Joëlle Proust (Institut Jean-Nicod, Ecole Normale Superieure, Paris)

We are publishing this week <u>Prof Joëlle Proust's</u> answers to our questions. <u>Prof Proust</u> is co-founder of SOPHA (the <u>Society for Analytic Philosophy in the French language</u>), HOPOS (<u>The International Society for the History of Philosophy of Science</u>), ESAP (the <u>European Society for Analytic Philosophy</u>), and ESPP (the <u>European Society for Philosophy and Psychology</u>).
She is currently working at <u>Institut Jean-Nicod, Ecole Normale Supérieure in Paris</u>. She has <u>written extensively</u> about action, agency, mental action, consciousness, metacognition, and intentions. Her last book is <u>*The Philosophy of Metacognition*</u>. Enjoy!

1. How did you become interested in Philosophy of Action?

I came to the philosophy of action through **<u>cognitive psychopathology</u>**. In the early nineties, I had engaged in a collaborative research with a specialist of the early episodes of psychosis, the French psychiatrist **Henri Grivois**. Grivois' rich clinical descriptions were fascinating as evidence of the role of non-linguistic forms of cognition in humans (a subject that, until then, I had only explored on the basis of animal evidence). His patients often reported having the vivid impression that others watched them and often imitated them. He was in a position, however, to observe their own impulsive tendency to imitate others' gestures (echopraxia), words (echolalia) or to take up others' goals. Grivois speculated that these dispositions were functionally related. We developed together a theory of schizophrenic delusions in which a perturbed representation of action determined both an impairment in the selection and control of actions, and a perturbed self-awareness. This hypothesis was further elaborated and successfully tested in collaboration with neuroscientist of action **<u>Marc Jeannerod</u>**. Since then, my interest in the representation of action led me to explore in much more detail and compare the mental actions in human children, adults and non-humans, a philosophical issue that psychologists study under the label of "metacognition" (i.e. the control and monitoring of one's own cognitive abilities).

2. What are you working on at the moment?

My present research is about cognitive phenomenology. My proposal is that the experience of thought has to be analysed in analogy with the experience of bodily action. In the latter case, non-conscious forward models allow the acting system to predict the specific types of feedback it should get on its way to a goal. In this process, expected and observed values are sub-personally compared, which elicits conscious feelings of ability, effort and self-efficacy; predicting discrepancies also allows the agents to efficiently (if non-consciously) correct their trajectory to their goal. A similar analysis can be proposed for mental actions, except that expected feedback is

in this case much more difficult to identify by theorists (although more and more is known about the relevant non-conscious heuristics that underlie these predictions), and that discrepancies between expected and observed feedback elicit specialized "noetic" feelings, which differ from the feelings of ability that are elicited in bodily actions.

In a nutshell, my present work explores two proposals: 1) there are only two kinds of cognitive phenomenology: one kind, exemplified by internal speech and other forms of sensory imagery, has the function of indexing the currently active epistemic goal; the other kind consists in noetic feelings, such as the feeling of understanding, of knowing, of being right or wrong. Their function is to anticipate and monitor progress to the goal. 2) My second proposal is that the specific awareness of noetic feelings as of our past or future cognitive outcomes can be explained by a semantic relation between indexing and noetic feelings that I call "functional projection".

3. What is your 5-15 sentence account of what an action is?

My definition of action is articulated as a causal relation between a motivating goal representation G and the attempt to bring it about by executing H. Acting to obtain goal G, then, means
Df: Being motivated to have goal G realised → (causes) trying to bring about H in order to see G realised, where H refers to the set of bodily and cognitive dispositions that have been selected as instrumental for the realisation of G.
This definition needs to be fleshed out by specifying, in each case, the selection mechanism for a specific forward model (i.e. an instrumentally reliable dynamic representation mediating a given goal and its external target).

Mental actions have a similar structure.
Df: Being motivated to have mental goal G realised → (=causes) trying to bring about H in order to see G realised, where H refers to the set of cognitive dispositions and normative comparators that have been selected as constitutive constraints for H reliably producing G.
This characterization stresses the functional association of epistemic normativity and receptivity. Given the importance of normative requirements in mental actions, there has to exist a capacity for observing, or for intuitively grasping, where norms lie in a given case. Constitutive norm sensitivity is a receptive capacity without which no mental action could be performed. No such normativity is present in bodily action.

4. In your view, what were the three most important recent developments in philosophy of action?

<u>Helen Steward's</u> proposal of an ontology of action as process-based rather that event-based is an important clarification for articulating the causal structure of action.

Work on joint action helps me realize that an individualistic concept of action – whether bodily or mental – cannot be adequate for an account of its cooperative nature and for its role in communication. I share with **Steve Butterfill** the conviction that we need an account of joint action that is compatible with the premise that joint action plays a role in explaining how humans develop abilities to think about minds and actions of others. Steve Butterfill's own work offers promising routes of investigation. The recent book I co-edited on ***Metacognitive Diversity*** with **Martin Fortier** is an attempt to overcome my own past individualistic stance on mental action.

A theory of group agency, as proposed by **List and Pettit**, is an important source of inspiration for philosophers who want to explore collective epistemic actions as non-aggregative, non-reducible forms of actions, and the nature of the underlying group attitudes. I found this book a source of inspiration for proposing a conceptual analysis of consensual acceptance as a group attitude.

5. What direction would you like to see the field go in?

On a naturalist approach to action, a teleological explanation should be offered for the switch from 'motivational' states to 'executive states'. The puzzle that a teleological explanation solves is that agents do not need to "voluntarily" switch into the active condition for genuinely acting, because efficient willing, somewhat paradoxically, is something that happens to them. There is much more to be said about this puzzle.

Teleological explanations have a recurrent form that needs to be explored more closely in connection with issues such as freedom and responsibility. How responsible for their actions are agents who behave just as their peers do in a given culture, in the absence of alternative models (for example, by treating brutally animals, subordinates, and members of an outgroup)? Similarly, granting that teleological explanations apply to so-called arational thoughts, it would be interesting to distinguish the forms of trade-offs, temporal constraints and associated evolutionary pressures that explain the persistence of impulsive actions. Most of our mental actions are impulsive. Still, given time limitations, they are quite rational. Individualistic and collective conceptions of action might in combination shed light on this issue.

2018 May 05

Many thanks to Prof Proust for her answers!