NEUROBIOLOGIA VALORII UMANE

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Neurobiology of Human Values

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Given the perennial salience of human misery, failure, intolerance, and brutality, it may be naive to hold a conference dealing with the concept of optimal human being.

I was motivated to continue not by a desire to become a savant or talk show guru, but rather by a desire to share some fascinating new ideas about the nature of human nature.

I hope to convince you that optimal human being is not so mysterious or far from our grasp as we might think- in fact, many people have already achieved it.
Originea și evoluția Ființei Umane

- creația divină
- teoria evoluționistă
- teoria panspermiei
- programul inteligent
- concluzii
I have hitherto sometimes spoken as if the variations...had been due to chance. This, of course, is a wholly incorrect expression, but it serves to acknowledge plainly our ignorance of the cause of each particular variation.

But the much greater ... leads me to believe that deviations of structure are in some way due to the nature of the conditions of life, to which the parents and their more remote ancestors have been exposed during several generations.

The male and female sexual elements seem to be affected before that union takes place which is to form a new being.

LA VIE VIENT DE L'ESPACE

Francis Crick
Prix Nobel de médecine

Hachette
Scientology is defined as the study and handling of the spirit in relationship to itself, universes and other life. Thus, the mission of the Church of Scientology is a simple one: to help the individual regain his true nature, as a spiritual being, and thereby attain an awareness of his relationship with his fellow man and the universe. Therein lies the path to personal
The Origins Debate

Evangelical perspectives on creation, evolution, and intelligent design.

by the editors of Christianity Today
...we have to recognize that we are spiritual beings with souls existing in a spiritual world as well as material beings with bodies and brains existing in a material world. 1989
Thus, the more productive questions for current scientific inquiries should be, How do nature and nurture work together, and what are the processes through which biology and culture shape the mind?

FIINȚA UMANĂ

Interfață fizică (nature)

Interfață informațională (nurture)
The most beautiful and deepest experience a man can have is the sense of the mysterious. It is the underlying principle of religion as well as of all serious endeavour in art and science. He who never had this experience seems to me, if not dead, then at least blind
If an adult is believed to be no longer alive once consciousness has ceased, then the embryo can’t have begun to be alive before consciousness has started. The argument seems unassailable. But on its own it is dangerous, because it creates an atmosphere in which our understanding of human life is brain-centred, and soon we discover that the value and esteem that we give to individual human beings rapidly becomes based on some assessment of how well their brains function.
Concepts on optimal human being - as arising when sensory pleasures are maximized (epicurianism) - when the sting of displeasure is minimized (stoicism).
-sophists - the road to the "good life" requires giving up such quests, in favor of relativism, comfort, and moderation; the idea that it is possible to know reality and find truth is a false belief, which should be dispensed with forthwith
-Socrates- that virtue involves transcending pleasure seeking to develop deeper knowledge of "the good", "know thyself"

Concepts on optimal human being

- Plato - Optimal human being, in this view, occurs when we can directly apprehend beauty, truth, and goodness. These exist on a transcendent level of pure ideas, which must be approached if one is to escape delusion; "cave parable"

- Aristotle, virtuous living involves finding the "golden mean," leading to moral perfection and a balanced and harmonious mode of life.

Concepts on optimal human being
-in medieval times, Christian theology-in terms of adherence to various conceptions of God’s law, a tradition that began even earlier with the Hebrews. Real happiness would not come until after death, and then only if one had been sufficiently pious
-in the early renaissance, hedonism again came to the fore, as Bacon, Hobbes, Locke, and Hume renounced religious and idealistic conceptions of the good, instead endorsing skepticism and assuming that the rational pursuit of self-interest defines the good.

Concepts on optimal human being - utilitarianism, functionalism, and Adam Smith's economics all assumed that people were essentially motivated by the desire for personal gain. In the Romantic era, the pendulum swung back the other way, toward a vision of self-realization and self-as-quest; according to Shelley, Byron, Goethe, and Coleridge, we must seek to fulfill our destinies and experience the richest possible emotional life.

-but then once again the pendulum swung back, when the romanticist bubble was thoroughly punctured by Nietzsche and Freud, marking the start of the modern era.

Concepts on optimal human being
Optimal human being for the id is unlimited pleasure and gratification, whereas optimal human being for the superego is to achieve control and restraint of immoral impulses
...in the early and mid 20th century was operant behaviorism. It too endorsed a hedonistic perspective, in that biological needs and pleasures were viewed as the ultimate or primary sources of reinforcement potential -

Freud's most notable achievement was to point out the unconscious animal lurking behind the veneer of civilization. Freud's was a singularly hedonistic and unflattering vision of humans, one that split the mind into several parts, each with different criteria for success. Optimal human being for the id is unlimited pleasure and gratification, whereas optimal human being for the superego is to achieve control and restraint of immoral impulses.
The late 1950s and early 1960s ushered in a very different Zeitgeist, as the pendulum swung back toward the intuitive and the subjective. Carl Rogers and Abraham Maslow were probably the two most prominent proponents of third force psychology, and thus their views of optimal human being are worth considering in more detail. In his view optimal human being is not a place, but rather a process and, ideally, a lifelong journey.

Concepts on optimal human being

Optimal Human Being is indexed by the degree of integration between the many different levels of analysis that constitute a human being, ranging from neurobiological to cognitive to personal to social to cultural.

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<thead>
<tr>
<th>Level of Analysis:</th>
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<tr>
<td>Culture</td>
<td>Sociology, Anthropology</td>
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<td>Social Psychology</td>
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**REDUCTIONISM**: going down a level to explain. Explaining in terms of an entity's constituent parts.

**HOLISM**: going up a level to explain. Explaining in terms of what the entity is part of.

FIG. 2.1. Potential influences on human behavior.
Conceps on optimal human being

Făcut-aţi drumul de la vierme la om, dar este-n voi destul, încă din vierme. Odinioară aţi fost maimuţe, și chiar și-acum e mai maimuță omul decît maimuţele. În fapt, omul este un rîu plin de mocîrlă. Și trebuie marea să fii, ca să sorbi rîul mocîrlos fără de a te murdări.

Omul e-o sârmă întinsă între animal și Supraom - o coardă peste un abis.

După ce Zarathustra grăi aceste vorbe, privi mulțimea în tăcere. ”...iată-i cum rîd: nu mă înțeleg, pentru că eu nu sunt gura care se placă acestor urechi”

The rapid development of technology in the modern era has inspired a movement known as **transhumanism**. Envisioned is a near future in which human bodies and minds will be transformed and enhanced through genomics, pharmaceuticals, nanotechnology, robotics, artificial intelligence, and any number of prosthetic devices inside and outside our bodies.

... the possibilities of radical life extension through rejuvenation technologies or alternately reincarnating individuals inside of computers.
The multiple personality is undoubtedly one of the most dramatic and unusual of the emotional disorders. It is however, rather uncommon, so that the majority of practitioners never have had any direct contact with patients with this disturbance. Without this experience, differential diagnosis inevitably becomes more difficult.

For the most part, advocates of transhumanism are secular humanists committed to scientific materialism. They imagine a new age in which people will be freed from mental disease and physical decrepitude, able to consciously choose their “natures” and those of their children. Are the new sciences and technologies celebrated by transhumanists realistic or just another form of wishful thinking?

My thesis is this: transhumanist assumptions regarding progress are naive, because they fail to operate with an anthropology that is realistic regarding the human proclivity to turn good into evil. It is my own view that researchers in the relevant fields of genetics and nanotechnology should proceed toward developing new and enhancing technologies, to be sure; but they should maintain constant watchfulness for ways in which these technologies can become perverted and bent toward destructive purposes.

NEUROBIOLOGIA VALORII UMANE
...we have to recognize that we are spiritual beings with souls existing in a spiritual world as well as material beings with bodies and brains existing in a material world.

1989
... understanding the brain/body–mind complex is possible only when these three are considered as a holistic entity and not as discrete structures or functions.

Neuroscience is awaiting for a breakthrough: An essay bridging the concepts of Descartes, Einstein, Heisenberg, Hebb and Hayek with the explanatory formulations in this special issue..

Homo sapiens appears to be evolving into a new kind of species not seen before in organic evolution.

This is **HOMO HOLISTICUS**, systems man, the first species in the earth’s history with a global reach, entailing global selective forces charting its evolutionary change.

Global change and human change: a prescription for adaptive evolution from ecological network theory.

B.C. Patten, International Journal of Ecodynamics. 2006
The complexity of individual's thought processes and beliefs has important influences on social psychological phenomena such as attitudes, attributions, emotions, and stereotypes. Moreover, because collective outcomes are the product of individual decisions, cognitive complexity influences a variety of social-political outcomes as well, including judicial decisions and the outcomes of major international crises.

“Ideologies, philosophies, religious doctrines, world-models, value systems, and the like will stand or fall depending on the kinds of answers that brain research eventually reveals. It all comes together in the brain.

In brief, recent conceptual developments in mind-brain science are seen to bring changes in worldview perspective that revise the ultimate criteria and frame of reference for determining human value priorities and resolving value difference.

Omul nu poate fi înțeles ca o persoana detașată din societate; el este un produs al eredității, care conține concentrată istoria biologică a sa, dar este tot pe atâta și produs al societății din care face parte.

Singur omul a ajuns la conștiința actelor sale, pe care le poate dirija voluntar, în urma unei decizii reflectate.

Grigore T. Popa. Reforma Spiritului. 2002
Galileo Galilei made the beauty of the physical world central to his own deep faith... as did Johannes Kepler, Isaac Newton, and James Clerk Maxwell. For all these searchers, finding beauty embodied in the physical world, reflecting God’s glory, was the goal of their search. It inspired their work, and sanctified their curiosity. And with their discoveries, their faith was rewarded.
Man has been pondering for centuries over the basis of his own ethical and aesthetic values. Until recent times, such issues were primarily fed by the thinking of philosophers, moralists and theologists, or by the findings of historians or sociologists relating to universality or variations in these values within various populations. Science – or to be more precise many scientists – has avoided this field of investigation within the confines of philosophy. In the name of seeking an objective truth, the scientific approach naturally avoid the field of normative truths, at the risk of appearing indifferent to the possible harmful consequences of its own discoveries. François Rabelais’ famous dictum that “science sans conscience n’est que ruine de l’âme” (‘science without conscience is but the ruin of the soul’)

Beyond the temptation to stay away from the field of knowledge that is reserved for others – philosophers, politicians or religious figures – science may also have felt itself unconcerned by the study of human values for a simple heuristic reason, namely the lack of tools allowing objective study. For the same reason, researchers tended to avoid the study of feelings or consciousness until, over the past two decades, this became a focus of interest for many neuroscientists (Changeux 2002; Crick, 1994; A. Damasio 1999, 2003; Edelman, 1992; Llinas and Ribary 2001; W. Singer 2005a).
The rise of neuroscience and other disciplines makes a more objective and experimental approach possible. In particular, the imaging techniques used to display the living brain show us, for example, which areas of the brain are activated in association with moral or aesthetic ideas and attitudes. The field of neuroscience-brain imaging, as well as neurophysiology, neurology, anatomy, neuropsychology, etc.-has not been the only area to contribute new information. Ethology has enabled us to observe moral behavior—or behavior similar to ethics—in animals.

In recent years, several concrete observations have laid the foundations of the neuroscience of ethics. The personality changes and decline in moral sense suffered by Phineas Gage, the 19th century American railway worker who survived a metal bar passing through the front of his brain, provided evidence that social and moral functions are subserved by the frontal lobes (H. Damasio et al. 1994).
Among the more recent observations pertinent to the neurobiology of goodness, we would consider in particular the implications of 1.) neuropsychological studies of cerebral lesions (particularly the ventro-medial prefrontal cortex, VMPFC) which demonstrated a loss of moral sense in subjects who became sociopathic or presented other behavioral deviations, irrespective of whether they benefited from normal development (Anderson et al. 1999; H. Damasio 2005), 2.) results from functional brain imaging of subjects responding to questionnaires designed to evaluate an ethical attitude (Greene et al. 2001; Greene 2005), 3.) the identification of neurons or neural networks involved in empathy (Rizzolati 2005) or of somatic markers that are themselves linked to emotions and thus cognition (A.
The emotions also play a key role in aesthetics, though neuroscience has displayed less interest in this area. Nevertheless, J.-P. Changeux has pondered over the human brain’s predisposition to invent or imagine creations (1994, 2005). In some ways, the artist may be regarded as a neuroscientist. For example, “artists have discovered which key contours must be perceived by the visual brain to identify the essential structure of an object. By studying the nature of lines used in line drawings, scientists may eventually gain access to this natural knowledge base” (Cavanagh 2005). Neurophysiologists such as S. Zeki (1993) have highlighted the responses of visual areas to drawings that he calls Mondrians. Cela-Conde et al. (2004) tried to localise aesthetic perception using magnetocencephalography. They found that the left prefrontal dorsolateral cortex was greatly activated when people perceived beautiful stimuli (either natural or artistic).
Capacități mentale ale Ființei Umane

cunoaștere
gândire
intuiție
previziune