

# Short Essay Questions: Philosophical Issues in Behavioural Science

## **Instructions**

Choose any one question from those below.

Do not attempt to answer more than one question in your essay.

## **Lecture Materials**

Each question draws on specific sections of the lecture material, which also provide sources for reading. You do not have to use the lecture material but your essay will probably be marked down if it could have been improved by making better use of the lecture material.

The deadline imposed on this course for the short essay means that our lectures and seminars have not yet covered the material you need for some of the questions. Probably safer to stick to those we have covered.

## **Glossary**

The lecture materials include a glossary to facilitate communication between us. You may deviate from the glossary providing you explicate your terms and providing you have good reason for doing so.

## **Marking Criteria**

This course uses the standard philosophy marking criteria. Ideally your essay will demonstrate an awareness of a philosophical issue in a behavioural science. We are aware that students taking this course may come from a variety of disciplines. Your essay can be written in the style of an essay from any of the disciplines covered on this course.

## Question 1

How, if at all, should discoveries about the roles of habitual and goal-directed processes inform attempts to solve The Problem of Action\*?

\*The Problem of Action is the question, What distinguishes your actions from things that merely happen to you?

### Lecture Notes

Philosophical Theories of Action

### Reading

*If you are following the lecture notes, you should already know what to read. You do not need to consult this list. This is only for people coming to the assignment without using the lecture notes (not recommended).*

Davidson, D. (1971). Agency. In Binkley, R., Branaugh, R., and Marras, A., editors, Agent, Action, and Reason., pages 3–25. University of Toronto Press, Toronto. Reprinted in Davidson, D. (1980) Essays on Actions and Events. Oxford: Oxford University Press.

Dickinson, A. and Perez, O. D. (2018). Actions and Habits: Psychological Issues in Dual-System Theory. In Morris, R., Bornstein, A., and Shenhav, A., editors, Goal-Directed Decision Making, pages 1–25. Academic Press.

### Further Reading

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

Dickinson, A. (1985). Actions and habits: the development of behavioural autonomy. In Weiskrantz, L., editor, Animal Intelligence. Clarendon Press, Oxford.

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

### Where to Find the Reading?

In some cases the reference section of the lecture notes already includes a link to help you find the reading.

If there is no link in the lecture notes, start by searching for the title (and, if that fails, by title and authors) on google scholar. If this fails, the library has resources. If those fail, please check first with others on the course. If you still have problems, you may email your seminar tutor.

## Question 2

***In the current version of the course, we have not yet covered this topic in the lectures.***

How, if at all, should discoveries about the role of motor representation inform attempts to solve The Problem of Action\*?

\*The Problem of Action is the question, What distinguishes your actions from things that merely happen to you?

### Lecture Notes

***In the current version of the course, we have not yet covered this topic in the lectures.***

### Reading

*If you are following the lecture notes, you should already know what to read. You do not need to consult this list. This is only for people coming to the assignment without using the lecture notes (not recommended).*

Davidson, D. (1971). Agency. In Binkley, R., Brnaugh, R., and Marras, A., editors, *Agent, Action, and Reason*, pages 3–25. University of Toronto Press, Toronto. Reprinted in Davidson, D. (1980) *Essays on Actions and Events*. Oxford: Oxford University Press.

Butterfill, S. A. and Sinigaglia, C. (2014). Intention and motor representation in purposive action. *Philosophy and Phenomenological Research*, 88(1):119–145.

Mylopoulos, M. and Pacherie, E. (forthcoming). Intentions: The dynamic hierarchical model revisited. *Wiley Interdisciplinary Reviews: Cognitive Science*, 0(0):e1481.

### Further Reading

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

Shepherd, J. (2018). Skilled Action and the Double Life of Intention. *Philosophy and Phenomenological Research*, forthcoming.

### **Where to Find the Reading?**

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## Question 3

Which, if any, applications of decision theory are incompatible with the truth of Dickinson's dual process theory of action?

*In this question, 'decision theory' refers to the theory elaborated by Jeffrey (1983). Variants are variously called 'expected utility theory' (Hargreaves-Heap & Varoufakis, 2004), 'revealed preference theory' (Sen, 1973)) and 'the theory of rational choice' (Sugden, 1991). As the differences between variants are not important for our purposes, the term can be used for any of core formal parts of the standard approaches based on Ramsey (1931) and Savage (1972).*

### Lecture Notes

Dual Process Theory Opposes Decision Theory?

### Reading

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Dickinson, A. (2016). Instrumental conditioning revisited: Updating dual-process theory. In J. B. Trobalon & V. D. Chamizo (Eds.), *Associative learning and cognition* (Vol. 51, pp. 177–195). Edicions Universitat Barcelona.

Jeffrey, R. C. (1983). *The logic of decision, second edition*. Chicago: University of Chicago Press.

Tadelis, S. (2013). *Game theory: An introduction*. Princeton: Princeton University Press. Retrieved from <http://webcat.warwick.ac.uk/record=b3473236~S1>

Sugden, R. (1991). Rational Choice: A Survey of Contributions from Economics and Philosophy. *The Economic Journal*, 101(407), 751–785. <https://doi.org/10.2307/2233854>

### What to Read on Decision Theory

Jeffrey, R. C. (1983) is probably still the best introduction to decision theory for those with philosophical interests.

Hargreaves-Heap & Varoufakis (2004, p. Chapter 1) provides a very accessible overview of key objections to assumptions of decision theory. (Their stated

concern is game theory; but game theory is built on decision theory, and most of the objections they cover are objections to the underlying decision theory.)

Sugden (1991, p. §§I–IV) is an excellent but very difficult discussion.

Steele & Stefánsson (2020) provides an overview of decision theory as presented by Jeffrey's and a discussion of some challenges (in §5).

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### **References**

*You are not expected to read these; they're included only because mentioned in explaining the question.*

Jeffrey, R. C. (1983). *The logic of decision, second edition*. Chicago: University of Chicago Press.

Neumann, J. von, Morgenstern, O., Rubinstein, A., & Kuhn, H. W. (1953). *Theory of Games and Economic Behavior*. Princeton, N.J. ; Woodstock: Princeton University Press.

Ramsey, F. (1931). Truth and probability. In R. Braithwaite (Ed.), *The foundations of mathematics and other logical essays*. London: Routledge.

Savage, L. J. (1972). *The foundations of statistics* (2nd rev. ed). New York: Dover Publications.

## Question 4

Why, if at all, do we need a theory of shared intention?

### Lecture Notes

See Lecture 04.

### Reading

*If you are following the lecture notes, you should already know what to read. You do not need to consult this list. This is only for people coming to the assignment without using the lecture notes (not recommended).*

Bratman, M. E. (1992). Shared cooperative activity. *The Philosophical Review*, 101(2), 327–341.

Bratman, M. E. (1993). Shared intention. *Ethics*, 104, 97–113.

Bratman, M. E. (2014). *Shared agency: A planning theory of acting together*. Oxford: Oxford University Press.

Gilbert, M. P. (2010). Collective action. In T. O'Connor & C. Sandis (Eds.), *A companion to the philosophy of action* (pp. 67–73). Oxford: Blackwell.

Ludwig, K. (2007). Collective intentional behavior from the standpoint of semantics. *Nous*, 41(3), 355–393.

Searle, J. R. (1990). Collective intentions and actions. In P. Cohen, J. Morgan, & M. E. Pollack (Eds.), *Intentions in communication* (pp. 90–105). Cambridge: Cambridge University Press.

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## Question 5

What is team reasoning? Which, if any, social interactions are better modeled by team reasoning than game theory?

*In this question, ‘game theory’ refers to versions the theory based on Neumann, Morgenstern, Rubinstein, & Kuhn (1953) and presented in any of the standard textbooks including Hargreaves-Heap & Varoufakis (2004); Osborne & Rubinstein (1994); Tadelis (2013); Rasmusen (2007).*

### Lecture Notes

See Lecture 05.

### Reading

*If you are following the lecture notes, you should already know what to read. You do not need to consult this list. This is only for people coming to the assignment without using the lecture notes (not recommended).*

Bacharach, M. (2006). Beyond individual choice. Princeton: Princeton University Press.

Sugden, R. (2000). Team preferences. *Economics and Philosophy*, 16, 175–204.

### What to Read

Either Bacharach (2006) or Sugden (2000), not both. Sugden (2000) is probably easier for most people.

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### References

*You are not expected to read these; they’re included only because mentioned in explaining the question.*

Hargreaves-Heap, S., & Varoufakis, Y. (2004). *Game theory: A critical introduction*. London: Routledge.

Neumann, J. von, Morgenstern, O., Rubinstein, A., & Kuhn, H. W. (1953). *Theory of Games and Economic Behavior*. Princeton, N.J. ; Woodstock: Princeton University Press.

Osborne, M. J., & Rubinstein, A. (1994). *A course in game theory*. MIT press.

Rasmusen, E. (2007). *Games and information: An introduction to game theory* (4th ed). Malden, MA ; Oxford: Blackwell Pub.

Tadelis, S. (2013). *Game theory: An introduction*. Princeton: Princeton University Press.