Philosophical Issues in Behavioural Science

University of Warwick, Autumn Term 2023–4 <s.butterfill@warwick.ac.uk>

Outline

Acting together is emerging as a major topic in both philosophy and behavioural sciences. Philosophical investigation is indispensable for fully understanding many discoveries in the behavioural sciences, and for identifying new areas of investigation. Conversely, theories and discoveries in behavioural sciences can inform and constrain philosophical investigation.

Key questions include: When two or more agents act together, in virtue of what can their actions have a collective goal? What is it for agents to act together cooperatively, or to be committed to do so? Are there distinct roles for intention and motor representation in explaining the purposiveness of action? How if it all do motor representations shape experiences of actions, one's own or others'? Are there multiple systems for tracking others' actions, beliefs and other mental states?

Some Relevant Reading

This is not an exhaustive list but will give you a flavour of the course. You will not be expected to read all of these works.

Anscombe, G. E. M. (1957). Intention. Blackwell, Oxford

Bach, K. (1978). A representational theory of action. *Philosophical Studies*, 34(4):361–379

Bacharach, M. (2006). *Beyond Individual Choice*. Princeton University Press, Princeton

Davidson, D. (1980). *Essays on actions and events*. Oxford University Press, Oxford

Dickinson, A. (1994). Instrumental conditioning. In Mackintosh, N., editor, *Animal Learning and Cognition*. Academic Press, London

- 1. Action: Instrumental and Habitual
 - Do discoveries about why humans act create new problems in philosophy of action?
 - Introducing the notion of an interface problem.

Reading: Dickinson (2016)

- 2. Decision Theory, Habitual Action and Planning
 - Decision theory as a model.
 - Limits of the model from below (habitual action) and above (planning).

Mechanistically neutral vs mechanistically committed theories of action.

Reading: Jeffrey (1983); Bratman (1987)

3. Purposive Action: Intention and Motor Representation

- What is motor representation? Why are goals represented motorically?

- Reading: Butterfill and Sinigaglia (2014); Mylopoulos and Pacherie (2016); Bach (1978)
- 4. Acting Together: Shared Intention
 - Introducing philosophical questions about acting together.
 - What is shared intention and what is its role in acting together?

Reading: Bratman (2014)

5. Joint Commitment

Is irreducibly joint commitment needed to characterise normative aspects of acting together?
Reading: Gilbert (2013)

6. *Game Theory and Acting Together*

– Can we model acting together using game theory?

Reading: Sugden (2000); Gold and Sugden (2007); Bratman (2011)

7. Collective Goals and Motor Representation

If collective goals are represented motorically, what follows about acting together?
Reading: Knoblich et al. (2011); Butterfill (2016)

8. Cooperation

What is cooperation and what is its role in cultural development?

Reading: Tomasello (2009)

Table 1: Indicative List of Possible Topics

Dickinson, A. (2016). Instrumental conditioning revisited: Updating dualprocess theory. In Trobalon, J. B. and Chamizo, V. D., editors, *Associative learning and cognition*, volume 51, pages 177–195. Edicions Universitat Barcelona

Dixit, A., Skeath, S., and Reiley, D. (2014). *Games of Strategy*. W. W. Norton and Company, New York

Frankfurt, H. (1978). The problem of action. *American Philosophical Quarterly*, 15(2):157–162

Gergely, G., Nadasky, Z., Csibra, G., and Biro, S. (1995). Taking the intentional stance at 12 months of age. *Cognition*, 56:165–193

Gilbert, M. P. (2013). *Joint Commitment: How We Make the Social World*. Oxford University Press, Oxford

Gold, N. and Sugden, R. (2007). Collective intentions and team agency. *Journal of Philosophy*, 104(3):109–137

Heider, F. and Simmel, M. (1944). An experimental study of apparent behaviour. *American Journal of Psychology*, 57(2):243–59

Kalis, A. and Ometto, D. (2021). An Anscombean Perspective on Habitual Action. *Topoi*, 40(3):637–648

Michael, J., Sebanz, N., and Knoblich, G. (2016). The Sense of Commitment: A Minimal Approach. *Cognitive Science*, page 1968

Michael, J. A. and Szigeti, A. (2018). "The Group Knobe Effect": Evidence that people intuitively attribute agency and responsibility to groups. *Philosophical Explorations*, 0(0):1–18

Mylopoulos, M. and Pacherie, E. (2016). Intentions and Motor Representations: The Interface Challenge. *Review of Philosophy and Psychology*, forthcoming:1–20

Mylopoulos, M. (2022). Oops! I Did it Again: The Psychology of Everyday Action Slips. *Topics in Cognitive Science*, 14(2):282–294

Pacherie, E. (2013). Intentional joint agency: shared intention lite. *Synthese*, 190(10):1817–1839

Ramsey, F. (1931). Truth and probability. In Braithwaite, R., editor, *The Foundations of Mathematics and Other Logical Essays*. Routledge, London

Roessler, J. (2020). Plural practical knowledge. Inquiry, forthcoming:1-20

Schwabe, L. and Wolf, O. T. (2010). Socially evaluated cold pressor stress after instrumental learning favors habits over goal-directed action. *Psychoneuroendocrinology*, 35(7):977–986

Sinigaglia, C. and Butterfill, S. A. (2015). On a puzzle about relations between thought, experience and the motoric. *Synthese*, 192(6):1923–1936

Sugden, R. (2000). Team preferences. Economics and Philosophy, 16:175-204

Zacks, J. M., Tversky, B., and Iyer, G. (2001). Perceiving, remembering, and communicating structure in events. *Journal of Experimental Psychology: General. Vol.* 130(1), 130(1):29–58