inquiries. By comparing the characteristics of the enzymes that play analogical functions and, analyzing the structure of active as structural proteins, one is able to see that the macromolecules of man and monkeys are extremely similar and sometimes identical. The difference between a man's and a gorilla's chromosomes appears as so small (48–46) that more distinctions can be found within the same biological species. Human and chimpanzee's hemoglobin are effectively identical and the comparison

³¹ Karl R. POPPER, *Objective Knowledge: An Evolutionary Approach* (Oxford: Oxford University Press, 1972).

³² See W. KUNICKI-GOLDFINGER, Znikąd donikąd, 36–37.

of all blood proteins of anthropoids shows that they are less differentiated than those of very closely related species.³³

In spite of these similarities at the level of biology, the human psyche and the contents of its acts remains still the Rubicon, which leaves the representatives of the natural science with the hope of a future scientific revolution. Having taken into account the ambitious explanatory projects aimed at the evolutionary interpretations of the features specific for human culture, it should be said that such explanations do not touch the essence of the phenomenon in question. One can manipulate the superficial analogies showing the role of the aesthetic qualities of peacocks in their struggle for peahens, one can also try to find the parallel of remorse in the chimpanzee's behaviour. Nevertheless, these analogies don't give the necessary answer to the following question: how to explain at the level of evolution that mechanisms involving the principles of the biological struggle for existence led to the emergence of the consciousness capable of admiring the Beethoven's Ninth Symphony, developing complicated systems of ethics and mathematics, being able to make disinterested sacrifices for others on behalf of higher values. Directed by his own methodological principles, the naturalist is limited to making a statement of some features that characterise human consciousness. The philosopher, crossing the borders of the natural sciences, can search further for rational interpretations of the differences between the human and the irrational animal psyche.

When analysing the human psyche, one should remember that the characteristic of man's will allows him to desire other beings and the perspective of undetermined activity includes also non-material values such as truth, good, beauty, love, happiness, and God. Desirable and cognitive faculties are practically used in the sphere of human wishes, cognition, choosing or external activity. Our activity includes consciousness, thinking, reflectiveness, recognition of truth, work, culture, tradition, embodiment of values and many other domains. The rational realisation of man's openness lets us assert his unique position among other beings and requires research into the proper ground for transcending the world of nature.³⁴ A satisfactory version of philosophical evolutionism must take into consideration the fact that in the human psyche the essential role is played by the openness toward cultural

³³ Ibid., 209.

³⁴ See Roman DAROWSKI, *Filozofia człowieka (Zarys problematyki. Antologia tekstów)* (Kraków: Wydawnictwo WAM, 2002), 53–56.

values which can't be reduced to the level of the evolutionary struggle for existence.³⁵

BIOLOGICAL CONTINUITY AND ONTOLOGICAL DISCONTINUITY

A deep comparative analysis has been accomplished by Jerzy Chmurzyński who makes reference to the problem of truth and falsehood from the biological perspective. His investigations are crowned by the thesis that the processes of cognition in the world of animals lack the element of abstract thinking and occur at the level of senses and the so-called creative concrete thinking. The latter, as sensory-motor (image-moving), runs within the borders of the current perception of objects surrounding living and acting individuals. Having a particular task to accomplish, an animal perceives the elements of the surrounding reality as functional and structural proportions.

The set of important cognititive mechanisms is represented in animals by the imitation of abstract thinking. Its significant feature should be identified with the so-called *shapeness* of perception i.e. the ability of the perception of particular images by the creation of some wholeness. Individual elements are composed in a compact structure (relations) permanently accompanying given objects. The shapeness of cognition lets one memorise which of the two houses is bigger or stands closer to an observer. It also makes it possible to compare the quantity which—because of associations with the process of abstraction—is sometimes called wordless thinking. Birds are able to estimate the number (from 1 to 7) by virtue of accompanying visual shapes and insects differentiate the number of petals by touching flowers. Such shapes can generate falsifications, errors or inaccuracies. Especially at the optical level, the perceptual system is characterised by the possibility of a mistake that may be made by man as well as an animal.

³⁵ "Senza dubbio la mente umana separata in modo netto la nostra specie dagli animali non umani. [...] L'autoconoscienza umana ovviamente differisce grandamente da ogni rudimento di mente che può essere presente negli animali non umani. La grandezza della differenza ne fa una differenza di tipo, non di grado. A casa di questa primaria differenza l'umanità divenne un prodotto straordinario e unico dell'evoluzione biologica". Theodosius DOBZHANSKY, "Evolution of Mankind," in *Evolution*, ed. Th. Dobzhansky, F. J. Ayala, G. Stebbins, & J. W. Valentine (San Francisco: W.H. Freeman & Company, 1977), 453; trans. by Angelo Serra SI: "Le origini biologiche dell'uomo," *La Civiltà Cattolica* 149 (1998). IV (3559): 30.

Reflecting on the imitation of abstract thinking in the world of animals, Chmurzyński recalls two examples of the adulterations in the imitation. The first one consists in the imitation of the research of causal relations, the conditioning, and the conditional reaction, i.e. they lead towards the achie-vement of the optimal pattern of situational correspondence. Errors arising in this context occur during the education or at its end as a deviation from the mean level of performance. The second example is delivered by the imitation of the research of references among the numerical quantities. Some animals are able to imitate a given physical process that has the character of a function. Ethologists speak about the so-called calculative mechanisms; their detailed course depends on the individual experience. The example of bees shows how the dependence between the velocity of their dance and the distance from the source of benefit or a new place to form a beehive takes the form of a regular curve.³⁶

Another problem is connected with the analysis of imitation that in the simplest (physiological) form consists in making the behavioural rhythm following the external one. Having a psycho-physiological character, the imitation can work in such a way that some individuals are "infected" by others. *Allomimetical behavior* includes synchronisation, assimilation of motions, especially their orientation. Examples of the behaviour at this level are not restricted to the world of animals; the average man steps onto the street immediately when the rest of those waiting for green traffic light just goes forward.

When an individual behaves as if its biological motivation increased, the phenomenon of imitation is called the *allomimetical* induction or the transposition of instinct. The release of such an activity is made under the influence of an accessible stimulus that influences a given behavioural mechanism. Its well known confirmation can be shown by a decrease of the reaction threshold causing the return of a chicken, which has already satisfied its appetite, when other chickens in the vicinity start to eat. *Allomimetic* induction takes place even across the taxonomic borders: perceiving people eating at the table, dogs begin to "ask" for food.

Imitative behaviours are generated by social impulses, too. Some of them have a physiological character (for example yawning), others—an instinctive one (genetically coded 'sheep-like' instinct). Nevertheless, there are also such behaviours whose interpretations have to be referred to the sphere of the psyche (a reaction on escaping individuals, as an effect of vocal or

³⁶ See J.A. CHMURZYŃSKI, "Prawda i fałsz z perspektywy biologicznej," 393–396.

semantically given signals (the latter appear in baboons' behaviour). Instinctive behaviour sometimes attains univocal forms within the non-social species as well as among the individuals representing distinctive species. The enticing stimulus can be provided even by the behaviour of animals preparing for action—for example: birds flying toward food.³⁷

The above perspective induces us to characterise instinct as a genetically determined mechanism of nerves and the congenital ability to form biologically "purposive" reactions. The latter are usually made by the multistage behaviour released and governed by a proper external stimulus rooted in the internal motivation. Ethologists distinguish two fundamental stages of the instinctive behaviour. The first one, called the appetitive phase, consists in the peculiar preparation that—as in the reproductive instinct—from time to time becomes the chainlike process (reproductive migration, choice of territory, collection of the materials for nest). The second stage—the realisation of the instinctive behaviour—is performed by the accomplishing action (in some measure fulfilling the need).

Such forms of social activity of animals as the formation of a herd, mutual feeding or *allomimetic* behaviour are not treated as instinctive. In order to be classified into this behavioural level at least one of the following factors should occur: a given behaviour is preceded by another having the appetitive character (or leading to the accomplishing action), is manifested "in vacuum," such as the releasing or "throw-over-like action." The former is exemplified by the run of a hungry bird toward a non-existent insect. By the strong stimulation of a given motivating centre the instinctive action governed by it can occur even without the adequate releasing stimulus. The throw-over-like actions are manifested by the conflict of motivations. The simultaneous inclination toward an attack and escape can liberate the rigid patterns of behaviour from another repertory of instinctive behaviors, for example the care of the body. Moreover, in the latter one can distinguish the following kinds of instinct: alimentary, that of taking in the water and electrolytes (ions), breathing, reproductive, sleep, or the care of offspring.³⁸

Many traditional monographs of the issue under consideration suggest that ontological monism is usually accepted by biologists and critically judged by most of philosophers dealing with main problems of metaphysics. The examples of John Eccles or Andrzej Jerzy Chmurzyński deliver naturalistic counter arguments to such a classification. On the other hand, within

³⁷ Ibid., 399.

³⁸ http://ptetol.nencki.gov.pl/s_instynkt.htm (accesed 9.06.2016).

the group of influential philosophies of culture, there is an attempt at questioning the subjectivity as well as the transcendence of man over nature, defending the thesis on the death of the human subject.³⁹ In the philosophical jargon characterising these propositions, not only the substantiality of the person but also the very notion of person itself is undermined, proclaiming that man is his own experiment and treating him exclusively as "a human product."⁴⁰

Summarising the naturalistic as well as philosophical investigations on the nature of the human psyche, one should ascertain that in these mutually independent research programmes there is a methodologically accepted confirmation of the thesis concerning the coexistence of physical continuity with ontological discontinuity in the evolutionary interpretation of nature. The ontological thesis surely can't be definitively justified as reductive understanding leads only to probabilistic explanations; however, the successive arguments connected with a new domain of phenomena can increase the authenticity of the confirmed thesis. This doesn't change the fact that the opposite thesis will be also able to enlist new sympathisers. On the one hand, they would come from the groups that don't acknowledge the difference between the ontological and scientific forms of evolutionism; on the other, they would occur among thinkers capable of the future formulation of the new version of monism making the contemporary opposition between materialism and spiritualism totally pointless. In such a context intellectual propositions alternative to the presented view will be often introduced. Nevertheless, the basic problem of these explanations consists in the lack of an interpretation of features of the human psyche, adequate to the actual data, that express the relative autonomy of the contents of the human psyche in reference to biological determinants.

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³⁹ Angelo SCOLA. "Człowiek: zanikający podmiot czy nowe centrum?" *Społeczeństwo* 13 (2003), 2(54): 175–194.

⁴⁰ See Marc JONGEN, "Der Mensch ist sein eigenes Experiment. Nach dem Humanismus: Einige Thesen, mit denen der Nationale Ethikrat für Gentechnologie Frieden schließen sollte," *Die Zeit* 9.08.2001 nr 33: 31.

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WYJĄTKOWOŚĆ CZŁOWIEKA W ŚWIECIE I PRÓBY JEJ PODWAŻANIA

Streszczenie

Podkreślając cechy charakterystyczne dla kultury i świadomości człowieka, zwykle wylicza się: refleksję metafizyczną, zdolność samoświadomości, etyczną wrażliwość sumienia, doświadczenie estetyczne i doświadczenie religijne. Za pomocą nierównoważnych sformułowań akcentuje się rolę nauk nowożytnych w rozwoju człowieka czy podkreśla wagę altruizmu w ludzkich zachowaniach, które przez "bycie dla innych" transcendują biologiczne prawo walki o byt i ukazują bogatą rzeczywistość kultury upoważniającą do wypowiedzi o wyróżnionej roli człowieka w przyrodzie. Z drugiej strony człowiek pozostaje nadal elementem przyrody, podporządkowanym przez swą cielesność jej prawom fizycznym i biologicznym. Uwzględnienie tego faktu nie pozwala mówić o absolutnej transcendencji człowieka wobec przyrody, lecz tylko o względnej. W tej ostatniej istotna jest zarówno biologiczna więź człowieka z resztą przyrody, jak i kulturowe otwarcie na wartości ponadprzyrodnicze.

Stwierdzenie współistnienia ciągłości fizycznej z nieciągłością ontologiczną w ewolucyjnym tłumaczeniu przyrody nie budzi dziś większych oporów. Tezy ontologicznej nie sposób uzasadnić definitywnie, gdyż rozumowanie redukcyjne prowadzi jedynie do probabilistycznych tłumaczeń. Nowych zwolenników będzie mogła zyskiwać także i teza przeciwstawna. Jej sympatykami będą zarówno te środowiska, które nie uznają różnicy między ontologiczną a naukową wersją ewolucjonizmu, jak i te, które dopuszczają możliwość przyszłego wypracowania nowej wersji monizmu, w której bezprzedmiotowe okaże się dotychczasowe przeciwstawienie między materializmem a spirytualizmem.

Niezależnie od wyżej wymienionych szczegółów toczącej się debaty podkreślanie wyróżnionej roli człowieka w przyrodzie ciągle znajduje krytyków w kręgach wielu nurtów zależnie od przyjmowanych przez nich założeń metodologicznych czy deklaracji ontologicznych. Podstawową trudność tych tłumaczeń stanowi jednak brak adekwatnego do współczesnych danych wyjaśnienia tych cech psychizmu ludzkiego, w których wyraża się względna autonomia treści psychiki ludzkiej w stosunku do determinant biologicznych.

THE UNIQUENESS OF MAN IN NATURE AND SOME EXAMPLES OF ITS QUESTIONING

Summary

There are often mentioned specific features of human consciousness and culture: metaphysical reflection, ability of self-consciousness, moral sensitivity, aesthetical and religious experience. One can express the role of the similar contents, stressing the role of modern sciences in the human development or the worth of altruism in the acts of man, who—existing for others transcends the biological struggle for existence revealing in such a way the rich world of culture that gives right to assert his unique role in the nature. On the other hand, man still remains the element of nature, by the corporeality subordinated to its physical and biological rules. Taking this fact into account, we are not permitted to speak about the absolute transcendence of man over nature but only about relative one. The latter consists in the biological bond of man with the rest of nature and his cultural openness toward supernatural values.

There is also methodologically accepted confirmation for the thesis concerning the coexistence of physical continuity with ontological discontinuity in the evolutionary interpretation of nature. The ontological thesis surely can't be definitively justified. Therefore, the opposite thesis will be also able to enlist new sympathisers. On the one hand, they would come from the groups that don't acknowledge the difference between ontological and scientific form of evolutionism; on the other, they would occur among the thinkers capable of the future formulation of a new version of monism making the contemporary opposition between materialism and spiritualism totally pointless.

Apart from above mentioned aspects of the debate, the statement emphasizing that man transcends nature is still being criticized by some intellectual circles depending on methodological presuppositions or ontological declarations. Nevertheless, the basic problem of these explanations consists in the lack of an interpretation of features of the human psyche, adequate to the actual data, that express the relative autonomy of the contents of the human psyche in reference to biological determinants.

Słowa kluczowe: człowiek; przyroda; kultura; altruizm. **Key words:** man; nature; culture; altruism.

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