

Proust, J. (2013)

Reply to Peter Carruthers' "[Knowledge of our own thoughts is just as interpretive as knowledge of the thoughts of others](http://Onthehuman.org)", <http://Onthehuman.org>

Peter Carruthers (2011) presents to us experimental evidence in favour of the strong claim that every form of self-knowledge is propositional, based on self-attribution and mindreading, and of an indirect, interpretive kind. My objection is not that this claim is wrong, but only that it is too strong. Contrary to what his essay above is claiming, a dual-account of thinking about one's thinking is able to offer "a principled way of accounting of the circumstances in which people access their thoughts directly, or rely, rather on self-directed mindreading".

My arguments will draw on the processes engaged in metacognition, i.e., assessment of one's own cognitive success in a given task. Experimental studies suggest that two systems are involved in human metacognition. One of them is based on the feelings of fluency (or ease of processing), which apply to the structural aspects of a perceptual, conceptual, memorial, or reasoning task, independently of the particular mental contents involved in it. This system offers a direct access to one's mental capacities – it does not require representing that one has attitudes with certain contents. It merely requires representing the task, and the uncertainty about the possibility of performing it correctly or not. The function of these feelings seems thus to be to guide decision in a way that is task-dependent, affect-based, and motivational. Mindreading-based metacognition, on the other hand, assesses cognitive dispositions on the basis of a naive theory of the first-order task, and of the competences it engages. In contrast with the former, the latter requires representing both the relevant propositional attitudes and their contents.

The existence of a fluency based-system suggests, pace ISA theory, that not every form of access to one's attitudes is interpretive. There is a form of "procedural" management of one's attitudes that is based on an affective form of epistemic assessment and experience, which associates a positive or negative evaluation to a given attitude – without needing to represent it as an attitude. Furthermore, the patterning of the data is now better understood. Conditions such as divided attention, low motivation, low personal relevance, elated mood, favor cognitive assessment based on fluency. In contrast, when task motivation and personal relevance are high, when mood is bad, and when indications are given to the subject that fluent experiences may be attributed to environmental influence, then analytic, theory-based metacognition steps in.

Moreover, there is also a clear behavioral dissociation between procedural metacognition and theory-based prediction. Subjects may offer radically different assessments of

cognitive dispositions in self and others when they have been engaged in a task, from when they assess success in a detached way. In certain cases, an engaged judgment is more reliable. In Koriat & Ackerman (2010), judgments of learning based on the subjects' own experience of a given task (self-paced learning of pairs of items) correctly use ease of processing as a cue: the longer you study a pair, the less likely it is that you will remember it. This cue is not used in essays where a yoked participant merely observes another perform the task. In these cases, a naïve, but wrong theory is used, according to which the longer you choose to study items, the better you will remember them. In other studies, however, fluency-based judgments lead to incorrect predictions, whereas attribution-based predictions are reliable. For example, subjects rate their memory for childhood better when their task is to recall six rather than twelve childhood events. A yoked participant, however, would correlate memory rating with the number of events retrieved (Schwarz, 2004).

Peter Carruthers might object that a subject, when engaged in a metacognitive task, has access to evidence that she fails to have when she is merely observing another agent. Thus it is expected in ISA terms that the validity of the self-evaluations should differ in the two cases. In response to this objection, note that the participants in the engaged condition are unaware of using an effort heuristic. None of them reports, after the experiment, having based their own judgment of learning on an inverse relation between study time and learning. A natural explanation for the dissociation discussed above is that procedural metacognition and mental attribution engage two different types of mechanisms. Engaging in a cognitive task with metacognitive demands allows the agent to extract "activity-dependent" predictive cues, i.e. implicit associative heuristics that are formed as a result of the active, self-monitoring engagement in the task. Predicting success in a disengaged way, in contrast, calls forth conscious theoretical beliefs about what predicts success in the task. This type of contrast between implicit heuristics and explicit theorizing, and between engaged and detached assessment, seems to support the view that one's knowledge of one's own thought is different in kind from one's knowledge of the thoughts of other people.

## References

Koriat, A. & Ackerman, R. 2010. Metacognition and mindreading: Judgments of learning for Self and Other during self-paced study. *Consciousness and Cognition*, 19, 1, 251-264.

Schwarz, N. 2004. Metacognitive Experiences in Consumer Judgment and decision making, *Journal of Consumer Psychology*, 14, 4, 332-348.