

# Attunement, habits, and knowing what to do

Dag Munk Lindemann<sup>1</sup> and Oliver Kauffmann<sup>1</sup>

**Abstract.** ‘Recognizing’ and ‘registering’ are cognitive/representational metaphors for the brain’s tuning to sensorimotor interdependencies which should be avoided by a sensorimotor account of consciousness (‘SMAC’). Other accounts of the vehicular as well as of ‘cognition’ at the level of sensorimotor interdependencies are wanted. In some prominent versions, however, SMAC also clearly acknowledges a truly cognitive level, for which the cognitive metaphors (exclusively) should be reserved. In our presentation we take advantage of John Dewey’s considerations on habits: A habit is a tendency which controls future experiences conceived as an executive skill by uniting stimuli and actions in order for the organism to achieve its goal. Dewey’s account points in the direction of a presentational kind of ‘knowing what to possibly do’, to be distinguished from orthodox accounts of ‘knowing how’ and ‘knowing that’. Different forms of this ‘type’ of knowledge as well as various empirical support and objections are discussed.

As it has been pointed out (e.g. by Block, in [1]), ‘recognizing’ and ‘registering’ are cognitive metaphors for the brain’s tuning to sensorimotor interdependencies which should be avoided by a sensorimotor account of consciousness (‘SMAC’). These metaphors give associations to the familiar ballpark where representational theories (like e.g. HOP, HOT, HOST) reigns - theories which SMAC goes against. Hence other accounts of the vehiculars at the level of sensorimotor interdependencies are wanted. On the other hand, SMAC in some versions (e.g. [2, 3]) clearly acknowledges a truly cognitive level, for which the cognitive metaphors (exclusively) should be reserved.

Firstly our presentation deals with the question of what alternative model might fulfill the role of the vehiculars at base level. Secondly we discuss how to get the higher-order cognitive level right in order to explain a subject’s conscious presentation of the world due to its implicit knowledge of sensori-motor contingencies without invoking neither representations of these, nor representational properties ‘trickling down’ into the base-level.

With respect to ‘the vehicular problem’, we suggest that John Dewey’s considerations on habits are useful towards uncovering the SMAC-compatible processual underpinnings, and thus be more than just another non-representational metaphor of the ongoings at this base level. Dewey’s account of habits makes a presentational kind of ‘knowing what to possibly do’ understandable, a form of knowledge which is different from the orthodox accounts of ‘knowing how’ and ‘knowing that’ respectively. Different conceptions of ‘knowing what to do’ are tried out in our presentation, and some empirical supportive cases [4, 5] and objections [6, 7] from blindsight, sleepwalking and related visuo-motor phenomena are discussed.

Human actions exhibit stable relationships to worldly affairs in terms of organizational patterns of relations between actions and perceptions. These patterns can be understood through Dewey’s

conception of habit: The nature of a habit is a tendency that controls future experiences conceived as an executive skill by uniting stimuli and actions in order for the organism to achieve its goal [8, 9, 10]. It is the unifying structure which actively looks for stimuli to appear and selects the impulses given the registered stimuli. On the other hand, the stimuli searched for by habit are selected on the background of the change of the surroundings which they make possible. Habits play constitutive (qua functional) roles for conscious experiences, not only for unconscious actions. As Dewey notes: without “entering into organization with things which independently accomplish definite results, the eye stare blankly and hand moves fumblingly. These organizations are habits.” [9].

Thus a habit is not to be understood in ‘the’ folk psychological sense of the word: Surely we often take habits to be patterns of behavior that we have repeated enough times to be able to perform them unconsciously. But according to Dewey, this conception gets it the wrong way around: “[...] [I]t is truer to say that we repeat because we have habits, than that we form habits because we repeat” (Dewey, op.cit.).

Hence Dewey is not only the first (proto)SMAC proponent, but his conception of habits helps answering the question why we see what we see: What is perceivable are the (gibsonian) ‘invariants’ affording an organism to act, made possible by habits.

With respect to our second issue, perceptions are constituted by implicit knowledge of sensorimotor contingencies, which is neither to be understood as ‘knowing how’ nor ‘knowing that’ but rather as a complex and dynamic kind of ‘knowing what to possibly do’. Thus, perception is always relative to knowing ‘what I am doing’ or ‘what I am inhibited in doing’ and characterizable as “knowing what possible to do in relation to a specific stimulus”: a knowledge constituted by (deweyan) habits. Therefore, no knowledge of ‘sensorimotor contingencies’ exists in the standard sense of propositional knowledge: the ‘sensorimotor contingencies’, form part of ‘knowing what to possibly do’.

This conception of knowledge is not without problems. Above presenting different forms of this ‘type’ of knowledge as well as various empirical support and objections, we also discuss the objection that ‘implicit knowledge of what to possibly do’ really isn’t knowledge at all, but ‘merely’ a kind of belief.

## REFERENCES

- [1] O’Regan, J. K. & N. Block (2012). Discussion of J. Kevin O’Regan’s ‘Why Red Doesn’t Sound Like a Bell: Understanding the Feel of Consciousness’, *Review of Philosophy and Psychology*, 3 (1): 89-108.
- [2] O’Regan, J. K. (2011). *Why Red Doesn’t Sound Like a Bell. Understanding the Raw Feel of Consciousness*. Oxford: Oxford University Press.
- [3] Hurley, S. & A. Noë (2003). Neural plasticity and consciousness. *Biological Philosophy* 18: 131-168.

---

<sup>1</sup> University of Aarhus, Denmark. Email: OLKA@dpu.dk

- [4] Weiskrantz, L. (1997). *Consciousness Lost and Found. A Neuropsychological Exploration*. Oxford: Oxford University Press.
- [5] Cowey, A. (2010). The blindsight saga. *Experimental Brain Research* 200: 3-24.
- [6] Revonsuo, A. et al. (2000). The zombies among us: Consciousness and automatic behaviour. In: Rossetti, Y. & Revonsuo, A. (Eds.), *Beyond Dissociation. Interaction Between Dissociated Implicit and Explicit Processing*. *Advances in Consciousness Research*, vol. 22, Amsterdam: John Benjamins Publishing Company: 331-351.
- [7] Stoerig, P. (2010). Cueless blindsight. *Frontiers in Human Neuroscience* 3: 1-8.
- [8] Dewey, J. (1899). *Lectures in the philosophy of education*: New York: Random House.
- [9] Dewey, J. (1922). *Human Nature and Conduct. An Introduction to Social Psychology*. London: George Allen & Unwin.
- [10] Dewey, J. (1958). *Experience and Nature*. New York: Dover Publications, Inc.