

REMOVING STONES FROM A THREAD TO STRING THEM:

How biocentric thinking accentuates human singularity

Nina Kozachynska

University of Tartu

Abstract: The paper offers a few observations on the properties of living organisms, which tend to be overlooked while considering human nature through its opposition to the animal world. Hence, by omitting antagonism between non-humans and humans, additional aspects of perceiving and comprehension of both are constituted. Based on the ideas of Uexküll, Bergson, and Merleau-Ponty, the question of the subjectivity of time — actualised differently when it comes to the variety of living creatures — is examined closely. In addition, the paper touches upon cognition and corporeality interrelation, providing examples of how the human body may serve as a cognitive instrument. Alongside that, attention is paid to the daily use of erased natural metaphors and zoometaphors, which confirm the significance of the diversity of living organisms for conceptualising the world around us.

Keywords: temporality, corporeal ontology, natural metaphors and zoometaphors, umwelt, functional Circle, Uexküll.

Eemaldades kive niidilt, et neid nõorida: Kuidas biotsentriline mõtlemine rõhutab inimsingulaarsust

Abstrakt: Käesolev artikkel pakub mõned tähelepanekud elusorganismide omaduste kohta, mida kiputakse tähelepanuta jätma juhul, kui inimloomust käsitletakse vastandina loomariigile. Jättes välja antagonismi inimese ja mitte-inimeste vahel, kujundatakse artiklis täiendavaid taju- ning mõistmisaspekte. Lähtudes Uexkülli, Bergsoni ja Merleau-Ponty ideedest uuritakse aja subjektiivsuse küsimust, mis aktualiseerub erinevalt elavate olendite paljususes. Lisaks puudutab artikkel tunnetuse ja kehalisuse seoseid, pakkudes näiteid sellest, kuidas inimkeha käitub kui tunnetuslik instrument. Selle kõrval pööratakse tähelepanu igapäevastele surnud looduse- ja zoometafooridele, mis kinnitavad eluslooduse mitmekesisuse olulist rolli ümbritseva maailma kontseptualiseerimisesl.

Märksõnad: temporaalsus, kehaline ontoloogia, loodus- ja zoometafoorid, maailm, funktsiooniring, Uexküll.

И отчего же в общем хоре
 Душа не то поет, что море,
 И ропщет мыслящий
 тростник? тростник?¹

Introduction

Christian, Jewish, and Muslim medieval philosophers described a man as the crown of the universe (Butchvarov 2015: 9). Echoing Aristotle's natural classification, Linnaeus emphasised the ability of humans to 'know thyself' ('Nosce te ipsum'), which to his mind distinguished them from animals (Linnaeus 1740: 34); Cassirer, for his part, came to perception a person as an *animal symbolicum* (Cassirer 1954: 44). The only possible way to answer the question "What is a person?" seems to imply one-step back — and a reformulation to "How is a man different from an animal?" However, the endeavour to cognise human nature through its opposition to the animal world is fraught with the alienation of culture from the ecosystem. Furthermore, the motif for cultural superiority becomes more than visible. In Timo Maran's words:

This conviction manifests itself in a number of forms — viewing human language as a closed system of abstract formal relationships (as in the structuralism inspired by the linguistics of Ferdinand de Saussure); rejecting the possibility of direct relations between literary works and the extra-textual environment; treating literature, music, performative and fine arts as belonging to a high culture that is distant from any everyday material concerns, etc. (Maran 2020: 25)

Another difficulty associated with such a formulation of the question is the fragmentation and isolation of the disciplines studying human nature. Humanities tend to approach the issue from different viewpoints, exacerbating the inconsistency. As Max Scheler points out:

The self-problematics of man have now turned out to be maximum throughout the entire period of known history [...] We have a scientific, philosophical, and

¹ Тютчев Ф. "Певучесть есть в морских волнах..." / Tyutchev, F. "In ocean waves there's melody..." (the English translation by Jude, F.):

In the general chorus, why this solo refrain?
 Why do our souls not sing like the sea
 and why must the thinking reed complain?

theological anthropology that know nothing of each other. [...] The ever-growing multiplicity of the particular sciences that are enlarged in the study of men has much more confused and obscured than elucidated our concept of man. (Scheler 1994: 132,133)

Perhaps this is due precisely to the fact that the formulation of so-called questions presupposes some kind of opposition and seemingly emphasises the formed superiority of man over other species. What if, echoing Uexküll, we follow the path of accentuation of nature and transform our question in a slightly different way: How does human uniqueness coexist with their biologically determined similarity with other organisms? And inspired by Uexküll's passion for metaphors, we will illustrate this alternative path using the image of multi-coloured beads made from natural stones.

So, immediately, we are not assigning that rainbow-coloured shimmering beads to a human (although he possesses them deservedly and has worn them for many centuries with dignity). Blinded by this brilliance of the necklace, we risk either returning to the definition of the crown of creation or considering just a few of the most noticeable stones – the uniqueness of speech, mythological thinking [following Aristotle, Rackham (1959), and Lévi-Strauss (1972)], the symbolisation of experience (Cassirer 1980), making choices (Kierkegaard et al. 1959), or instrument creation (Franklin, Bigelow 1904). Instead, we calmly yet decisively remove the beads from the neck and carefully pick up the stones strung on a thread. Looking at them freed carefully, we suddenly realise that each of them had had their own story before they appeared on the human neck. Some may remember themselves as intricate pieces of rocks or mineral salts. But, it often seems incredible that such stones existed in nature by themselves before becoming an adornment of man. Incredible to such a degree that people are sometimes inclined to omit the noun natural and simply name them stones from a wooden jewellery box.

Referring to Uexküll's work, *The theory of meaning and The stroll through the worlds of animals and men*, we will focus on considering the few remarkable properties of living organisms. Or, as Whitehead put it, the operating presence of nature, which is closely intertwined with the life of human beings (Whitehead 1953).

Temporality

The realist-Cartesian philosophical tradition has reduced the concept of the environment to a limited naturalistic ecology: animals here become organisms reacting to external stimuli and possessing no self-awareness:

[...] For a while reason is a universal instrument that is alike available on every occasion, these organs, on the contrary, need a particular arrangement for each particular action; whence it must be morally impossible that there should exist in any machine a diversity of organs sufficient to enable it to act in all the occurrences of life, in the way in which our reason enables us to act. (Leibniz et al. 1990: 81)

Rejecting the mechanistic understanding of René Descartes, and Gottfried Wilhelm Leibniz, however, seemingly falls into the vicious circle we have voiced before, answering the question of what is the difference between people and animals, inasmuch as he deliberately re-builds a hierarchy of cognitive abilities not in favour of non-humans:

The principal difference, however, is that they [animals] do not know that they are, nor what they are. Consequently, not being able to reason, they are unable to discover necessary and universal truths. It is also because they do not reflect regarding themselves that they have no moral qualities, whence it follows that they undergo myriad transformations—as we see a caterpillar change into a butterfly. (Leibniz et al. 1990: 449)

Uexküll, in *A Stroll through the worlds of animals and men*, invites readers to observe living organisms as subjects who perceive the world and act in it. For defining the totality of all perceptions, Uexküll uses the notion of the perceptual world of the animal *merkwelt*; *wirkwelt* becomes the term for actions, comprising the effector world. Together, these two dimensions form a subjective universe — the *umwelt* of animals, astonishing in its diversity. It is the *umwelt* of a certain organism that transforms neutral objects into meanings-carriers with which this animal interacts (Uexküll 1992 [1934]). Hence, for the stem of a blossoming meadow flower, several roles are assigned at once in the *umwelt* of several animals: for an ant, it is essential to use the stem in its original form; the cicada larva seeks to extract juice from it to build the liquid walls of its airy house; the cow is interested in green plant feed. For living beings, the very same flower plays a role of a path, an extraction point, and a morsel of food (Uexküll 1982: 30). Having endowed living organisms with their own perception of the world, Uexküll naturally approaches the question of the subjectivity of time:

There are not only the two varieties of space and time, in which objects are distributed. There is also the variety of *Umwelts*, in which objects assume a multiplicity of ever new and different forms. At this third level, the countless *Umwelts* represent the keyboard upon which nature plays its symphony of meaning, which is not constrained by space and time. (Uexküll 1982: 78)

Even though Henri Bergson and Maurice Merleau-Ponty did not work in tandem, they nonetheless discussed how reasoning about the linearity of time with a focus on the present becomes an obstacle to considering the time that exists for the subject as a vital presence (Merleau-Ponty: 2011). The first one insists on the

importance of pure duration (*la durée*): the transition from one state to another reveals to us more integral continuity that we did not know about before (Bergson 1946: 192-193). The second one accentuates the perspectival nature of the reflection of things; therefore, it is not possible to consider the world as a set of determinate features; rather, as a recognition of our unreflected fonts of experience (Merleau-Ponty 2011: 66). Bergson's idea of duration seems to make us rethink Leibniz's formulation of the impossibility of animal reason, including because of their biological transformations.

To illustrate the dependency of the time category on living creatures, Uexküll refers to the oft-quoted example of a tick, which is able to do without food for 18 years, squeezing time until the signal of butyric acid awakens the animal to its renewal. Here Uexküll emphasises that during her period of waiting, the tick is in a sleepless state. Instead of saying that there can be no living subject without time, we shall think vice versa (Uexküll 1992 [1934]). And then the second, one involuntarily recalls the truth, well-known from school, that living organisms subtly feel the flow of the pre-spring time – migratory birds must certainly understand when to return from southern countries to their nesting sites. This is just one of the encyclopaedic examples of how living organisms interpret seasonality, giving people signals about the coming of spring, which Maran calls *compound ecological signs* (Maran, Tüür 2017).

The key to the perception of invisible time-space lies in observing the spheres of the habitation of living beings. From Lorenz's viewpoint, a person perceives space and time in the same ecological niche as the world of animals, according to the principle of the *reverse side of the mirror* (Lorenz 1973). According to his perspective, the most relevant and accurate human perception of space and time can occur only when a person perceives the world and time in a single biorhythm with the animal world.

Anyone familiar with examples of experiencing creative impulse knows what it is like to forget about the world around him and virtually freeze for a while, losing track of time. The creative process, associated with self-reflection and escapism, is still the result of interaction with the outside world, acquiring meanings. Let us imagine that the clock of the inevitable counting of time is linearly hidden from our eyes – the awareness of individual relationships with time and precisely the extent of modifying its duration become largely possible due to the observation of different time durations of other non-living and living organisms.

Walking after Uexküll in the meadow, filled with the different temporal perceptions of living creatures, a person, it seems, can involuntarily remember that such a variety of transformations of time (as well as the worlds of subjective experiences) is inherent in our species. And it seems to be underrated knowledge received from nature in our time, when, controversially, much attention is paid

both to the cult of progress associated with facilitation, competitive environments, and the mental health of individuals.

Corporality

Introducing the reader to the concept of the functional circle, Uexküll highlights that the bodily (morphological) organisation of a living organism determines the possibilities of its perception of the surrounding world and actions in it. The perceptions and actions are purely selective: the body builds its environment for itself, which affects it back, shaping it (Uexküll 1982 [1940]). Depending on the bodily structure, living organisms perceive the world in different ways selectively. In addition, the boundary between an organism and its umwelt is often conditional (as in the case of the body of a spider that builds its web, which is partly a continuation of itself).

If you focus on the seeming oppositional gap between the cognitive abilities of humans and animals, following the abovementioned Descartes and Leibniz, you can lose sight of corporeality: a multilevel cognitive instrument available to both. The story of teaching Helen Keller confirms the effectiveness of the body in the process of cognition. The girl, who, at the age of one and a half lost her sight and hearing due to brain inflammation, was brought up by teacher Anne Sullivan with the help of tactile sensations alone. Sullivan invented the manual alphabet, tracing words in Keller's palm with her fingers (Keller 2003: 12). The transition from simple repetition of the teacher's hand movements to comprehension was completed in one moment. When Helen was taking water, suddenly she realised that the special touch was precisely the liquid:

[...] I [Anne Sullivan] made Helen hold her mug under the spout while I pumped. As the cold water gushed forth, filling the mug, I spelled "w-a-t-e-r" in Helen's free hand. The word coming so close upon the sensation of cold water rushing over her hand seemed to startle her. She dropped the mug and stood as one transfixed. A new light came into her face. She spelled "water" several times. (Keller 2003: 292, 293)

This example, as it were, encourages thinking about the study and knowledge of the world in various ways of feeling, without dividing them into separate blocks of those that supposedly give completeness of perception and are associated with higher human cognitive processes and those that are allegedly characterised by incompleteness.

Generally, people tend to make a smooth transition from recognising the world through various senses to thinking processes, and often it is barely perceptible. For instance, music in human perception may turn into a substance

with a spectrum of colours. Stimulation of one sensory or cognitive pathway may result in involuntary experiences in a second sensory or cognitive pathway: that is how the perceptual phenomenon of synaesthesia occurs. Proust explored artistically another curious phenomenon of unconscious memories — how aroma, sound, and light can awaken intense feelings associated with emotionally charged events (Proust 2002: 152). From simpler daily examples of the complementarity of non-verbal and verbal means of communication, we can recall how the use of gestures enables speakers to illustrate action with their hands before thinking over putting thoughts into words; no less visible are examples of cases of interchangeability when gestures substitute long turns of speech.

Body cognition is also practically inseparable from movement and action. The perceiving and thinking mind is a body in motion. According to Bergson, originally, we think only in order to act. “Our intellect has been cast in the mold of action” (Bergson 1998: 44). Ozorina describes the totality of children’s fantasies, games, dances, songs, modelling, and other types of individual creative activities of children in preschool and primary school age as a continuous world-building work that allows them to maintain a sense of stability, correctness and meaningfulness of their being (Ozarina 36). The world of a living organism arises together with its action. Merleau-Ponty, in turn, emphasises the primacy of knowing one’s own physicality in order to perceive others and gain access to the meanings that were originally contained in the organs of imaginary senses:

The flesh of the body makes us understand the flesh of the world. [...] All that precedes could be summarized as follows: the human body is symbolism — not in the superficial sense, i.e., where a representative term takes the place of another — but in the fundamental sense of: expressive of another. Perception and movement symbolize. And the meanings between them. For the unity of the body. [...] An organ of the mobile senses (the eye, the hand) is already a language because it is an interrogation (movement) and a response [...], speaking and understanding. It is a tacit language”. (Merleau-Ponty, Seglard 2003: 211-219)

In shaping the perception of the surrounding world and self-consciousness, non-verbal means of communication, motor activities and bodily exploration remain significant for non-humans and humans.

Living organisms as origins of metaphors

Croft and Cruse note that metaphors are everyday colloquial forms of conceptualisation that are closely linked with the human experience, the surrounding world, and the individual’s bodily and mental sensations (Croft,

Cruse 2004: 212-214). Consequently, a metaphor by its nature cannot but be anthropometric: when speaking about animals, we must single out *zoonyms*, which act as the primary names of animals and parts of their bodies, and *zoomorphisms* – secondary figurative, metaphorical designations that have a pronounced connotative potential. Seems like it should imply evaluative judgments when transferring the properties of one object or phenomenon to another.

However, figurative associativity, embedded in the metaphor, is supposedly due primarily to the variety of characteristics of living and non-living organisms and has the ability to spontaneously arise when a person conceptualises the new with the help of the already learned properties of the old. A metaphor can grow organically on the basis of observation itself and, at this early moment of its occurrence, does not contain evaluation but may acquire it later, depending on the interpretation of the recipient. James Fernandez compares two ways of describing a person: what is familiar to us, divided into descriptive concepts from different spheres of human life, and symbolic, based on the perception of an animal person and the transfer of his qualities to a person. He comes to a remarkable conclusion: the second option allows our mind to integrate more diverse experiences into a single metaphor (Fernandez 1972: 46):

Of George we say: he is a teller, he is a banker, he is a businessman, he is a Harvard alumnus, he is a father, he is an adult, he is a homo sapiens, he is anthropoid, he is a vertebrate, and so on. Of course, men belong to a number of domains, and hence in qualifying the inchoate pronoun, we must choose one domain or another: the domain of business activity, of educational activity, of domestic activity, of phylogenetic classification. (Fernandez 1972: 46)

But the comparison of George with lobster supposedly allows one to go beyond the boundaries of independent domains and link his personality characteristics into a holistic image: perhaps George is distinguished by haste, the ability to defend himself resolutely, and sometimes being easily irritable.

Ilyas Ustunier claims that the same zoomorphism can be used for several characteristics of a person since it has a wide range of connotations associated with different deployments of one basic seme or with a bunch of associations from several semes (units of meaning) in the structure of the original zoonym. For instance, the word donkey can describe an uncomplaining, hard-working, and stubborn person (Ustunier 2004: 13). No less curious, however, are examples of erased natural metaphors and zoometaphors, so inseparable from everyday communication that people often use them automatically, forgetting about their natural origins:

That's a budding theory. (Lakoff, Johnsen 2003: 48)

The seeds of his great ideas were planted in his youth. (ibid: 48)

Here's an idea that I'd like to plant in your mind. (ibid: 48)

The caterpillar turned into a butterfly. (ibid: 74)

The study of natural metaphors and zoometaphors made it possible to draw significant conclusions about many psychological and social phenomena that relate to human traits that are condemned or approved. Therefore, we can define which phenomena are in the focus of a person's attention or on the periphery (Sklyarevskaya 1993: 101). Social and psychological phenomena, which we are accustomed to considering mainly in the context of the people around us, are isolated from the world of the living and non-living organisms, thus becoming the fruits of the conceptualisation of the entire breadth of nature.

Conclusion

Well, we delicately removed the necklace from the man's neck — and, apparently, did not lose anything. Having strung just a few natural stones on the thread, we were equally convinced how much human processes of perception, cognition, and creation of the world are closely related to the environment of other living organisms. In a purely magical way, man can slow down and speed up time in his *umwelt*, just like many other living beings. Seeing a picturesque meadow full of insects and birds, he can indulge in creative inspiration to perpetuate it. Space and time are subject to nature: a person is guided in the first largely due to nature (and freezes in the second due to nature as well).

The border between the human body and his *umwelt* is somewhat illusory, inasmuch as the organs of mobile senses serve us both as language and speech. But here, it seems unexpectedly appropriate to return to the idea of the exclusivity of each person in a new context. Everyone perceives time and space differently, having a different bodily structure, and, as Uexküll showed us, these inner worlds cannot be compared. However, in his most sincere everyday situations, when there is no reason to defend his superiority, a human tends to speak as a biocentrist: he uses erased natural metaphors automatically to express pure joy or uneasiness.

Apparently, we can relate to the dictum of Plato, who found himself captivated by a blooming place of summer sounds and smells and explained his delight by the fact that he rarely goes beyond the fence of the city, where only people can teach him (Plato, Cooper 1997: 510). However, learning may not always imply being aware of it in a given momentum. Paradoxically, though, biocentric thinking of natural stone non-assignment (or barely assignment) allows us to string more and more on our invisible necklace. Stringing them

meekly, without being blinded, ensuring that its brilliance is similar to that of the sun.

References

- Aristotle; Rackham, Harris 1959. *Aristotle: Politics*. London: Heinemann.
- Bergson, Henri 1946. *The Creative Mind*. New York: Philosophical Library.
- Butchvarov, Panayot 2015. *Anthropocentrism in Philosophy*. Boston: Walter de Gruyter.
- Cassirer, Ernst 1998. Ernst 1998. *Izbrannoe. Opyt o cheloveke*, (B. Vimer, S.O. Kuznetsov, A.N. Malinkin, M.I. Levina, Yu. A. Murav'ev, S. A. Romashko), Gardarika, Moskva.
- Cassirer, Ernst 1980. *The Philosophy of Symbolic Forms. Volume 1. Language*. New Haven: Yale University Press.
- Cassirer, Ernst 1954. *An Essay on Man: An Introduction to a Philosophy of Human Culture*. New York: Doubleday.
- Croft, William; Cruse, Alan D. 2004. *Cognitive Linguistics*. Cambridge University Press, New York.
- Fernandez, James W. 1972. Persuasions and Performances: Of the Beast in Every Body... And the Metaphors of Everyman. *Daedalus* 101(1): 39–60.
- Franklin, Benjamin, Bigelow, John 1904. *The Works of Benjamin Franklin*. New York: Putnam.
- Keller, Hellen 2003. *The Story of My Life*. The Modern Library.
- Kierkegaard, Søren; Johnson, Howard; Lowrie, Walter 1959. *Either*. Garden City, N.Y.: Doubleday & Co.
- Leibniz, Gottfried W.; Spinoza, Benedict (Baruch); Descartes, René 1990. *The Rationalists*. New York: Anchor Books.
- Maran, Timo; Tüür, Kadri 2017. From birds and trees to texts: An ecosemiotic look at Estonian nature writing. In. Parham, John; Westling, Louise (eds.), *A Global History of Literature and the Environment*. Cambridge: Cambridge University Press, pp. 286–300.
- Maran, Timo 2020. *Ecosemiotics: The Study of Signs in Changing Ecologies* (Elements in Environmental Humanities). Cambridge: Cambridge University Press (pre-printed version).
- Merleau-Ponty, Maurice 2011. *Phenomenology of Perception*. London: Routledge.
- Merleau-Ponty, Maurice; Seglard, Dominique 2003. *The Nature*. Evanston: Northwestern University Press.
- Lakoff, George; Johnsen, Mark 2003. *Metaphors We Live By*. Chicago: University of Chicago Press.
- Lévi-Strauss, Claude 1972. *Structural Anthropology*. Harmondsworth, Middlesex: Penguin Books.

- Linnaeus, Carl 1740. *Systema naturae per regna tria naturae, secundum classes, ordines, genera, species, cum charateribus, differentiis, synonymis, locis*. 2nd ed. Stockholmie
- Lorenz, Konrad 1973. *Behind the Mirror: A Search for a Natural History of Human Knowledge*. New York: Harper Paperbacks.
- Plato; Cooper, John M. 1997. *Plato: Complete Works*. Indianapolis/Cambridge: Hackett Publishing Company, Inc.
- Proust, Marcel 2002. *In Search of Lost Time: Time Regained*. New York: Vintage Books.
- Sklyarevskaya, Galina N. 1993. *Metafora v sisteme yazyka*. Spb.
- Scheler, Max, 1994. *Selected Works*. Moscow: Gnosis.
- Uexküll, Jakob von 1992. A stroll through the worlds of animals and men: A picture book of invisible worlds. *Semiotica* 89(4): 319-391.
- Uexküll, Jakob von 1982. The theory of meaning. *Semiotica* 42(1): 25-82.
- Ustunier, Ilyas 2004. *Zoomorfnaya metafora, harakterizuyushaya cheloveka v ruskom i tureckom yazykah*, dissertation of the candidate of philological sciences. Uralskij gosudarstvennyj pedagogicheskij universitet, Ekaterinburg.
- Whitehead, Alfred N. 1953. *Science and the Modern World*. Cambridge: The University Press.