

## THE IDEA OF SANCTITY OF NATURE IN THE FORMATION OF HUMAN ONTOGENESIS

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*Božena ŠMAJSOVÁ-BUCHTOVÁ*

**Abstract:** *The article discusses the importance of the positive influence of nature on the initial phases of human ontogenesis. It describes the negative consequences of the current globalized culture on man's psychological and physical health, particularly in children. It outlines the road of return to nature.*

**Keywords:** *nature, human ontogenesis, psychological and physical health.*

Fifty years ago, people lived in the country and tended the land, whereas now the increasingly global consumer society, where most of the planet's inhabitants will soon live in cities devoid of traditional physical work, faces a threat that mankind has never known before. Changes are occurring in a process called socialization, whereby a person gradually becomes member of the human society. This process of learning and maturing, including cultivation of the psyche's emotional component, is marked by deprivation, by scarcity of the stimuli to develop a healthy personality. For the first time though, this is not due to lack of evolutionally young impulses from the cultural sphere, like family, school or society, which stimulate primarily the gray matter of the brain – the neocortex. There is a paucity of those experiences and physical influences from the original nature that develop the whole psyche. These experiences and influences, irreplaceable by culture and expected by the conservative program of human ontogenesis, co-determine the normal emotional profile of a personality, the quality of its sensual perception, and the life's orientation and values. (J. Šmajš, 2003: 99)<sup>1</sup>

1) Man is a biological species which emerged in the late tertiary period and functionally fell into a biosphere system, into natural ecosystems. For at least 40,000 years, humans have been born with the same biological endowment, i.e. with the same psyche, whose general structure must have roughly the same stability as that of human morphology and physiology. People create culture and adapt to it ontogenetically with only a smaller portion of their psychology, mainly with its cognitive component, the evolutionally youngest gray matter of the brain. Their highly stable genome (human constitution) may be one of the causes of today's civilization problems, including the lack of interest in finding a solution, but on the other hand it cannot, in its peculiar non-verbal manner, forego a protest against the loss of natural environment. A higher incidence of civilization illnesses, neurotic ailments, stress, drug addiction, and criminality may be expressions of such a protest. (J. Šmajš, 2005:93)

As stated by J. Šmajs (2005: 93), nature, as opposed to culture, affects the psychology of both man and animal by its forms, processes, and configurations.<sup>2</sup> The structure of the human psyche, outlined genetically in specialized nerve cells and brain tissues, develops and matures after birth by reacting to external stimuli. Since the evolutionally young cultural impulses, primarily of symbolic character, do not affect the older brain structures much, a new dangerous dysfunction appears: the early ontogenesis, traditionally the foundation of an individual's healthy development, gradually morphs into a period of irreversible, life-long personality deformation.

Social sciences do recognize the so-called extra-productive function of nature, that is the salubrious effect in the therapeutic, relaxation and recreational sense, although that is in fact an understatement. The indispensability of nature for human beings does not derive solely from the preservation of biological integrity and physical reproduction. Nature, although most of us do not realize it, also ensures our spiritual or psychic integrity and reproduction. It sustains both a healthy body and a healthy soul. Coupled with a broad complementary culture, it develops what is potentially contained in the human genome: a biologically predetermined humanness.

The socialization process must, especially in the early, sensitive phase of human ontogenesis, encompass the entire structure of man's environment. Even though the open nature may have been altered and obscured by cultural artifacts, it remains a hidden, little studied – and therefore undervalued – factor in the formation of healthy human personality.<sup>3</sup>

Nature participates in the process of personality formation primarily by having the human genome (the memory of our species) expect or anticipate an allocation of every newborn individual to a certain type of natural environment, a kind of “archetypal” ecological niche. This happens regardless if this or that culture exists or what is the location of a given family. If this basic categorization succeeds during the first sensitive phase of human ontogenesis, it will very likely have a positive effect on the subsequent formation of the individual's personality.<sup>4</sup>

The manner of finalizing the psychosomatic profile of an individual by his natural and cultural ambiance is similar to the way offsprings of other biological species are groomed in their natural “home” within the domestic ecosystem. However, human development is special in that it lasts much longer, it is open to external stimuli, and its genetic program expects

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2) The natural environment offers a wide range of stimuli to a child, which has a positive influence on its development. For example nature exudes a plethora of odors, we recognize shape, temperature, wetness, roughness and structure by touch, whereas most things that have been created artificially and are „perfect“ in form lack taste, smell and feel cold.....(V. Kulhavý, 2006:50, edited) .

3) Neurologists could observe what happens to the brain conditioned by few problems and challenges in donkeys, specifically in South-American domestic donkeys. In Chile and Peru, in addition to normal domestic donkeys which grow up in stables on farms, later to be used as draft animals, there are also donkeys who somehow managed to escape and join freely roaming herds of domestic donkeys turned feral. The young donkeys born that way mature in totally different conditions than their home-reared relatives. Their life is more difficult, full of problems and challenges, in all respects not only more diverse but also more uncomfortable. The consequences are not surprising: their brain is more complex and more interconnected, and in fact noticeably larger than the brain of their sheltered „brothers“. (Prekop, J.; Hüther, G., 2008:76).

4) At the beginning of its life, a child possesses all psychic and physical prerequisites for the development of a lifestyle that will be in harmony with a sustainable growth (nature). However, these talents are not skillfully utilized and developed. Research results have demonstrated that the beginnings of alienation from the natural environment have been observed in children younger than three years of age. (Strejčková, E., 2005).

a fitting pattern of cultural influences, including verbal inputs. Essential for this process, if disturbances of early personality developments are to be avoided, is a solid emotional attachment of the child to at least one adult, typically mother<sup>5</sup>, and so are the often-overlooked formative influences of the natural ambience, or the second “mother nature”.

Although pedagogues and psychologists keep debating whether socialization has to precede individualization in human development, they do not mention that, from the standpoint of human phylogeny, socialization is secondary. It has to be preceded and continually complemented by older naturalization, by non-verbal contact, and by the development of man’s adaptability to the genetically programmed natural world: the open nature. They only emphasize that a child has to be in parental care for a very long time, and that it should be reared in a suitable social ambience. In this anthropocentric approach, nature tends to be forgotten.

Yet nature, together with parental care, has been what most profoundly shaped the spiritual framework of human personality. It taught man to correctly perceive, recognize, evaluate, respect, cooperate, and fight. It is one of those things that people never appropriated only verbally, by reading or looking at pictures as they do today, but by physical and manual contact within an experience-based relationship.<sup>6</sup>

Socially living species, to whom man belongs, have a third indispensable „mother”: a structured and functionally cooperative animal community. The second and the third mother have been practically lost for a city-dwelling child in today’s information-oriented society.

Aside from a functional family, a “functional” nature or landscape – in fact any physical surroundings – to this day represents something that cannot be given to the child by any other means, not even at a later date, for example at school, much less in adulthood. We make the initial landscape and family our own through the most durable form of neuronal memory: the impression or imprinting. We then carry the initial imprint of our birthplace the entire life as a hidden secret of our personality, while we go on to experience, discover and evaluate the world around us. In these places we became aware of our uniqueness, of our identity, here we got to know the feelings of safety and stability.<sup>7</sup>

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5) “...the number of factors that prevent a harmonious development of personality in modern civilization apparently increases, while the impulses that support it are becoming fewer. One of these circumstances was identified half a century ago by the nestor of child psychology René Spitz. In the conclusion of his book about the first year of life, he writes: “Children raised without love mature into adults full of hatred“....hatred does not have to manifest itself by active destructivity. It may assume the form of sinister evil in the soul. I believe it is a serious social problem. By its gravity, and by the indifference with which it is overlooked, I would compare it to an ecological menace. (Přihoda, P., 2006).

6) A tactile physical contact with animate and inanimate natural forces and systems, an experience-based relationship with nature and with one’s own mother obtained by analog communication cannot be substituted by verbal or digital means, that is by spoken word, reading, or pictorial record, all of which are prevalent in today’s education of children. (J. Šmajš, 2003:102).

7) Unlike most European countries, the Czech Republic has more than once seen a break-down of the generational ties between certain natural places and their inhabitants, the farmers, during the last century. After numerous resettling, neither the parents nor the teachers exhibit any sign of some deep emotional attachment or understanding of the local natural values. They raise and teach generations of theoreticians, for whom the concept of “my homeland” is merely something archaic without a concrete meaning. The close rural areas get the least exposure with children. They appear neither in the mass media nor in the textbooks used nation-wide. The one-time perfectly normal after-school activities, when groups of children had the opportunity to get to know each other and learned to coexist with others within the local landscape, have almost disappeared, especially in cities. (Strejčková, E. et al.: Research into the Alienation of Man from Nature. Final Report. Prague, 2006:2).

Of course, man can live in a landscape full of concrete structures, asphalt-covered highways, parking lots, gas stations, sprawling warehouses and agricultural mass production, but it is impossible to live happily and well in such an artificial environment. Like raising children in a foster home or breeding free animals in captivity, it robs the man of his sense of landscape, thus distorting his genetically programmed humanness. A bad landscape habit, like the habit of wrong parental values or rules in a dysfunctional family, is, after all, a habit like any other, no matter how much it contradicts our inborn predisposition. It may be one of the causes of the so-called problems of civilization: the feelings of anxiety, fear, alienation, exhaustion, boredom. It may even lurk in the background of today's "incomprehensibly motivated evil", an aggressive behavior, and a variety of other pathological dependencies.

Man's return to nature has to commence with a practical and biologically sensitive reconstruction of landscape and human habitation. That requires political will, public support, ecological education/enlightenment, and, most importantly, keeping the adult population informed about the latest scientific knowledge of living systems and our understanding of life on the planet Earth.

As reported by Emílie Strejčková (2005), the founder of Toulcuv Dvur Ecological Center for Children, school surveys revealed that the current education and awareness of natural environment consists of information conveyed predominantly by words and images. That kind of information, considering the complexity of real life, is bound to be distorted and incomplete. Nature-related education typically starts at an age when the children have already adopted the habits of indoor consumer lifestyle. Lacking completely is a pre-school and in-school educational system to instill the habits of truly creative attitudes benefiting the remains of the more authentic natural enclaves. Taking care of indoor flowers, manicured lawns, bonsai trees, and caged animals is not enough.

For the students of Masaryk University, we are preparing a survey of their ecological IQ. A preliminary survey has already shown how little the young people of today know about living systems. As is for example the case of College of Economic Administration, these individuals may become the managers who will make decisions about various entrepreneurial activities and their impact on nature. Moreover, they will soon be raising their own children and shaping their attitude to nature. What will be their legacy? Indifference?

In 2005, I attended a seminar at Toulcuv Dvur on the results of a research into children's alienation from nature. The discussion yielded some significant insights:

- Today's children spend less time in nature, some even view it with fear or revulsion. Aside from the problems of overweight and lower immunity associated with reduced exposure to nature, the research found that the city-dwelling children in particular have poor ability to estimate distance, poor terrain orientation, cannot assess weather and therefore dress improperly, are unable to correlate natural phenomena (e.g. why there is a cone under a pine tree). They are physically awkward and less manually dextrous than their parents and grandparents used to be.
- Man's relationship with nature is not genetically encoded, but the range of his mental and bodily talents is based on, and limited by, the natural outside conditions in which he developed. Research findings confirmed that the ever-growing

suppression of man's direct contacts with nature has negative consequences for the ability and willingness to help preserve the richness of natural environment, as well as for healthy psychological and physical development of every individual.

- The analysis of children's drawings on the theme „My ideas about the world in which I live and in which I would like to live“ revealed a sharp polarization. One group had a preference for technology (computers, cinemas, hi-fi sound systems, etc.) with a clear-cut vision of the world where robots will do everything for us. The other group produced drawings with elements of nature (forest, horses, flowers, family home with a neat garden). Another dream, for younger children, was a tropical island.
- The older the children are, the greater is their preference for technological elements over the natural ones, and the activities of interest are linked to man-made environment (either indoors or outdoors in an urban setting).
- While even pre-school children can name a pictured animal, plants and trees are less recognizable. Many kids know they are supposed to protect all living creatures, but have no sense of the more important need to protect the environment where the animal lives.
- A survey of children's emotive reactions to nature in elementary schools showed that the fear of nature is no different in children from single-family houses with gardens than in children from high-rise buildings. This is apparently due to a shift in the garden function, which today tends to be summer relaxation, barbecuing, poolside fun etc., with nothing more than a trimmed lawn and a few decorative rocks or bushes. The children are therefore not exposed to the natural cycle by virtue of growing vegetables or keeping small farm animals.
- It became further evident that the fear of nature is more prejudicial than instinctive. According to the researches, this could be caused by the media influence, such as horror movies portraying animals in a negative light.
- The sociologists that analyzed children's free time in the capital city of Prague 30 years ago and now found a significant drop in the number of relatives in the country. The children do not have the opportunity to see the real country life, to experience farming first hand. Most of them do not consider country existence to be quality life and tend to be bored by it. The idea of being in nature triggers images of some activities, like visiting a zoo, a bike trip or a skating rink – not an ordinary walk. The cities in particular lack places where children could spend their free time, instead of sitting at the computer.
- In the seminar discussions, we agreed that in addition to the parents' role, an ecological education after school, such as hiking or boy-scouting, can have

a positive impact on children's bonding with nature. It is paradoxical though that the money for ecological education of young people from the structural funds of the EU is available starting from fifteen years of age. By that time, it is too late. It turns out that the beginnings of children's alienation from nature have been observed in children younger than three years. The experts consider the first three years critical in forming a relationship with nature. It is the period when the process of the permanent imprinting is the most intense, when the individual is directed toward the basic principles of life. At the threshold of life, every child has the psychological and physical tools to develop a lifestyle harmonious with nature. However, these possibilities are not skillfully utilized and developed.

## **IDEA POSVÁTNOSTI PŘÍRODY PŘI UTVÁŘENÍ LIDSKÉ ONTOGENEZE**

**Abstrakt:** Článek pojednává o důležitosti pozitivního vlivu přírody na první fáze lidské ontogeneze. Popisuje negativní důsledky současné globalizované kultury na psychické a fyzické zdraví člověka, zejména dětí. Naznačuje cestu návratu k přírodě.

**Klíčová slova:** příroda, lidská ontogeneze, psychické a fyzické zdraví