

Michael Tomasello: "Become Human"

Tomasello - his latest failure to fathom the essence of man

Michael Tomasello expands his well-known image of man with the book "Becoming Man" with "A Theory of Ontogenesis". However, he continues his previously false analysis of the uniqueness of humans only in a detailed and knowledgeable manner. It is not to be chalked up to him that - contrary to the old canon - he assumes a uniqueness of man. First, his analysis of this uniqueness is fundamentally wrong; secondly, he wrongly regards the ontogeny of man as an indication of his *p u r e* gradual emergence. - Anyone who expects Tomasello to make the breakthrough in the big question of which brain phenomenon makes up the uniqueness of the human being continues to see himself suggestively fed with facts that have long been known. If you want to stay up to date on the discourse of evolutionary anthropology, you should study your book.

His quintessence on the first theme of the character of uniqueness reads: The "unique processes of cultural coordination and transmission" consist in the fact that people use "shared intentions, shared knowledge and shared socio-moral values" (p. 19). In my commentary on his book on the "cultural development of human thought" I have already shown that T. uses these characteristics to describe specific forms of human cooperation and cognition that have long been known - as has often been demonstrated in a similar way in the course of intellectual history. In no way does it explain why only humans and not a higher animal can develop these characteristics further. T. still does not know which brain phenomenon makes higher, cognitive developments possible. I will give the illuminating answer in a moment.

With regard to the second topic, he tries - like Darwin - to explain the emergence of this uniqueness evolutionarily through small, gradual adjustment steps. Darwin sincerely surrendered to it in the face of human morality. On the other hand, in a chest tone: "The solution to the riddle - the new evolutionary process - is of course human culture." (P. 14) Even this general statement should ring the alarm bells for every logically thinking person: How can human culture - that of our pre-human beings not yet possessed -, let human beings evolve? Even

more clear: "The people living today have been selected in a natural way in order to master certain ecological or socio-ecological challenges that are unique to the species." (P. 16) Correct: Humans have been selected biologically - but not "to master certain... challenges. "T. seems to have forgotten: Evolution has no purpose - but humans do. Hominine evolution also takes place in that random mutations are positively selected due to suitable framework conditions. In the pre-humans of the genus Homo, the cerebrum was selected, the volume of which doubled up to humans. This brain gain was primarily genetic - in no way directly caused by a human culture of shared intentions with their transfer of knowledge. At every stage of evolution, fixed cognitive abilities were only part of a selection pressure towards corticalization. But T. explains the uniqueness of the cultural transmission of knowledge through precisely this transmission of knowledge - a tautology. According to T., this uniqueness of human beings would develop culturally only quantitatively - there would by no means be a qualitative leap to the animal or the genus Homo.

Very elementary facts refute this idea that goes against evolution: The genus Homo has approximately doubled its brain volume in about 2 million years: from 700 to 1400 ccm. In the same gigantic period of time, it always produced almost the same hand ax and took 1 million years from passive to active use of fire - does that testify to the cultural transmission of knowledge? Because of this paradox, evolutionary anthropology and with it T. has failed to this day. Because after the said 2 million years of cerebral evolution - without human-cultural transfer of knowledge - brain growth stopped - nevertheless, from then on, typical human cognitive performance increased very slowly but always at an accelerated rate. What do these two opposing phenomena say about the unique human intelligence that was misunderstood by T. and previous evolutionary anthropology? Radically new: For the first time, a constant brain is able to continuously develop higher levels of cognition!

Let us consider another elementary fact of hominization that has not yet been taken into account by anyone: at the latest by 100,000 BC. The first fully valid Homo sapiens split up into groups in Africa.

And finally, let's add one last, elementary fact that has a very general meaning: Where and whenever in the course of human history peoples with different levels of culture and civilization met - ancient Greeks

and Scythians, ancient Egyptians and Nubians, ancient Romans and Teutons, Europeans and indigenous peoples around the world, global capitalists and remnants of nomadic peoples - they were able to communicate “wisely”, took over cultural elements from one another, and even created a new culture. In short: people, at whatever cultural level, show themselves (as a people) able to understand every cognitive achievement within a very short time - for example from the spiritualism of shamanism to molecular genetics.

These three elementary facts related to one another allow further, essential insights:

People cannot be characterized by a fixed level of intelligence, however high it may be, only the ability to understand every level of cognition, but above all to be open to any future cognitive development. The uniqueness of humans is shown by the general brain potency for developing cognition - not just more specifically. What does this reveal?

That all people's brains at the latest since 100,000 BC cannot have genetically changed in its fundamental functioning - because it is evidently capable of developing any form of cognition *i t s e l f* at any time as it is. In this way, independent cognitive development replaces an inefficient mutation selection process with regard to the brain. (The fact that this autonomous cognitive development is only possible if the necessary historical framework conditions are in place should now be common property.) And what characterizes this unique function of the human brain?

Let us remember: During the 2 million years of evolution of the homo genus, the brain volume doubled - especially the unspecific association cortex. Obviously, the primary sensorimotor cortex has not been significantly changed since the Australopithecines. Of course, this also had to strengthen general connectivity, but this was not decisive, as the latest connectome research erroneously assumes. Why?

The unspecific association cortex deals, intracortically, as the name suggests, with all forward-looking evaluations beyond mere perception, memory, attention, affects, etc. Despite its enormous growth, however, during the evolution of Homo, apart from a few cognitive leaps, there was no cultural development. This began of all things when the brain gain stopped and groups of people separated a few tens of thousands of years later. So from a certain mass of additional, neuronal patterns,

which were made possible by the additional billions of unspecifically used neurons, a neuronal jump must have occurred.

We recognize the leap in quality in the phenomenon that has remained a mystery to brain research: awareness. However, it has nothing to do with perception or attention, as is still assumed, but consists in free imagination - as the suppression of all sensory perception proves. The in principle free imagination of the conscious person is based in turn on a neural autonomy state, which an additionally evolved system of neural patterns generates for the entire cerebrum. The solution to the riddle is therefore fundamentally a radically new system of neural autonomy that emerged from the self-regulation system of the originally animal unconscious, which we experience as a controllable consciousness. (Explained in more detail in "Consciousness - The Abyss between Humans and Animals".) Only their autonomous character transforms all the limited, cognitive abilities of the great apes into unlimited intellectual and creative forms of human cognition. Conversely, this means: There are no different, fixed forms of cognition, as T. claims, that are ontogenetically re-evolved. It is the awareness that awakens from the age of two up to adolescence that makes it possible for all people to acquire any specific cognition that becomes necessary independently and ad hoc.

That consciousness appears almost nowhere in T.'s terminology - especially not as autonomy of thought - speaks volumes. T. states: "An incomplete list of the most important psychological processes of great apes that have been transformed would include such things as imagining what others perceive and know, intentional communication, social learning ..." etc. (p. 484) Man might well mean that T. at least takes into account the function according to consciousness. But human history shows us the most diverse development of cognition: There is no list of fixed forms of cognition, however complete, whose human form would be selected beforehand. T. also claims: "These psychological processes arose before humans even existed, but human ontogenesis has transformed these processes in order to generate new and uniquely human results." (P. 484)

With this core thesis of his new book, T. is completely wrong: ontogenesis only realizes the fixed genotype as an individual phenotype under varying environmental conditions; it cannot transform what is fundamental and decisive in the human genome: namely,

consciousness. What makes shared intentionality, like all other specific forms of cognition, suddenly become human, is therefore the autonomous character of consciousness, which makes it freely adaptable. - As long as evolutionary anthropology has not recognized the essence of man in his consciousness, which allows him to develop any arbitrary, also future form of cognition independently, it will bog down in a dogmatically understood, biological gradualism.

Last version from Thursday, November 12, 2020