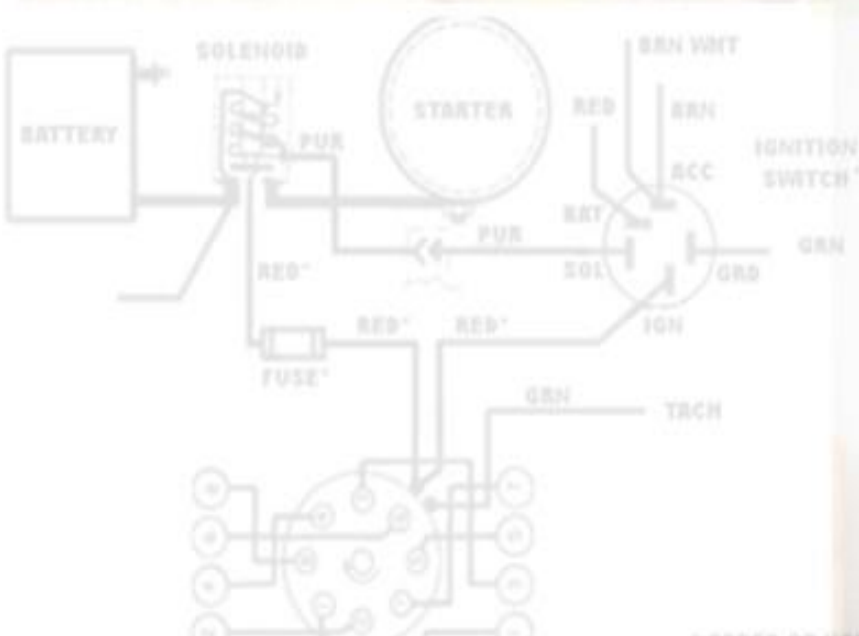# Philosophy of Coordination

Friday 29th January 2021

Philosophy of Coordination online workshop

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Jointly organised by: Egenis The Centre for the Study of Life Sciences, University of Exeter

Philosophy of Mind and Language group, Radboud University Nijmegen

Schedule (times in CET – subtract 1 hour for GMT):

10:00 – 10:10   Welcome (Marc Slors and Ric Sims)

10:10 – 11:00   Bart Geurts (Nijmegen)

From coordination in the moment to coordination for the future

11:10 – 12:00   Basil Wahn (Hannover)

How t(w)o divide a task: labour division in interpersonal coordination

12:10 – 13:00   Ekaterina Sangati (Okinawa) Marc Slors (Nijmegen)

Coordination and role emergence

Lunch Break

14:00 – 14:50   Ric Sims (Exeter)

Coordination and extended cognitive systems

15:00 – 15:50   Filip Buekens (Leuven/Tilburg)

Judgements of taste as strategic moves in coordination games

16:00 – 16:50   Julian Kiverstein (Amsterdam)

Skilled we-intentionality: Situating joint action in the living environment

16:50 – 17:00   Wrapping up (Marc Slors and Ric Sims)

Abstracts:

Bart Geurts, Radboud University

From coordination in the moment to coordination for the future

One of the most distinctive features of social interaction in our species is that we use language to coordinate our future activities, and in many cases far ahead. Non-human primates don't do this, as a consequence of which their interactions remain comparatively simple and short-range. I argue that the evolution of communication for future coordination was enabled by two developments: an increase of responsiveness during the communicative exchange and the emergence of normative behaviours in the follow-up. Responsiveness was required to coordinate future interactions, but wasn't enough for coordinating interactions beyond the immediate future, which required normativity, to boot.

Basil Wahn, Leibniz University Hannover

How t(w)o divide a task: Labor division in interpersonal coordination

In daily life, people often perform visuospatial tasks together, e.g., when looking for a misplaced key. When performing such tasks jointly, people coordinate their actions to divide the labor, e.g., by looking for a misplaced key in different rooms. This way, they tend to perform better together than individually - they attain a so-called group benefit. In this talk, I will present a series of experimental studies investigating whether and how people divide the labor when jointly performing visuospatial tasks - and under which conditions they attain group benefits. In particular, I will talk about 1) how a group's coordinative behavior changes depending on the size of a group (dyads vs. triads), 2) how external (embodied) constraints influence a group's coordinative behavior, and 3) how the description and behavior of an artificial co-agent affects people's willingness to coordinate. I conclude that people in a group rely on certain default division of labor strategies, yet flexibly adapt these strategies depending on group size and attentional limitations. The willingness to coordinate with an artificial agent depends on whether (people believe that) the agent acts human-like.

Ekaterina Sangati Okinawa Institute of Technology, and **Marc Slors** Radboud University

Co-ordination and role-emergence

In this presentation we introduce plans for and the reasoning behind a future empirical study on co-ordination. In this experiment we will study co-ordination in a situation where two or more people jointly sort virtual marbles—on an iPad-like device—by colour (without communicating verbally). We hypothesize that a division of labour with complementary roles will emerge, because roles make co-ordination cognitively low-cost. The 'iPad' set-up allows us to study the embodied negotiating processes of role-emergence in some detail. We expect the experiment to contribute to the view that human action co-ordination is more implicit and embodied than it is often made out to be, and to highlight the idea that roles and division of labour are much more important in action co-ordination than most of the literature suggests.

Ric Sims University of Exeter

Coordination and extended cognitive systems

"It is important from the outset to understand that distributed cognition refers to a perspective on all of cognition rather than a particular kind of cognition" (Hollan, Hutchins and Kirsh 2000:175). In this talk I thought it would be interesting to see how far one could take this statement in the context of the ontology of cognitive systems and see what light it sheds on various debates in and around 4E cognition. The starting point is to think of a cognitive system functionally as a collective entity: a coalition of processes that may be running for much of the time more or less independently of each other. To perform tasks, these processes will need to be exquisitely coordinated – that is not only tracked and triggered in a finely tuned time-critical manner – but also able to adapt to changes of task. I claim that these requirements constitute strict constraints on the system that may, in the right circumstances, make co-ordinating structures recognisable in the wild. Elsewhere I use this argument tentatively to adjudicate some controversial cases in the extended cognition debate. However, in the current talk I want to use it to say something about differences between extended/distributed cognition and Marc Slors' *symbiotic cognition* – the sort of cognition made possible by, for example, the legal system. It might turn out that parts of the 'environment' may perform co-ordinating functions with interesting implications, perhaps, for distinctively ecological approaches to cognition.

Filip Buekens KU Leuven & Tilburg University

Judgements of taste as strategic moves in coordination games

Recent work on evaluative discourse and judgements of taste in particular has focused on *active* interpersonal disagreements and less on agents being in a state of disagreement. I content that the former type of disagreement is the basic one and that the persistence of such disagreements is a key feature that requires explanation. I explore the communicative import of judgements of taste and the expressive dimension of such speech acts, based on an explanation of why we get involved in disputes about taste in the first place, why they can persist, what acceptance or rejection of such judgements consists in. I am going to defend that the use of the simple, semantically articulated proposition that *a is F*, characterized by an *unrelativized* truth predicate and not enriched by personal standards or perspectives offers a plausible semantic approach to sentences used in the unfolding of and subsequent interpersonal management of such disagreements. They function as focal points in a coordination game. The model shows that personal standards or perspectives are, contrary to a widely shared assumption in the debate, not the entities or objects that require coordination. What is shared are projects that require the coordination of the participant's individual strategic choices.

Julian Kiverstein University of Amsterdam

Skilled we-intentionality: Situating joint action in the living environment

There is a difference between the activities of two or more individuals that are performed jointly such as playing music in a band or dancing as a couple and performing these same activities alone. This difference is sometimes captured by appealing to shared or joint intentions that allow individuals to coordinate what they do over space and time. In what follows we will use the terminology of we-intentionality to refer to what individuals do when they engage in group ways of thinking, feeling and acting. Our aim in this paper is to argue that we-intentionality is best understood in relation to a shared living environment in which acting individuals are situated. By the "living environment" we mean to refer to places and everyday situations in which humans act. These places and situations are simultaneously social, cultural, material and natural. We will use the term "affordance" to refer to the possibilities for action the living environment furnishes. Affordances form and are maintained over time through the activities people repeatedly engage in the living environment. We will show how we-intentionality is best understood in relation to the affordances of the living environment.