

## **I. Leibniz's (1646-1714) Modal Metaphysics and Modernist Representations: Summary and Relevance to Debates in Classical and Post-Classical Islamic Philosophy**

### **Prelude:**

This short study succinctly focuses on Leibniz's modal metaphysics and its relevance to the philosophical study of Islamic philosophy and philosophical theology.

The first part of the study situates Leibniz in the general framework of modern philosophy commitment to the theory of representation and its roots in modern conception of the knowing subject as a foundational metaphysical and epistemic category on the one hand, and the mathematicised mechanical conception of nature stemming from Galilean physics, on the other.

The second part of the essay examines the fundamentals of Leibniz's modal metaphysics focusing mostly on his *Discourse on Metaphysics* (1686) and *The Principles of Philosophy, Monadology* (1714) along with his essays on the definition of nature, contingency and necessity.

The third part of the essay briefly investigates the critical relevance of Leibniz's modal metaphysics to discussions of modality (*imkān*) in the Islamic philosophical tradition in the classical and post-classical stages.

### **Part I: Leibniz and the Troubled Conception of Modern Representation**

In *The Order of Things (Les Mots et les Chose)*, Foucault argues,<sup>1</sup> in agreement with Husserl in the *Crisis of the European Sciences (Die Krisis der Europäischen Wissenschaften)*,<sup>2</sup> that the concern with 'mind-dependent representation' was the hallmark defining the connection between the discursive and the non-discursive in the modern Western European episteme from the late 16<sup>th</sup> century onwards. Contrary to Aristotelian Christian Scholasticism, the essence of the object, which constitutes the teleological actuality of its existence as a substance, is totally relegated in importance, if not ignored all together. The metaphysical principle that the essences which have a real definition that could be deduced through perfect deductive syllogisms constitute the *causa finalis* of substances are thoughts in the mind of God to which only rational beings

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<sup>1</sup> See Foucault's discussion of representation as the key epistemic expression of early modern philosophy or what he calls the 'classical episteme' in: Michel Foucault, *The Order of Thing* (trans. Alan Sheridan; New York: Routledge, 2005), §3.II Order, p. 55-63; §§3.IV-3.VI, p. 70-85.

<sup>2</sup> See Husserl's discussion of the mathematization of the world into geometrical forms devoid of plenum in modern Galilean and Newtonian geometry, and the way this mathematical world view contrasts with Euclidean mathematics in: Edmund Husserl, *The Crisis of the European Sciences* (trans. David Carr; Evanston: Northwestern University Press, 1978), §§8-9, p. 21-59. See also Husserl's explanation of the way in which mathematicised representations became the foundation for material rationality and gave rise to the problem he identifies as the crisis of modern psychologism in the work of rationalists like Descartes and empiricists like Berkeley and Locke alike, in: *Ibid.*, §§16-23, p. 73-87. Finally, see Husserl's analysis of Hume's skepticism as a critique of the psychologistic origins of the modern theory of representation in both, and how Kant's proposed transcendental solution to Humean inductive skepticism about representations stands as the first step towards constructing an egology as a phenomenology consciousness in: *Ibid.*, §§24-32, p. 88-120.

have access by connecting logically and spiritually with the mind of God and which, in turn, was radically attacked by the material rationality and the mechanical world view that took mathematicised material representations as its point of departure in constructing its new scientific and philosophical weltanschauung. According to this weltanschauung, beings are representations in consciousness (extensions on (x, y, z) axes in coordinate and solid geometry). The mathematical and rational conditions governing the constitution of these representations, and not the essential reality defined by the logical thoughts of God (the rules of deductive logic that govern the relationship between essences in Aristotle's predicate and propositional logic), are the defining characteristic of reality and truth.

To illustrate this concern with mind-dependent representations, Foucault gives a creative interpretation of Velasquez's masterpiece *Las Meninas* wherein the painter, Velasquez, represents his act of painting which is in essence is an act of representation. Foucault writes:

Perhaps there exists, in this painting by Velasquez, the representation as it were, of classical representation and the definition of the space it opens up to us. And indeed, representation undertakes to represent itself here in all its elements, with its images, the eyes to which it is offered, the faces it makes visible, the gestures that call it into being. But there in the midst of this dispersion which it is simultaneously grouping together and spreading out before us, indicated compellingly from every side, is an essential void: the necessary disappearance of that which is the foundation—of the person it resembles and in whose eyes it is only resemblance.... representation, freed finally from the relation that was impeding it can offer itself as representation in its pure form.<sup>3</sup>

Both the subject and object are representations seeking to be ordered. Both are resemblances and resemblances are sufficient. There is no longer an **essence** in the mind of God to which beings are analogous. Resemblances are the epistemic boundaries of human capacity. Resemblances are Representations. Foucault claims that this position is a further development of Bacon's position. He cites Bacon: "The human intellect, from its peculiar nature, easily supposes a greater order and equality in things than it actually finds; and, while there are many things in Nature unique and quite irregular, still it feigns parallels, correspondents, and relations that have no existence. Hence, that fiction that among the heavenly bodies all motion takes place by perfect circles."<sup>4</sup> According to Foucault, Bacon is clearly criticizing the pre-modern essentialist assumption of beings being ontologically and epistemologically analogous to the form thought by the theistic versions of Aristotle's God of Thought-Thinking-Thought. The role of the modern philosopher, as is that of the modern scientist, is to discover the order of representations not to discover the essences beyond the finite limits of the senses and human reason. This is what was Velasquez looking for but could not, as of yet, figure out.

To demonstrate how the modern mind tried to seek the order of representations, Foucault put forward of on the categorical terms Leibniz uses: *mathesis universalis*. According to Foucault, the *mathesis universalis* or the general abstract law is the translucently constructed mirror image of mind-independent reality. Underlying this translucence is the assumption of the perfect correspondence between the image and the

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<sup>3</sup> Michel Foucault, *The Order of Things*, p. 17-18.

<sup>4</sup> *Ibid.*, p. 57.

mind-independent reality that is sensible, an assumption made by Leibniz, Spinoza and many other modern thinkers.

In full resonance with this idea, Leibniz argues a number of important theses in §§9-11 of the *Discourse on Metaphysics*.<sup>5</sup> After showing how the universe of God's creation can be 'represented' differently in terms of every individual substance inasmuch as infinite things could be (correctly or falsely) predicated of it, Leibniz proceeds to qualify his position on substances from a phenomenal versus an essential perspective. In §10, he accuses the scholastic Christian Aristotelians of failure due to their imposition of abstract metaphysical speculation on empirical and practical research. The scholastic claim that substantial forms could be defined solely through valid moods and shapes of syllogisms arbitrarily hampered the development of experimental knowledge in Christian Europe. In §11, Leibniz argues that substantial forms should be preserved for the purpose of metaphysics and theology or *metaphysica generalis* and *metaphysica specialis*.<sup>6</sup> According to Leibniz, metaphysical and theological reasoning are integral parts of rational reflection. Leibniz, as I will explain below, contends that phenomena/representation follow a system of modal representations based on the principle of sufficient reason. Since finite minds, like the human mind, cannot have access to the sufficient reasons but at best to some of the necessary conditions of the existence of individual substances, and since he proved that the idea of the Necessary Existent or God implies existence, it must be that sound metaphysical and theological reflection governed by logical rules of modality is in harmony with the empirical investigation of phenomena rooted in their logical conception as *possibilia*. Modal Metaphysics is the *mathesis universalis* of Leibniz's world of modal representations as Foucault would probably phrase it.

## **Part Two: The Fundamentals of Leibniz's Metaphysics: Summary Perspectives from *The Discourse on Metaphysics*, *The Monadology* & Other Essays**

Two principles constitute the *sine-qua-non* to understanding how Leibniz harmonizes the relationship between his metaphysical commitment to the Aristotelian theory of substantial forms, essential definition and demonstrative syllogistic, as an indispensable foundation for theology and systematic rationality, on the one hand, and his commitment to mind-dependent representations constructed according to mathematical modeling and scientific experimentation, on the other hand. The first is the principle of sufficient reason and the second is the modal distinction between necessity and possibility on the logical, metaphysical, and epistemic levels. Leibniz summarizes these principles lucidly and cogently in his 1686 essay *On Contingency*. In this vein, Leibniz writes:

“Existence doesn't differ from essence in God, or, what is the same thing, it is essential for God to exist. Whence God is a necessary being. Creatures are contingent, that is, their existence does not follow from their essence. Necessary truths are those that can be demonstrated through an analysis of terms, so that in the end they become identities, just as in algebra an equation expressing an identity ultimately results from the substitution of values [for variables]. That is,

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<sup>5</sup> Gottfried Wilhelm Leibniz, *Philosophical Essays* (ed. & tans. Roger Ariew & Daniel Garber; Indianapolis: Hackett Publishing Company, 1989), p. 41-3.

<sup>6</sup> *Ibid.*, p. 43.

necessary truths depend upon the principle of contradiction. Contingent truths cannot be reduced to the principle of contradiction; otherwise, everything would be necessary and nothing would be possible other than that which actually attains existence. Nevertheless, since we say that both God and creatures exist, and we say that necessary propositions are true no less than contingent ones, it is necessary that there be some common notion, both of contingent existence and of essential truth. In my view, it is common to every truth that one can always give a reason for every non-identical proposition; in necessary propositions, that reason necessitates; in contingent propositions, it inclines.”<sup>7</sup>

This rather intense paragraph could simply be unpacked as follows. God is the necessary existent. All other beings are possible concepts/essences that could attain existence in actuality, or not. The necessary propositions expressing God’s actions could be analyzed into identity relations following the law of contradiction. Contingent propositions express true relations that cannot *finitely* be analyzed into identity relations that are analytic a priori expressions of the law of contradiction. Leibniz then notices the problem of univocity implied in his definition. If necessary and contingent propositions are both true, then the concept of truth both concepts share needs better nuancing. Epistemologically, a contingent truth inclines whereas a necessary proposition necessitates. But what is the metaphysical foundation of inclining and necessitation in this case? In response, Leibniz introduces the principle of sufficient reason: “...nothing exists without there being a greater reason for it to exist than for it not to exist.”<sup>8</sup> God metaphysically causes some possible things to exist based on the sufficiency of the *raison d’être* of their existence. Epistemologically, God knows all reasons. However, as finite humans, we do not know all the sufficient reasons for the existence of everything. This is how Leibniz can maintain an approximate balance between his modernist commitment to the metaphysics and epistemology of mind-dependent representations, the knowledge of which is based on mathematical modeling and inductive experimentation, on the one hand, and claims about substantial forms that give conceptual teleology for reason and rational reflection in connection with the rational actions of the Necessary Existent or God, on the other.

Against this background, the layout of Leibniz’s modal metaphysics could be better understood. After explaining the necessity of balancing the modernist interest in understanding the *mathesis universalis* based on mathematical and geometrical models and experimental induction, on the one hand, and maintaining the commitment to an intellectual intuition of the substantial forms conditioned by a qualified use of them, on the other, Leibniz turns to a discussion of the degrees of necessity in order to reconcile his claims about necessity and contingency with his earlier claims of God’s creation of the best possible world, which in turn, is at odds with determinism. Hence, in §13 of the *Discourse on Metaphysics*, Leibniz introduces the distinction between absolute and hypothetical necessity.<sup>9</sup> One thing may be “absolutely necessary, and its contrary contains a contradiction; such deduction pertains to eternal truths, such as those of geometry. The other is necessary only *ex hypothesi*, and, so to speak, accidental; this is contingent in itself, and the contrary does not imply a contradiction.” The law of

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<sup>7</sup> Ibid., p. 28.

<sup>8</sup> Ibid., p. 28.

<sup>9</sup> Ibid., p. 44-6.

contradiction is thus the criterion for whether something is absolutely or hypothetically necessary. If one could do otherwise without contradiction, then one has the freedom to do it even though one won't.

In §§17-22 of the *Discourse on Metaphysics*, Leibniz explains his view of nature and natural bodies against the background of his modal metaphysics and the principle of sufficient reason.<sup>10</sup> Most of these sections are a discussion and a critique of Leibniz's rival natural philosophers. Most of them are Cartesians. The main point is that every now and then natural philosophy does have to turn to metaphysics and investigate the true underlying reality of the phenomena to explain certain occurrences. That is, "it becomes more and more apparent that although all particular natural phenomena can be explained mathematically or mechanically by those who understand them, the general principles of corporeal nature and even mechanics are nevertheless metaphysical rather than geometrical, and relate to certain indivisible forms or natures, as the causes of appearances, rather than extended corporeal mass."<sup>11</sup> Also, in §19, *The Utility of Final Causes in Physics*, Leibniz criticizes Spinoza's anti-anthropomorphic and anti-teleological arguments. Leibniz argues that, it is ridiculous to say that "we see because we happen to have eyes, but not that the eyes were made for seeing."<sup>12</sup>

In §§ 23-31 of the *Discourse on Metaphysics*, Leibniz articulates his view on human understanding and will in connection with God against the background of the principle of sufficient reason. In §23, Leibniz gives a brief critique of the ontological proof, in particular as put forth by Descartes maintaining that the "argument only proves that God necessarily exists if He is possible."<sup>13</sup> Luckily, for us "the divine nature ... [needs] only its possibility or essence in order to actually exist..."<sup>14</sup> In §24 on the different kinds of knowledge and definitions Leibniz, in contrast with other modern philosophers, such as Descartes, holds that there are varying degrees of ideas. That is, they are not only either 'clear and distinct' or 'confused,' but rather there are multiple combinations, such as 'clear and confused.' This last type is for example present in taste, i.e., aesthetic judgments. Also, there are several types of definitions based on the principle of sufficient reason:

- 1) Nominal definition: "it can still be doubted whether the notion defined is possible..."
- 2) Real definition: "when possibility is proved only by experience..."
- 3) Real and Causal definition: "when the proof of the possibility is a priori ... as when it contains the possible generation of the thing."
- 4) Essential definition: "when it takes the definition to its limits or as far as primary notions, without assuming anything which itself requires a priori proof of its possibility, the definition is perfect..."<sup>15</sup>

In §25, Leibniz argues that there are only two ways in which we can have a complete idea or notion: "when our knowledge of confused notions is clear, or when our knowledge of

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<sup>10</sup> Ibid., p. 49-55.

<sup>11</sup> Ibid., p. 51-2.

<sup>12</sup> Ibid., p. 53.

<sup>13</sup> Ibid., p. 56.

<sup>14</sup> Ibid., p. 56.

<sup>15</sup> Ibid., p. 56-7.

distinct notions is *intuitive*...”<sup>16</sup> In §26, Leibniz refers to Plato’s doctrine of recollection to substantiate his theory of knowledge and definition. By definition, an individual substance contains all its predicates, that is, also all its ideas, notions or concepts. After all, there is no other source for any of this other than the substance itself. So “the mind always expresses all its future thoughts and is already thinking confusedly of everything it will ever think.”<sup>17</sup> Insofar as our attention is drawn to thoughts not expressed clearly, they become clear, and our virtual knowledge of a thing becomes actual. So, Plato was right that we already know everything, we just have to recollect, or collect it. Turning to §27, Leibniz attacks Aristotelian Empiricism. Aristotle’s description “squares better with popular notions, as is usually the case with Aristotle; whereas Plato goes deeper.”<sup>18</sup> In this regard, Leibniz speaks of Copernicus here as a way to show how common conceptions can be “false” or even inverted, i.e., that the sun rises and sets. All our notions and ideas come from “internal experience” and not from the senses. They only seem to come from the senses insofar as we are unaware that they were merely less clearly expressed. Finally, in §30, Leibniz returns to the problem of freedom. Our will is free, because it is in a way indifferent to our actions and thus allows us to choose one or the other. As for sin: “It is simply a matter of choosing not to; and God could not have set an easier or fairer condition than that.”<sup>19</sup> But of course, we must act the way we do otherwise we wouldn’t be expressions of our substance. Also, that Judas sinned and thereby got Jesus killed, is not really a bad thing, it was necessary for the good of the whole. Doing evil is a limitation and privation, grace is God leading us to perfection. In the *Monadology*, Leibniz expands his theory of the individual substances (monads) focusing on individual humans giving explanation of perception and intellection in light of his modal metaphysics.

## **Part II: The Relevance of Leibniz’s Modal Metaphysics and His Views on the Principle of Sufficient Reason to Islamic Philosophy**

Many scholars including Mahmūd Qāsim<sup>20</sup> and Abū al-‘Ilā Afīfī<sup>21</sup> have pointed to the debt Leibniz’s theory of individual substances (monads), and even his view of evil and destiny, possibly owes to the theory of fixed essences in the mystical philosophy of Muḥyī al-Dīn ibn al-‘Arabī’s (d. 1240). More recently, scholars like Kara Richardson have made arguments about the possible precedent discussions of the principle of sufficient reason in the work of Avicenna. Similarly, Khaled al-Rouayheb has posed questions as to whether or not the theory of possible worlds has precedents in the work of Afḍal al-Dīn al-Khūnajī and other post-classical Muslim logicians and metaphysicians.<sup>22</sup> These are all questions worth more philosophical investigation historically and philosophically.

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<sup>16</sup> Ibid., p. 58.

<sup>17</sup> Ibid., p. 58.

<sup>18</sup> Ibid., p. 59.

<sup>19</sup> Ibid., p. 61.

<sup>20</sup> Mahmūd Qāsim, *Muḥyī al-Dīn ibn ‘Arabī* (Cairo: Maktabat al-Qāhira al-Ḥadītha, 1972).

<sup>21</sup> Abū al-‘Ilā Afīfī, *The Mystical Philosophy of Muḥyīd Dīn-Ibnul ‘Arabī* (Cambridge: Cambridge University Press, 1939).

<sup>22</sup> Afḍal al-Dīn al-Khūnajī, *Kashf al-Asrār ‘an Ghawāmiḍ al-Afkār* (Tehran: Mu’sassat Ḥikma wa Falsafa, 2010).

Two specifically thematic points also call for further philosophical examination. The first is the connection between the essential possibility of all phenomena/material substances versus their necessitation by the act of the Necessary Existent, God, echoes the problematic relationship Avicenna characterizes between essences/concepts of all beings other than God being possible in themselves but necessitated through the action of Necessary Existent, God, in the *Metaphysics* of the *Book of Healing* and later in the *Remarks and Admonitions*, as well as other writings. This position was equally criticized by al-Ghazālī<sup>23</sup> in the *Incoherence of the Philosophers* and Averroes in the *Grand Commentary on the Metaphysics*. This problematic claim about the ontological status of any being as possible in itself but necessary through the necessitation of God raises many important metaphysical and epistemic questions that have momentous implications for the connections between metaphysics and natural sciences and logical claims versus empirical claims of physics.

The second problem concerns the possibility of arguing for freedom of human agency that is necessary for the coherence of theodicy and a rational argument for eschatology in light of the modal relationship between necessitation and possibility. Avicenna encountered the same problem. In his famous *Risāla fī Sirr al-Qadar (Treatise on the Secret of Destiny)*, Avicenna wrestles with this problem in the wake of his discussion of the problem of evil. A point worth noting is that if the modal system is intended to give more agency to human subjects and human knowledge versus the logical deterministic idealism implied by Aristotle's logical system of essences, how can the claim of the necessitation of the possible essences in themselves in actuality serve this purpose?

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<sup>23</sup> Some may argue that al-Ghazālī accepted then necessitation of the possible in some of his writing like *al-Iqtisād fī al-I'tiqād* and as scholars like Eric L. Ormsby argued in *Theodicy in Islamic Thought* (Princeton: Princeton University Press. 1984). However, counter-arguments could be made based on his argument in the *Incoherence of the Philosophers*.