1 Descartes and Newton

What is Descartes' account of “motion in the strict sense”? What are its principal weaknesses and how does Newton’s alternative definition of motion overcome them?

Reading


Newton, *Mathematical Principles of Natural Philosophy*, the “Scholium to Definition VIII”, paras. 0–7. This is reproduced in Alexander (ed.) *The Leibniz–Clarke Correspondence* (Manchester University Press), pp. 152–60, and in Huggett (ed.), Ch. 7.


Further reading

B. Dainton, *Time and Space* (Acumen, 2001), Ch. 10, §§1–3; Ch. 11, §1–2.

J. B. Barbour, *Absolute or Relative Motion?* vol. 1 (CUP, 1989) [a.k.a. *The Discovery of Dynamics* (OUP, 2001)], Ch. 8, §§5–8 and Ch. 11, §3.

N. Huggett, *Space from Zeno to Einstein*, commentaries to Ch. 6 and to Ch. 7, §§1–3 only.


http://users.ox.ac.uk/~ball0402/teaching/
2 The rotating bucket and the globes

Do Newton’s discussions of the rotating bucket experiment and of the globes thought experiment provide the basis of an argument for the existence of absolute space? Is this what Newton intended them to be? If not, what was his intention?

Reading

Newton, *Mathematical Principles of Natural Philosophy*, the “Scholium to Definition VIII”, paras. 8–14.

N. Huggett, *Space from Zeno to Einstein*, commentary to Ch. 7, §§4–5.

J. B. Barbour, *Absolute or Relative Motion?* vol. 1 (CUP, 1989), Ch. 12, §5.


Further reading

B. Dainton, *Time and Space* (Acumen, 2001), Ch. 11, §3.

J. N. Butterfield, ‘The Leibniz–Clarke Correspondence: Lecture notes’, part B, pp. 8–13 (§VII), available from: [http://users.ox.ac.uk/~alls0074/](http://users.ox.ac.uk/~alls0074/)


3 Leibniz on space

“I have many demonstrations, to confute the fancy of those who take space to be a substance, or at least an absolute being” (LEIBNIZ). Explain and assess Leibniz’s arguments against the reality of space.

In writing your essay you should consider the following specific topics/questions:

- What are Leibniz’s arguments, what is their logical structure and are they sound?
- What, exactly, is Leibniz’s positive account of space and time?
- What are Clarke’s replies to Leibniz’s arguments?
- Leibniz and Clarke also discuss atomism. What does each say? What is the relationship between the arguments they employ about atomism and those concerning space?

Reading

The Leibniz–Clarke Correspondence

N. Huggett, Space from Zeno to Einstein, commentary to Ch. 8.


Further reading

B. Dainton, Time and Space (Acumen, 2001), Ch. 10, §§4–7; Ch. 11, §§4–5.


E. Vailati, Leibniz & Clarke (OUP, 1997), Ch. 4.


http://users.ox.ac.uk/~ball0402/teaching/
4 The Identity of Indiscernibles

‘To suppose two things indiscernible is to suppose the same thing under two names’ (Leibniz). What does Leibniz mean by this? Is he right?

Reading

The Leibniz–Clarke Correspondence (see Alexander’s introduction, pp. xxii–xxiii for specific references).


http://www.seop.leeds.ac.uk/entries/identity-indiscernible/

Further Reading


B. Russell, The Philosophy of Leibniz, Ch. 5.


P. F. Strawson, Individuals, Ch. 4 (“Monads”).

J. A. Cover and J. O’Leary-Hawthorne, Substance and Individuation in Leibniz (CUP, 1999), Ch. 5.

General Tips

http://users.ox.ac.uk/~ball0402/teaching/
5 Leibniz on Necessity and Contingency

EITHER: What is Leibniz's account of necessity and contingency?
OR: “To say that God can only choose what is best is effectively to deny him freedom of choice.’ Can Leibniz answer this objection?

Reading

The Leibniz–Clarke Correspondence, especially Leibniz’s 5th letter and Clarke’s reply.

Leibniz, ‘First Truths’ in Loemker (ed.) G. W. Leibniz: Philosophical Papers and Letters (Reidel, 1969). (Also translated as ‘Primary Truths’ in Ariew and Garber (trans. and eds), G. W. Leibniz: Philosophical Essays (Hackett, 1989) which is available online via Past Masters under ‘Continental Rationalists: Descartes–Spinoza–Leibniz’)


Further Reading


E. Vailati, Leibniz & Clarke (OUP, 1997), Ch. 3.


General Tips

• Your essay should not be much longer than about 2000 words (an excellent essay might well be shorter).

• Set out the main thesis of your essay at the start.

• Conclude your essay with a restatement of the main thesis/theses that you have argued for and a summary of the way in which you have argued for it/them. Indicate any outstanding problems.