

PRIME MATTER IN SCIENCE AND PHILOSOPHY.

In the Western and Islamic tradition, the notion of “prime matter” goes back, according to some, as far as Plato, who spoke of a “receptacle,” which is the substrate in which material things come to be. He compares it to gold being molded and remolded, but denies that this receptacle has any properties of its own like gold does. He calls it alternately “space,” “place,” or “seat.” He compared the receptacle to a mother, and the model from which it derives its form to the father, and the nature or natural object that enters into becoming as a result of the two coming together as the offspring. It is not surprising that many later discussions of prime matter in both the Islamic and Christian traditions were related to discussions on the nature of space or place.

As in other issues commentators disagree as to what Plato meant, and if his “receptacle” and the “prime matter” attributed to Aristotle are the same entity. It is also a matter of dispute whether Aristotle had a firm conception of prime matter or he only accepted that there is some matter for any particular form. Matter (*hyle*) was one of Aristotle’s four causes. In the case of a bed, the matter was the wood, the form was the shape of the bed, the agent or efficient cause was the carpenter, and the final cause is for being slept on. In the case of a statue, the matter would be bronze, for example. One of Aristotle’s definitions of the human soul is that it was the form of a living human body. The form of a thing is the actualization of a potentiality of the matter. A tree is potentially a bed, and that form is

actualized by the carpenter for the purpose of being slept on.

However wood, bronze, and other “matters” each have their own specific natures, which is to say each has its own particular form. Wood does not behave like bronze or like flesh. What, then, is the potentiality that is actualized by the “woodness” of the wood, or the bronzeness of the bronze?

Muslim philosophers used both the transliteration *hayūlā* and the translation *māddah* (“matter”) to render the Greek *hyle*, and sometimes *‘unṣur*, a term usually reserved for the translation of “element,” as in the elements of air, water, fire, and earth. The Ikhwān al-Ṣafā’ described prime matter in relation to other levels of matter in the following way:

Know that the diversity of things comes only through form, not matter. Thus we find many things whose substance is one and whose forms are diverse. . . .

Know that there are four sorts of matter: the matter of artisanry, the matter of nature, the matter of the all, and Prime Matter.

The “matter of artisanry” is every body with which the artisan works and from which he makes his artifact. . . .

“Natural matter” is the four elements [earth, water, air, fire]. Thus, all the engendered things below the sphere of the moon—I mean the plants, animals, and minerals—are engendered from the elements and transmuted into them at corruption. . . .

“The matter of the all” is unconditioned body, from which comes the entire cosmos. I mean the spheres, the stars, the pillars, and the engendered things altogether, for all these are bodies, and their diversity is in respect of diverse forms.

“Prime Matter” is a simple, intelligible substance not perceived by sensation. This is because it is the form of existence alone. . . . (Chittick, 2001).

In the case of a bed the “matter of artisanry” would be the wood; the “natural matter” would be the combination of the four elements that gives

wood its nature; “the matter of the all” is at a level of non-differentiation from which the four elements themselves are actualized; and “prime matter” is that pure potentiality from which all other levels of matter are actualized. The bed is a form of the wood; the wood is a form of natural matter; natural matter is a form of unconditioned/absolute body; and the unconditioned/absolute body is a form of prime matter.

For al-Kindī, the upper world of Intellect, Nature, and Soul was to be distinguished from the lower world of Body, Creation, Matter, Form. Avicenna, who treated *hayūla* and *māddah* as synonymous, spoke of “absolute matter” as that matter which only exists in actuality when it receives some form, possessing no form in itself except the attribute of potentiality. For Avicenna prime matter is explicitly not a kind of substrate that allows substance to undergo gradual change. Qualities of a substance can undergo change, but these changes are with respect to the particular matter of the object (e.g., the wood of the bed), not insofar as it is matter, but insofar as that matter’s form changes. Prime matter is actualized by some form, but it is not a subsisting actualized entity such that it could be changed from one thing into another. When it is not being actualized by a form it is nothing but pure potentiality. Prime matter is said to have, at most, the form of corporeality (*ṣūrat al-jism*).

Ibn Rushd, commenting on Aristotle, points out that unlike the aspect of the human soul called the “material intellect,” which was so named not because it was a kind of matter but because it received all the forms of concepts and universals, prime matter receives the forms of bodies that are differentiated and particular. Prime matter is determined in sensible forms. Ibn Rushd was willing to give prime matter more of an intrinsic character and states that prime matter is never not actualized in the state of the three dimensions of body and is never divested or stripped of these dimensions;

otherwise body would become non-body and dimension would become non-dimension. This seems to be different from Avicenna's position that three dimensionality is the first form that prime matter receives.

Jābir ibn Ḥayyān thought the conception of prime matter was nonsensical. In this he echoed Plotinus, who considered it a "mere shadow upon a shadow." Dialectical theologians (including both Mu'tazilites and Ash'arites) by and large rejected the form-matter account of bodies in favor of variants of a theory of atoms being the ultimate constituent of bodies, whose nature and changes were directly created and sustained by God. Atomism was an essential part of most theologians' proofs regarding the contingency of the world and its ultimate dependence upon God. Al-Bīrūnī also sided with the atomists against Avicenna.

In one of Ibn al-'Arabī's cosmologies (following William Chittick in considering these to be multiple) the idea of the *habā'* or "dust" is used along with the Intellect, Universal Soul, and Universal Body. But any conception of prime matter or "ultimate nature" (*al-ṭabī'ah al-'uzmā*) must be understood in the context of his most consistently employed metaphysics, namely the self-disclosure and manifestation of the Divine Names and Qualities. For Ibn al-'Arabī everything is necessarily a manifestation of a Divine Name. God's knowledge of Himself is the reality of the immutable identities (*al-a'yān al-thābitah*), which are forms in God's Knowledge. God then bestows light, or existence, or His "Breath" upon these forms and they then become realized in the created order.

The most plausible way to interpret Ibn al-'Arabī's use of prime matter is to assume that he either uses it as one of the many ways in which he situates his overall vision of the prevailing intellectual culture, in which were those such as the Peripatetics who took prime matter to be something real, or as a kind of metaphor to describe one as-

pect of his overall metaphysics, as when he says in the *Futūḥāt* that "In [God's] Knowledge we are like forms in dust (*habā'*)."¹ The term *habā'* is one which Ibn al-'Arabī elsewhere uses to signify prime matter. The metaphysical notion of the actualization of a pure potential does not map neatly onto the metaphysics of Ibn al-'Arabī, unless it is seen as being identical with the bodily dimension the "Breath of the Compassionate" (*nafas al-Raḥmān*) upon which all creation depends for its very being. But the Divine Breath is not the pure potentiality of the Peripatetics or Brethren of Purity. It is an Attribute of God Himself. Ibn al-'Arabī's metaphysics of the breath has certain similarities with atomist metaphysics, in that God's "breathing" constantly renews or re-creates all of creation with each breath. Each creature is in a sense a word spoken upon the Breath of God, but this is something quite different from the substrate or potentiality of the Peripatetics. Nothing about God could properly be described as being "actualized," neither the Breath of the Compassionate nor any other Attribute.

It should be noted that for Suhrawardī prime matter was a purely mental concept that had no objective reality, in keeping with his overall metaphysics of light which did not require reliance on the form/matter distinction. For him each being was made of varying modes of light and was a single unified thing unto itself, and not a composite of form and matter. That which is known of the object is not its form separated from its matter, but its very luminous substance. Considering the similarities in metaphysics, one would have expected Suhrawardī's explicit repudiation of prime matter to have been echoed by Ibn al-'Arabī; perhaps it was Ibn al-'Arabī's willingness to express himself using multiple languages of cosmology and also his disinterest in establishing a thoroughly systematic metaphysics that allowed him to deploy the concept in various ways.

Prime matter also figures in Mullā Ṣadrā's concept of change. For Ṣadrā nature (*ṭabī'ah*) is that by which change (motion, *ḥarakah*) takes place. Nature is an essential attribute of bodily things, and its essence is to be fluid. It stands between pure actuality and pure potentiality. In being itself, it is change. Without nature that which is changeless would not be able to bring anything into actualization, because there needs to be a reality that allows the unchanging to effect change. Nature does not bring about change by itself; rather this actualization of a potential (which is what change or motion is) must be brought about by that which is outside of matter.

For Ṣadrā the act of being or becoming "disengaged" (*mujarrad*) from matter is significant in that ultimate spiritual perfection is described by Sadra as the actualization, out of matter, of human potentialities. The "disengaging" of the soul from matter in its acts of perception is the very progress along the spiritual path of becoming more and more intense in its existence. Ṣadrā's doctrine of nature as the principle of the actualization of pure potential was of a piece with his doctrine of change-in-substance. This latter doctrine held that substances could in fact change while still remaining the same substances.

A question can be asked, however, whether Ṣadrā's embracing of prime matter as a cosmological principle can be harmonized with his overall ontology and metaphysics of the oneness of existence. If existence is one and if all things are manifestations of God's Names and Qualities, then what Name or Quality is manifested by that which has no essence in and of itself? It could be argued that the same reasons that led Suhrawardī to dismiss prime matter could have led Ṣadrā to do the same.

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