Remote Learning Module for 3 April 2020

Lecture Notes: Leibniz, The *Monadology*

Last time we examined the general lineaments of Leibniz's physics and theory of perception. In the last years of his life, Leibniz unified these two concerns into the metaphysical system he called *monadology*. As we noted in the course of tracing his biography, Leibniz was, throughout his career, intent upon demonstrating the incoherence of any metaphysics which either assumed, implied, or stipulated that *matter can think*. Thus, he aimed his own metaphysical reflections against both Cartesian dualism and Spinozist monism, both of which he regarded as exercises in materialism. Instead, and with a considerable intellectual debt to Plato's Theory of Forms, Leibniz presented in the *Discourse on Metaphysics* and the *Monadology* a set of principles and deductions tantamount to Idealism, or the view that only immaterial ideas are the ultimate constituents of reality, and Phenomenalism, or the view that the objects of all referring expressions reduce to phenomena.

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(1) Propositions 1 - 16.

Proposition 1 defines the *monad* as that which has no parts—a straightforward derivation from the first definition in Euclid's *Elements*: "a point is that which has not parts." As in Euclid, points have zero dimension, so that the spatial properties of one, two, and three dimensional constructions are about *relations* between or among points. In this we can see the purport of Leibniz's criticism of Newtonian absolute space (which Leibniz described as a "monstrous un-thing"): space, for Leibniz, is not a container things inhabit, but rather a relation between two or more things.

Proposition 2, then, defines the *composite* as that which is divisible into simples. Recall here Leibniz's analogy in his letter to Arnault: a composite thing is like an army: both are merely phenomenal. We can talk about armies invading or battling, but so long as we do not refer to its simples (individual soldiers), we refer to noting real. Compare this analysis with Section XII of the *Discourse*.

Propositions 4 – 6 establish Leibniz's idealist/phenomenalist ontology: monads can only be created or annihilated (#4); monads can't decay (#5); and there are no physio-deterministic laws governing them (#6).

Propositions 7 – 11 provide Leibniz's general theory of change and multiplicity. Proposition 7 is one Leibniz's most quoted assertions: "monads are windowless"—noting comes into or from them; in other words, monads cannot change because of external causes, since they have no parts to be transposed. But in order to do much metaphysical work, Leibniz admits, monads must have *some* qualities (#8), since, otherwise substance monism (Spinozism) would necessarily follow. Here we find Leibniz's Laws of ontological discourse, the Identity of Indiscernables and

the Indiscernability of Identicals: two referring terms will be coextensive if and only if they share all and only the same properties. Logically: $(x)(y)[(x = y) \equiv (F)(Fx \equiv Fy)]$.

Since physical position is not a property of monads—space being a construct or aggregate—no two monads can be distinguished by spatial location (one here and the other there). Consequently, differences among monads must be *intrinsic* not *extrinsic*. Imagine rotating an equilateral triangle 120˚, in which case, it's second orientation would be indistinguishable from the first. Additionally, since change can be observed, monads must be capable of change; but then change too must be internal, and not efficiently caused by external forces.

Propositions 12 – 16 culminate the general theory: multiplicity (sameness with a difference) may be accounted for by way of the property of *perception*, and change may be accounted for by the principle of *appetite*. Give that differences among monads must be intrinsic, there must be for each monad, at least one internal property capable of being changed from one state to another. A minimum of two states is required in order for both change and identity over time. Leibniz holds that this one *variable* property must be *perception*—not apperception or consciousness, but an *expression* of the many in the one, or the composite in the simple (as in the conic sections, whereby points, circles, parabolas, hyperbolas, etc. are all expressed as sections, or slices, of the cone). This completes Leibniz's ontology: we have substances (the monads), each with its own essence (variable perception), and causality (appetite).

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(2) Propositions 17 - 37.

Proposition 17 contains what is perhaps Leibniz' most enduring analogy (and one cited by both mind/bodyu materialists and dualists): the explanation of perception cannot be given by mechanism, for if you *could* walk into a brain as you *can* walk into a barn, all you would see are bodies in motion; you would not see anything which could *explain* perception. Therefore, the explanation of perception must be sought in the simple substance. Materialists of Hobbes' ilk would, of course, contend that those bodies in motion are the very stuff of perception. To give Leibniz his due, however, let's think again about his analogy to the army: suppose we are in the middle of the Thirty Years War, and we have reason to believe that the army of Maurice of Nassau hopes to reach the Rhine River by sundown; as we walk about the marching columns, observing the shifting positions of the soldiers, we'll never find that *hope*.

Following Aristotle's account of the nature of agency, Leibniz calls his monads *entelechies*, that is, self-sufficient agents, which realize a form more or less perfectly. Note well that in this context Leibniz employs the term, "perfection," as having a teleological meaning: to act towards a goal, or to have a purpose (#18). We might use the term "soul" for any agency, but Leibniz wants to reserve "soul" for monads with a memory (#19). Why? Because in dreams we possess the energy to wake (#20) and after waking from a dream or a fainting spell (a *swoon*), it is in principle possible to predict or retrodict anterior/posterior perceptions. In other words, upon waking from a swoon or a dream, you can know you were just moments ago having perceptions even though at the time you were unconscious of them (#22 & #23). Thus, Leibniz concludes, the state of a non-soul monad is that of a perpetual swoon—a dream from which the monad can

never wake up. Animals, then, do have distinct perceptions as well as memories, so animals too have souls (#25), a striking contrast with Descartes *res cogitans*, but quite consistent with Aristotle's account of the kinds of minds there are in the world (plant, animal, human). Memory provides consistency of the person (#26). Perceptions vary in vividness (#27); in other words, strong impressions have strong effects. In Proposition #28 we find a use of the term, empiricist, which pre-dates Kant's usage for categorizing epistemologies favoring sense perception over clear and distinct ideas as the ultimate sources of knowledge. Here Leibniz adduces that 75% of human action is indistinguishable from animal action, which is to say, most of human action is like the trial-and-error knowledge of medical empiricists: unreasoned from first principles, but rather gathered from remembered experience (we expect the sun to rise tomorrow from the regularity of our experience, not from the principles of mechanics). Nevertheless, because we humans have rational souls, we are capable of acquiring knowledge of necessary and eternal truths—the truths of reason afforded to us by the natural light (#29). We are thus capable of metaphysics (#30).

The two great principles of our reasoning are the *Law of Contradiction*—what implies a contradiction is necessarily false, and what is implied by a tautology is necessarily true (#31), and the *Principle of Sufficient Reason*—there are no brute facts (#32).

Accordingly, in Proposition 33, Leibniz holds that there are two kinds of truth:

(i*) truths of reason*, which are matters of logic, and so prior to experience, and found out by analysis (the *analytic apriori* truths), and

(ii) *matters of fact*, and so posterior to experience and found out by synthesis (the *synthetic aposteriori* truths).

The Principle of Sufficient Reason delivers *analytic apriori* judgments (#35); but there must also be a sufficient condition for each contingent truth (each *synthetic aposteriori* judgment) (#37), and since this sufficient condition must stand outside the chain of efficient causes, there must be a *necessary being*—God.

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(3) Propositions 38 - 90.

Propositions 38 – 52 identify the divine properties: God is necessary substance (recall Leibniz's report of his conversations with Spinoza in 1676); God' nature is absolutely perfect (in the teleological sense of the term).

In Proposition 53 we find Leibniz's portrait of God as the Great Decider, contemplating an infinity of possible worlds. As we noted the other day, Leibniz is walking a thin line between possibility and necessity here: on the one hand, there are infinitely many *whole* possible worlds, but, on the other hand, within each one of these possible worlds, events will follow necessarily from the laws of nature that God will have chosen along with the choice of bringing *that* world, and not another possible one, into being. How does God decide? Why, the Principle of

Sufficient Reason, of course, which is why this must be, according to Leibniz, the Best of All Possible Worlds (#54 & #55).

In Proposition 78 we find another of Leibniz' more well-known notions: since souls and bodies follow distinct laws, and given Propositions 53 – 55, in choosing this as the Best of All Possible Worlds, God fashions a *pre-established harmony* between psychological and physiological events. This notion of a pre-established harmony can be seen in the way in which we design our clocks to picture the diurnal rotation of the Earth with respect to the Sun (neither does astronomical motion cause clocks to keep track of the hours of the day, nor do clocks causally influence the rotation of the Earth—one pictures the other by way of pre-established harmony). Similarly, the logical states of a computer program are mirrored in the machine states of a digital processor.

Leibniz concludes his metaphysical investigations at Propositions 89 & 90: God is the architect of the world, and it is only in the teleology of the divine architecture that we humans can find our beatitude.

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On Monday, we'll turn our attention to the British Empiricists with a consideration of the life and philosophy of John Locke. Be well everyone, and remember: social distancing saves lives, which is presumably why we are still not in JUB 202 presently.