Published: July 20, 2004
Last Updated: December 3, 2012

MICROCOSM AND MACROCOSM

MICROCOSM and MACROCOSM in pre-Islamic Iranian thought. The theory of microcosm and macrocosm, i.e., of the correspondence between the different parts of the human being and those of the cosmos, is no mere mental game. It is one of the ancient ways in which people have represented existence, seeking to define a unity between themselves and the world in which they lived. It is thus one of the great theories of the ancient world, especially in the systems of Vedic, classical Greek, and Gnostic thought. This vision of the world is not unique to the Middle East and India but is also attested in the Far East. In the West it continued into, and even beyond, the Middle Ages. It was not overlooked within ancient Iranian thought. While not made explicit in the Avesta, the concept is well attested in the religions that developed during the Sasanian period: Manicheism, Mazdaism (or Zoroastrianism), and Nestorian Christianity. Within these, philosophical speculations were closely connected with medicine and astrology; and so there developed a structured body of doctrines which is of great interest to the historian of ideas.

Two sets of correspondences lie at the basis of the theory of microcosm and macrocosm: (1) the equivalence between the different components of the material world and the various elements of the human body, which often amount to seven—hence the link with the astrological seven planets; and (2) the correspondence of the four cosmic elements (water, fire, air, earth) to the four bodily humors (blood, phlegm, red bile, black bile); the members within

either group mutually contrast in the same fashion in respect to their qualities—hu midity, dryness, heat, and cold. The Manichean treatise in Chinese provides a good summary of all the implications of the micro-macrocosm doctrine; for it also includes, within the correspondence of the fleshly body to the celestial and terrestrial universe, other features such as the celestial wheel, the planets, the seas and the rivers, the dry and the humid, the plants and the animals, the mountains, the four seasons, the years, months, days (Gignoux, 1994, pp. 29-30).

Neither the Gathas nor the Younger Avesta explicitly attest this theory. Only one passage of the Vendidad (17.5) appears to compare hair with plants, this equivalence being one of the components. It is only in the Pahlavi texts of the 9th-10th centuries that the elements of the doctrine are collected. Most notable is the *Bundahišn*, chapter 28—the very title of which ("About the human body resembling the world") is eloquent—which contains a wealth of equivalences. For example: "The skin is like the sky, the flesh like earth, the bones like mountains, and the veins like rivers, the blood in the body like the water of the sea, the belly like the ocean; and hairs are like the plants." Seven parts of the body form the nucleus of the doctrine (except that here the belly no doubt is an error by the editor), but the book enumerates many other correspondences. The parallelism of some of them with those mentioned by a 6th-century Syriac author, Aḥūhdemmeh, suggests a borrowing from the Syriac source (Gignoux, 2001b, pp. 222-23). In another passage (*Bundahišn* [TD2], pp. 194-95), the classification of seven visible versus invisible, and seizable versus non-seizable, things draws a parallel between the stars and atmospheric phenomena, the seven terrestrial creations (with mistakes), and the seven parts of the body. These last are limited here to the head, namely, the two ears, two eyes, two nostrils, and mouth. Elsewhere (*Bundahišn*, pp. 33-35) the list of seven terms is extended to the religious realm, so that the seven creations (sky, water, earth, plants, livestock, mankind, fire) are compared to the seven divin ities—Ohrmazd and the six Amesha Spentas.

In the chapter about the death of Gayomard (*Bundahišn*, p. 100.8-10), eight metals are said to have been formed from the eight parts of his body: lead came from the head, tin from the blood, silver from the marrow, iron from the feet, copper from the bones, crystal from the fat, steel from the arms, and gold from the living soul. However, these correspondences belong to the field of astrology, for the seven planets correspond to the seven metals, as shown, for example, in the *Syriac Treatise of Medicines* (Budge, I, pp. 488.24-489.3).

The Pahlavi *Dēnkard* provides a list of seven terms, followed by the mention of the four cosmic elements corresponding to the four humors, thus affirming the connection of the two doctrines of the theory as defined above. The passage (ed. Madan, I, p. 278) reads: “The body of the world consists of fire, water, earth, metals, plants, livestock, and mankind, just as the human body consists of marrow, blood, veins, nerves, bones, flesh, and hair. And the combinable elements of the world’s body are fire, air, humidity [i.e., water], and earth, just as the elements of the human body are air, blood, bile, and phlegm” (trans. Gignoux, 1994, p. 33). In the last-mentioned list, air is evidently a mistake for bile, of which there are two kinds. This is a copyist’s error, since Pahl. *wād*/*wā@y* “air” is written almost like *wiš* “bile.”

The priest Zādspram, in his *Anthology*, connects medicine with the micro-macrocosm theory. In chapter 30, he sets forth the seven parts of the human body, starting from the interior and proceeding to the exterior, as did the Manichean and Gnostic sources. He enumerates: marrow, bones, flesh, nerves, veins, skin, and hair. However, Zādspram does not relate these elements to the parts of the world, but rather to the seven planets according to Plato’s *Timaeus*. Thus the moon is the site of the marrow, Mercury that of the bones, Venus that of the flesh, the sun that of the nerves, Mars that of the veins, Jupiter that of the skin, and Saturn that of the hair. Elsewhere, in the eschatological chapter (34.7), it is said that the four cosmic elements preserve the seven parts of the body as though in storage, in expectation of resurrection by Ohrmazd at the end of time. It continues (34.8-16): earth is in charge of flesh, bones, and nerves; water in charge of blood; the plants are responsible for the conservation of hair (the text is faulty, but can be explained by the well-known parallel between hair and plants); light receives fire (?); and air, the vital soul. Thus the editor was inconsistent; instead of the expected four cosmic elements, the five terms earth, water, plants, light, and air are found. Later theologians (or copyists?) appear to have forgotten the logical correspondences in the micro-macrocosmic theory.

The Pahlavi text *Škand Gumānīg Vizār*, chapter 16, which is devoted to a critique of Manicheism (de Menasce, 1945, p. 253), attributes to Mani a doctrine of the microcosm, although it mentions only four of the seven elements. The author, Mardānfarrox ī Ohrmazddād, attacks the theory as diabolical, declaring that Ahriman was its author! It is surprising that Mardānfarrox rejects it as daevic, while all the other Pahlavi texts display its positive character. We can probably infer that he meant to assert that the

Mazdeans adopted this doctrine from the Manicheans, which would explain the opprobrium. In fact, the Mazdean expression for the microcosm, no doubt translated from Greek *mikrokosmos*, is *gehān ī kōdak*, similar to Manichean Middle Persian *šahr ī kōdak*, which is equivalent to Syr. *ʿalmā d-zawrā* "the little world."

The origins of the theory probably lay outside Iran and should be sought in the west, in Greece, or in the east, in India. The fact that Sasanian Iran borrowed this theory may explain the numerous inconsistencies pointed out above. The theory of the four elements goes back at least to Empedocles (5th century BCE). Plato adopted it, as well as Aristotle, who attributed two qualities to each of the elements in the following manner: fire is hot and dry, air is hot and humid, water is cold and humid, and earth is cold and dry. In addition, the elements communicate with each other through one of their qualities. It is no doubt an echo of these communications which we find in the *Kephalaia* (chap. 71, pp. 175-76, "on the combination of elements"); the idea also appears in the first chapter of the *Bundahišn*, where it is said that Ohrmazd created "fire from light, air from fire, and from the air he created water, and from water he created earth" (Nyberg, 1929, p. 221). The Stoics, Zeno and Chrysippus, set forth the theory of man as a microcosm, for according to them man was the measure of all things. However, astrology took advantage of these speculations by associating the four qualities of the elements with the seven planets (Gignoux, 2001a, p. 49). It may be stated that the Iranians received the Greek doctrine of microcosm and macrocosm from the Manicheans and perhaps also from Syriac sources. Several lists with seven terms are attested in Manichean literature, especially in the *Kephalaia*; but lists with five terms are also frequent—for instance, bones, nerves, flesh, veins and skin in a fragment of the *Book of Giants* (Gignoux, 1994, p. 40; see GIANTS, BOOK OF). These five parts of the human body are compared to the five cosmic elements, following Aristotle, who had added a fifth element to the list of four, namely ether. The roots of the *Book of Giants* lie in Jewish tradition, as is shown by the Qumran documents; the book was used in Hellenistic gnosis and by Mani. The *Book of Secrets of John* (Tardieu, 1984) also mentions the bones at the head of the lists, corresponding to the Persian idea that the bones are an essential part of the human being (Gignoux, 1979).

The constitution of the five-term lists may be explained by the seven planets being reduced to five by omission of the sun and moon, the two major light sources. (Manichean speculations are closely connected with astrology.) Syriac

sources attest these same theories; Aḥūhdemmeh in the 6th century wrote a treatise called “Man is a microcosm,” which apparently is lost. In the history of Qardag (in the Acts of the Persian Martyrs [q.v.], ed. P. Bedjan, *Acta martyrum et sanctorum* II, Paris and Leipzig, 1891, pp. 442-506), the luminaries are compared to the principal members (brain, heart, and liver) and the two eyes, as in the *Bundahišn*. Later, Theodore Bar Koni compared the seven terms of the human body to the seven attributes of God, as in the Gnostic text *Apocryphon of John* (Gignoux, 1994, p. 44). The eastern Syrians insisted on a theory of a bond which connected the human being to other creatures by his body, and to celestial beings by his soul; this is another adaptation of the macrocosm-microcosm theory. According to Tardieu (see above) the source of these doctrines is to be sought in non-Manichean gnosis, but it appears that the Mazdean lists are derived from the Manichean ones.

In conclusion, we must not neglect the importance of Indian sources, which combine diverse materials to illustrate the theory (see Filliozat, 1999). The famous hymn of *Ṛg-Veda* 10.90 is a remarkable example of it, a basic text of this theme which was orally transmitted through millennia (Gignoux, 1999, pp. 12-13). The doctrine is attested farther east, in China and Tibet, but somewhat later, perhaps from the 6th century; and this dating may indicate its introduction by the Manicheans.

BIBLIOGRAPHY

E. A. W. Budge, *The Syriac Book of Medicines* , 2 vols., London, 1913, repr. Amsterdam, 1976.

Bundahishn, ed. B. T. Anklesaria, Bombay, 1908.

E. Chavannes and P. Pelliot, “Un traité manichéen retrouvé en Chine,” *JA*,1911, pp. 499-617; 1913, pp. 123-392.

Dēnkard , ed. Madan, Bombay, 1911.

Philippe Gignoux, “Corps osseux et âme osseuse: essai sur le chamanisme dans l’Iran ancien,”*JA* 267, 1979, pp. 41-79.

Idem, “La doctrine du macrocosme-microcosme et ses origines gréco-gnostiques,” *Iranian and Indo-European Studies.Memorial Volume of Otakar Klima* , ed. Petr Vavroušek, Praha, 1994, pp. 27-52.

Idem, “Un témoin du syncrétisme mazdéen tardif: le traité pehlevi des *Sélections de Zādsparam,”Transition Periods in Iranian History*, Studia Iranica. Cahier 5, 1987, pp. 59-72.

Idem, “Anatomie et physiologie humaine chez un auteur syriaque, Aḥūhdemmeh.” *Comptes Rendus de l’Académie des Inscriptions et Belles-Lettres*,1998, pp. 231-42.

Idem, *Ressembler au monde:Nouveaux documents sur la théorie du macro-microcosme dans l’antiquité orientale*, Brepols, 1999.

Idem, *Man and Cosmos in Ancient History*, Serie Orientale Roma 91, 2001a.

Idem, “L’apport scientifique des chrétiens syriaques à l’Iran sassanide,” *JA* 289, 2001b, pp. 217-36.

Ph. Gignoux and A. Tafazzoli, *Anthologie de Zādspram*, Studia Iranica. Cahier 13, Paris, 1993.

Pierre Jean de Menasce, *Škand-Gumānīk Vicār*, *La solution décisive des doutes*, Fribourg en Suisse, 1945.

H. S. Nyberg, “Questions de cosmogonie et cosmologie mazdéennes,” *JA*, 1929, pp. 193-310.

H. J. Polotsky and A. Böhlig, eds., *Manichäische Handschriften der Staatlichen Museen zu Berlin, Band 1: Kephalaia, 1. Hälfte*, Mit einem Beitrag von Hugo Ibscher, Stuttgart, 1940.

M. Tardieu, *Ecrits gnostiques. Codex de Berlin*, Sources gnostiques et manichéennes 1, Paris, 1984.