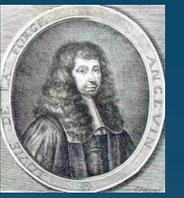


The Mechanistic Roots of Occasionalism: Stage One



What is Occasionalism?

Occasionalism is the doctrine about causal efficacy that exploits the non-observational nature of causation. We observe a prior and a posterior state of the universe, and discern the difference between them. But we cannot observe the force or power causally necessitating the change.

Occasionalists argue:

- That there is some force causally necessitating such changes;
 - That this force cannot be the in the physical objects themselves.
- Therefore the causal force must be God.

God is the only true efficient cause, in other words. What is interesting is the justification of the second premise.

The Project

Occasionalism was first developed by Al-Ghazali in eleventh century Bagdad. Al-Ghazali's position and arguments were universally rejected for over 500 years. Then suddenly in the 1660s, occasionalism reappeared among the Cartesian mechanists. It would flourish among them for almost 50 years until Newtonianism and Leibnizianism replaced Cartesianism. We are asking three questions:

- What was it about Cartesian strict mechanism that made precipitated this sudden rise in occasionalism's fortunes?
- How did this make premise two in the occasionalist argument compelling?
- Why didn't this emerge in Newtonian and Leibnizian mechanical philosophy?

The Passivity Arg.

Occasionalists offered a number of arguments for premise two. The first we considered was The Passivity Argument.

1. All bodily change is a change in motion.
2. Bodies cannot initiate motion in themselves.
3. Bodies cannot initiate motion in others.
4. Therefore, bodies are completely passive.
5. Nothing passive can be a cause.
6. Therefore, bodies cannot be causes.

Assessment of PA

This argument appears to be mechanistic by resting on the thesis that matter, as mere quantity, is inherently passive. But in fact passivity in the sense of being unable to initiate motion in other bodies is not part of the mechanistic program. The passivity argument was a poor argument for occasionalism and one that betrays no important mechanistic roots.

The No Transfers Arg.

A much better argument is the No Transfers Argument.

1. Motion is a mode of a body.
2. Modes cannot be transferred to other subjects.
3. Therefore, bodies cannot initiate motion by transferring their own motion to other bodies.
4. If bodies are to initiate motion in others, they must create that motion in those bodies.
5. This is a creation ex nihilo.
6. This is clearly absurd.
7. Therefore, bodies cannot be causes.

Assessment of NT

This argument gives a proper metaphysical basis for attributing passivity in the strong sense to bodies. And the modal metaphysics was a key feature of Cartesian mechanical philosophy. In our judgment, this is a key element in the rise of occasionalism and explaining why occasionalists found premise two compelling. Contrasting the notion of property dependence within a modal metaphysics and the metaphysics of Newtonianism and Leibnizianism will be a central task of stage two of our project.

The Quod Nescis Arg.

On the surface this argument looks odd and problematic.

1. Causes must know how to produce their effects.
2. Bodies cannot be knowers.
3. Therefore bodies cannot be causes.
4. Finite minds do not know how their volitions produce effects in either their own bodies or their minds.
5. Therefore, finite minds cannot be causes.



Assessment of QN

This argument rests on the implausible assumption that causes must be agent-like. However, the argument might possess a degree of plausibility if one pushes the mechanistic conception of scientific explanation as knowing how to do or make something. Because one does not truly understand unless one can recreate the natural mechanism underlying the causal event, and because recreating it is simply doing it, one cannot understand it unless one is a cause. But more is still required for the occasionalist to establish the converse.

The No Necessary Connection Arg.

This prominent argument depends on the claim that causes must be necessarily connected to their effects.

1. Causes must be necessarily connected to their effects.
2. It is always possible to conceive of a bodily cause occurring without its alleged effect.
3. Therefore, bodies cannot be causes.
4. It is always possible to conceive of a finite mind's volition occurring without its alleged effect.
5. Therefore, finite minds cannot be causes.
6. Therefore, physical objects cannot be causes.

Assessment of NNC

This is a famous argument because of its connection with Humean causal skepticism. But we can find little reason for a mechanist to endorse its central premise. Few natural philosophers committed to the stronger claim that causes must be logically necessary for their effects; they only committed to causes being causally necessary. And there is nothing behind the mechanical philosophy that seems to require anything more than this.



The Conservation as Constant Creation Arg.

Most commentators consider this the strongest occasionalist argument.

1. God must conserve physical objects in existence.
2. Conserving something in existence is no different from constantly recreating it at every moment.
3. Nothing can be created unless it is created fully determinate.
4. Therefore, nothing can be created with a power to cause itself to come to have some property.
5. If nothing can be a cause of anything in itself, it cannot be a cause of anything outside of itself either.
6. Therefore, no finite created thing can be a cause.

Assessment of CCC

We question the usual understanding of this argument as resting on the premise that nothing can be created unless it is fully determinate. A better interpretation of this argument is that it relies on two mechanistic principles. First, that all bodily properties are reducible to relations of extension. And second, that causes must be simultaneous with their effects. Such a reinterpretation of this argument makes it more plausible to a theorist who accepts the necessity of divine conservation, and shows the argument's mechanistic roots much more clearly.

Conclusion

Of the five arguments occasionalists typically offered for premise two, only NT and CCC seem to hold any genuine plausibility. And these two arguments appear to have deep conceptual roots in the new mechanical philosophy of the seventeenth century. NT is importantly dependent on Descartes' conception of bodily properties as modes and the notion of existential dependence that is bound up with that. CCC is importantly dependent on the reduction of all bodily properties to extension and the premise that causes must be simultaneous with their effects. This study of the occasionalists' arguments suggests two preliminary results: (1) that body-body occasionalism, rather than body-mind or full blown occasionalism, are the most plausible forms of occasionalism and (2) that crucial factors behind explaining why Newtonian and Leibnizian physics failed to go in an occasionalist direction was their rejection of the metaphysics of modes and their rejection of causal simultaneity. Exploring these preliminary results is the purpose of stage two of our research program.

Researchers:

- Benjamin Hill (Western Philosophy/Rotman Institute)
- Henrik Lagerlund (Western Philosophy/Rotman Institute)
- Todd Ryan (Trinity College/Philosophy)
- Elliot Rossiter (Western Philosophy/Rotman Institute)

