Секция «Биология, медицина, философия: совместная проблематика дисциплин (круглый стол)»

How to discover special features of human intelligence? An approach to the "-philosophy

Научный руководитель – Irrgang Bernhard -

Reinhardt Nadine

Postgraduate Дрезденский технический университет, Дрезден, Германия $E\text{-}mail:\ nadine\ reinhardt92@web.de$

The discussion about human cognition is mainly founded on the assumption that intelligence is a form of rational information processing, that is describable with an analytic method. But when one considers the actions of human beings in general, it becomes clear that they are individual and cultural activities, that enable us to successfully handle different situations. From this point of view, the ability to think on an abstract and logical level and the capability to speak are quite central for a valid concept of human intelligence. But also important are practical skills. Even in science, which follows an ideal of objectivity it isn't possible to conduct research without such skills. Without knowing how to handle a microscope with professionalism for example, a biologist is not able to investigate micro-organism or cell structures. (Ryle 1949, Fleck 2015, Irrgang 2015)

Furthermore it is important to note that these skills are the result of a practical knowledge, that is informed by our culture and mediated by the social community, an individuum is part from it. Consequently, intelligent achievements of humanity can not be reduced to theoretical or mental processes, which are described by analytic approaches. Intelligent behavior is more than logic or matter. Our culture, including technology and science, thus consists of theoretical as well as practical achievements. (Ryle 1949)

The presented approach of a "Leib"-philosophy (e.g. philosophy of embodiment) tries to meet this perspective by rejecting a dualistic understanding of mind and matter. It rather focuses on the individual actions and operations on one side, while focusing on the other side on cultural environments and social milieus which serve as a fertile soil for practical and cognitive actions. (Polanyi 1967, Fleck 2015, Kuhn 1962) Seen from this perspective, the intelligent actions of human beings result from a knowing-how that is understood as a disposition that enables successful operating. Because it is an independent field of knowledge, that is based on processes of internalization which enables intelligent actions, it is impossible to reduce it to propositional knowledge or knowing-that. (Ryle 1949, Polanyi 1966, Tomasello 1999, Schubert 2012)

While acting, the internalized aspects function as an implicit background and necessary condition to learn how to handle different situations. But it is neither necessary nor appropriate to reflect or to explicit them because it is impossible to describe an action, as it was experienced from the first person perspective including phenomena titled as Qualia, sufficiently in a logical dimension. Consequently, receiving competences does not only consist of reflecting and of learning rules because the process of internalization rather requires experiences and training. (Polanyi 1966, Dreyfuß 1972, Dreyfuß/ Dreyfuß 1986, Tomasello 1999)

In reference to that, the human "Leib" must be seen as an apriori phenomenon that enables intelligent actions because it is the necessary ground for processes of internalization, that is needed to act successfully. Consequently, these aspects of "Leiblichkeit" can not be linguistically mediated in its original way. It is necessary to experience it on a subjective level. (Irrgang 2015)

The focus on the human "requires to take cultural, anthropological and evolutionary aspects in their connection into consideration because the specific form of human collective learning is based on the unique evolutionary development of human beings. It enables a form of imitational learning by recognizing the intentions of others as a reason for a specific action. In consequence this action will be understood as coherent to fulfill the own needs and it will be internalized to handle specific practical situations as well as theoretical problems.

The evolutionary base for this cultural transmission, that characterizes this very specific human type of learning, especially comprises the morphology of the human body, that enable specific operations as well as the development of specific neuronal mechanism, which enable to recognize the intention of others as a condition for learning by imitation. (Tomasello 1999)

Thus the assumption of a "Leib"-philosophy consists in a way, that connects mental and physical aspects of human intelligent actions as well as the cultural and evolutionary framework in order to describe adequately the aspects of successful handling. This is what designates the singular skills and the features of human intelligence. (Irrgang 2009)

Subsequently it is important to conduct an interdisciplinary research that integrates natural sciences like biology, psychology or neuroscience, while also giving credit to and absorbing insights from humanities and philosophy. Such a wider scope is useful to understand the special abilities of the human mind in a philosophical manner.

In the end the advantages of a philosophical approach that accepts the "Leib" as a necessity for intelligent actions thus are threefold. First it includes knowledge from biological research, especially aspects concerning the individual and some evolutionary developments. Second, this approach does not try to reduce intelligent actions to a rational mental process, but tries to integrate such processes into its concept. Third, this approach shows that the "Leib" in general has to be acknowledged as a principle of human intelligent achievements. A human being or better said being a human - is always a part of cultural and social environments. They constitute the structural framework that must be taken into account for the perspective of the "Leib"-philosophy

References

- 1) Dreyfuß, Hubert L. (1972). What Computers can't do The Limits of Artificial Intelligence. New York: Harper & Row, Publishers
- 2) Dreyfuß, Hubert L., Dreyfuß, Stuart E. (1986). Mind over Machine. New York: Free Press.
- 3) Irrgang, Bernhard (2009). Der Leib des Menschen. Stuttgart: Franz Steiner Verlag
- 4) Irrgang, Bernhard (2015). Menschlicher Leib, personales Wissen, Praxis. Zur Kritik der Leibkonzeption der Neuen Phänomenologie. In: Irrgang, B., Rentsch, T. (Eds.): Leib in der neueren deutschen Philosophie, Würzburg (pp. 75-104)
- 5) Kuhn, Thomas (1962). The Structure of Scientific Revolution. Chicago: University of Chicago Press.

- 6) Polanyi, Michael (1966). The Tacit Dimension. Garden City, New York: Doubleday & Company, Inc 1966
- 7) Ryle, Gilbert (1949). The concept of mind. Chicago: University of Chicago Press.
- 8) Schäfer, Lothar, Schnelle Thomas (Eds.) 2015.
- 9) Schubert, Axel (2012). Die Praxis des Wissens. Frankfurt: ontos Verlag
- 10) Tomasello, Michael (1999): The Cultural Origins of Human Cognition. Cambridge: Harvard Universitiy Press
- 11) Fleck, Ludwik. Entstehung und Entwicklung einer wissenschaftlichen Tatsache. Frankfurt a.M.: Suhrkamp Verlag