Leibniz’s “Tentamen Anagogicum”

Areins Pelayo
30 July 2018
University of Illinois at Chicago
Apelay4@uic.edu
The Most Determined Path Principle (MDPP) was first presented in *Acta Eruditorum*, around 1682.

This essay was written, according to Loemker, around 1692, because of Leibniz’s mention of the brachistochrone problem (i.e., finding the fastest point of descent on a curve).
Some Preliminary Definitions

- **MDPP:** “a ray is directed in the most determined or unique path,” where ease of determination is distance of path times resistance of medium (L 479).
- **Law of Continuity:** Roughly, the idea that there are no jumps or gaps in nature.
- **PSR:** For every event, there is a cause or reason.
- **Principle of Perfection:** Choosing the simplest law/rule with richest effects—This is God, an architect, or geometer acting perfectly.
- **Variational Principle:** An empirical principle that maximizes or minimizes quantities that depend on functions to find certain functions (e.g., what shape does a chain suspended from both ends have in zero gravity?).
- **Efficient Cause and Final Cause:** A final cause in an explanation is in terms of a creature’s or entity’s final purpose. An efficient cause in an explanation is in terms of how a creature or an entity achieve that purpose.
Themes

- The revival and necessity of final causes in mechanistic explanations.
- The principle of perfection and the “middle term” principles (e.g., MDPP and Law of Continuity).
- MDPP explains why the angle of incidence and the angle of refraction/reflection are equal. Law of continuity explains the phenomena of rebound and elasticity in cases of motion. So, they are metaphysically-ish principles that justify or explain the physical principles.
- What does all this have to do with Leibniz on space?: His method of analysis and synthesis is in background of all this (according to Loemker at least), and both methods depend on 3 rational principles: (1) Law of Identity, (2) Principle of Contradiction, and (3) Principle of Sufficient Reason—The relation of this principle, which is the topic of debate in the Leibniz-Clarke correspondence on the status and nature of space, to the “middle term” principles may shed light not only on Leibniz’s thought, but also on his argument for a relationist view of space (e.g., could Leibniz better defend his position if he used these middle term principles rather than the PSR?).
Points of Discussion

- Are the middle term principles proto-variational principles? What’s their relation to differential equations? (McDonough 2009, p. 35) thinks MDPP grounded the discussion of a principle of least action, which eventually resulted in today’s variational principles.

- Is Leibniz introducing a “thin notion” natural teleology? (ibid thinks so).

- How do principles similar to MDPP and Law of Continuity relate to more general principles, such as PSR and Principle of Perfection?

- Leibniz refers to MDPP as a “principle of discovery” (p. 484) and refers to the principle as a “hypothesis” (p. 479, so they are only morally certain, for their converse implies no contradiction). Does Leibniz think that laws such as the law of reflection/refraction are discovered with the help of these principles or that they may be properly justified with these “middle term” principles, or both?
Works Cited
