

Chapter 4. Long-range, transcontinental manifestations of a transformation cycle of elements

4.1. Element cosmological systems worldwide

It is a widespread idea that the entire universe is composed of a handful of essences, which are combined and dissociated so as to produce the myriad concrete manifestations of reality. As we shall discuss in greater detail below, four elements⁶⁵ were identified by the Presocratic Greek philosopher / shaman Empedocles of Acragas / Agrigentum in *Graecia Magna* / Southern Italy (fifth c. BCE). In the Western tradition Empedocles has been regarded as the inventor worldwide of an element-based cosmological scheme. The model was subsequently reformulated and divulged by Plato and especially Aristotle, and became the very cornerstone of Western natural science, astrology, medicine, psychology, literary and artistic symbolism and iconography⁶⁶ including colour symbolism,⁶⁷ until well into Early Modern times.⁶⁸ It entered deeply into the

⁶⁵ This concept has gained a new lease on life in the works of Deleuze and Guattari (1972; Guattari 1989); cf. Macauley 1998; van Binsbergen 2008.

⁶⁶ In Western alchemical writings the four elements tend to be represented by conventional symbols, e.g. triangles standing on their base or top, intersected or not by a horizontal line. Chevalier & Gheerbrant (1994, s.v. 'élément') claim that there are basic line patterns to represent each of the four elements, e.g. wave, zigzag, log band – which is interesting because these very patterns dominate the iconography of the Southern African divination tablets used in four-tablet divination – a divinatory practice which forms one of the principal empirical referents in this book.

⁶⁷ Cf. Lyle 2006, listing the four colours black, red, white and yellow as a basic Indo-European scheme, without however making the obvious connection with the four elements. Note the projection onto geography, where seas of all these four colours have been distinguished (albeit not unambiguously) since Ancient times. Also note

esoteric traditions of mystery cults (Eitrem 1926-1927), Hermeticism,⁶⁹ the Ancient Sabaeans of Yemen, the Qarmatians (Massignon 1974), alchemy, Islamic occult sciences (*cf.* Nasr 1964; Ullman 1972; Fahd 1966), even surfacing in Post-Modern, globally distributed digital media and games such as *Avatar*, etc. However, this present argument will explore the Working Hypothesis that, in his Western (South Italian) periphery of a Greek world that had always been highly indebted to adjacent West Asia (regardless of possible connections further afield, in Asia and Africa), Empedocles may have merely codified, and corrupted, a thought system which, in various local variants, had been circulating throughout Eurasia a dozen millennia since the Upper Palaeolithic; or, according our Alternative Working Hypothesis, for a much shorter period but still since the Bronze Age (5-3 ka BP).

As the authorities on the Sabaeans indicate,⁷⁰ among this ethnic group the planets were known as ‘Fathers’, the elements as ‘Mothers’ – an interesting background to Islamic geomancy, where the initial set of four broken or unbroken lines, on which the entire divinatory procedure is based (*cf.* the six lines, one above the other, out of which each of the 64 hexagrams of *Yi Jing* consists: ☰ ☱ ☲ ☳ ☴ ☵, etc.), is also called ‘Mothers’. The same situation obtained in the most likely original milieu of Islamic geomancy, that of the اخوان الصفا *Iḥwān al-Ṣafā* of Iraq c. 1000 CE (de Boer 1921: 90). These scholarly contexts were all highly indebted to Plato’s *Timaeus*, in which the symbolism of the *mother* as primal matter plays an important role (*Timaeus* 52b; *cf.* Johnson 1973; Plato 1975a). In Western astrology, the reference to ‘mothers’ goes back at least to Vettius Valens.⁷¹ The latter distinguishes some twelve τῶποι *topi*, artificial astro-

practically the same colours in Fig. 4.3 (also front cover) from Southern Africa.

⁶⁸ As late as the middle of the 19th c. CE, the London professor of chemistry Thomas Griffiths (1851) was honoured to explain to Queen Victoria of England the principles of Modern chemistry in the, then still eminently familiar, terms of the four elements of Empedocles.

⁶⁹ Virgin 1885; Klein Franke 1973; Quispel 1992; *Corpus Hermeticum* 1945-54; Yates 1964; Waite 1893.

⁷⁰ Carra de Vaux 1974; Shahrastani 1859; Chwolson 1968; de Boer 1921: 90, 1967.

⁷¹ Vettius Valens (c. 120 – c. 175 CE; *cf.* Tester 1989: 47; no reference to ‘mothers’ in this sense or in related senses is to be found in Bouché-Leclercq’s monumental study of Greek astrology; although primal matter appears here in an Empedoclean sense as *mère universelle*, Bouché-Leclercq 1899: 13, while Earth features as mother of gods

logical points on the horoscope, many of whose names resonate with the Arabic and Greek names of the sixteen basic configurations in geomancy which was to emerge nearly a millennium later; nonetheless, a detailed analysis (van Binsbergen 1996c) brings out that it is primarily *other* astrological concepts than the *topi* which inspired these geomantic configuration names. In West African Ifa divination, the expression ‘mothers’ has been preserved to indicate the sixteen basic configurations (Ellis 188; Dennett 1968 / 1910: 149).

Having examined the extent of Presocratic influence on a particularly influential alchemical text, the *Turba philosophorum*,⁷² Peter Kingsley (who from the 1990s has stressed – rightly, but much to the dislike of mainstream classicists and historians of philosophy and of natural science – Empedocles’ identity as a shaman besides that of a philosopher) states:

‘And yet behind these similarities of form and content lies something much more fundamental. Underneath the accretions of Islamic, alchemical and also Gnostic ideas, genuine teachings of the Presocratic philosophers are preserved at the very core of the *Turba* tradition. Elsewhere ((...) [Kingsley 1995a]: chs 5, 15-24) I have outlined the route followed by these Presocratic teachings before they surfaced at Akhmim in Upper Egypt during the tenth century AD; *the subsequent course of transmission as they penetrated eastwards as far as Iran; and – last but not least – the significance of the way that teachings which originally owed so much to the East eventually returned to the East.*’ (italics added) (Kingsley 1994b).⁷³

Although unwelcome to some classicists (Bremmer, for instance, rejects the very idea of the shamanistic roots of Greek poetry, including that of Empedocles; Bremmer 1993: 1993: 25), Kingsley’s emphasis on the shamanic side of Empedocles is well-taken. His ideas form merely the culmination of a process, throughout the second half of the 20th c. CE, in which the specialists came to realise the impact of Asian shamanic thought on what until then merely appeared to constitute Greek rationality. The signs of this shamanic influence on classic Greek civilisation have been manifest to those who could read them. For instance, as Jason’s companion, Medeia (significantly a Colchian, *i.e.* West Asian,

and of Heaven, *e.g.* pp. 31, 75n, 92.

⁷² Cf. Gratarolo / Waite 1896; Plessner 1954.

⁷³ On the same East-West reverberations or pendulum-swing movement, cf. Frobenius 1923: *passim*, and Needham with Ling, 1961, Vol. I.

princess) engaged in the dismemberment and cooking of her brother and of king Pelias (Apollonius Rhodius, *Argonautica*); this is clearly reminiscent of shamanism, where reviving of the dead by the proper arrangement of their bones is a common theme – right through to the *sangoma* cult in Southern Africa, where those making animal sacrifices meticulously collect the bones and guard them, for fear that enemies would get hold of these bones and undo the sacrifice. Once recognised in their proper identity, shamans (usually set apart as alien and bewildering) turn out to abound in the classical Greek tradition: Pythagoras, Abaris, Empedocles, Orpheus, Aristeas, Epimenides, Hermetimus, Parmenides. Among these, Empedocles is not the only one to be canonised as a Presocratic philosopher, in the first place. The position is summarised by MacLennan:

‘It is now well established that ancient Greek philosophy had roots in the shamanic practices common to many cultures (e.g., Dodds 1951: Ch. 5; Butterworth 1966: Ch. 4, 1970; Kingsley 1994[c], 1995: Ch. 15). The Greeks learned these techniques from the “Scythians” when they colonized the north shore of the Black Sea in the seventh century BCE and from the Thracians and Persian Magi, who also knew north-Asiatic shamanism (Hornblower & Spawforth 1996: 1375; Kingsley 1995[a]: 226-227). These practices are reflected in the stories of Orpheus, who exhibits many of the features of a “great shaman” (Dodds 1951: 147; Eliade 1964: 391-392); of Aristeas (8th-6th cents. BCE), whose soul could leave his body in trance and accompany Apollo as his raven; of Abaris (7th-6th cents. BCE), the healer-sage (*iatromantis*) who traveled on a magic arrow (a typical shamanic wand), which he later gave to Pythagoras; and of the semi-historical Epimenides (7th-6th cents. BCE), who purified Athens (596 BCE) and was also known for leaving his body while in a trance state (Avery 1962, s.v.; Dodds 1951: 140-142; Hornblower & Spawforth 1996, s.v.). They all exemplify many of the characteristics of shamanic practice, as presented by Eliade (1964 especially Ch. 11), and were closely associated with Hyperborean Apollo (reflecting, again, the northern connections). Evidence of shamanic practice is also apparent in ancient biographies of historical figures, such as the pre-Socratic philosophers Pythagoras (572-497 BCE), who descended into the underworld and claimed to have the soul of Hermetimus, an ancient shaman, and whose followers venerated the Orphica and sometimes wrote under the name “Orpheus” (Dodds 1951: 141, 143-145); Parmenides (fl. 495), whose poem, with its progress from the illusory world of duality to The One, has many of the hallmarks of a shamanic journey (Kingsley 1999, 2003); Empedocles (c. 495-435), a magical healer who boasted that he could control the weather and retrieve souls from Hades (Dodds 1951: 145-147; Kingsley 1995); and other less well-known figures. They all combined “the still undifferentiated functions of magician and naturalist, poet and philosopher, preacher, healer, and public counsel[or]” (Dodds 1951: 146) and bore the distinguished title “healer-seer” (*iatromantis*), as a good term as any for a shaman.’ (MacLennan 2006)

The Greeks' contact with the world of shamanism usually refers to the elusive ethnic category of the Hyperboreans, about whom considerable information was circulating, as evident from the following extensive passage from Diodorus Siculus (*Bibliotheca Historica*, 1933, II, 47 1-2):

47. Ἡμεῖς δ' εἶπε τὰ πρὸς ἄρκτους κεκλιμένα
μέρη τῆς Ἀσίας ἠξιώσαμεν ἀναγραφῆς, οὐκ
ἀνοικίον εἶναι νομίζομεν τὰ περὶ τῶν Ὑπερβορέων
μυθολογούμενα διελθεῖν. τῶν γὰρ τὰς παλαιὰς
μυθολογίας ἀναγεγραφότων Ἑσκαταῖος καὶ τινας
ἑτεροὶ φασιν ἐν τοῖς ἀντιπέρας τῆς Κελτικῆς
τόποις κατὰ τὸν ὠκεανὸν εἶναι νῆσον οὐκ ἐλάττω
τῆς Σικελίας. ταύτην ὑπάρχειν μὲν κατὰ τὰς
ἄρκτους, κατοικεῖσθαι δὲ ὑπὸ τῶν ὀνομαζομένων
Ἑπερβορέων ἀπὸ τοῦ πορρωτέρω κείσθαι τῆς
βορείου πνοῆς· οὖσαν δ' αὐτὴν εἰγεῖν τε καὶ
πάμφορον, ἐτι δ' εὐκρασίᾳ διαφρούσαν, διττοὺς
2 κατ' ἔτος ἐκφέρειν καρπούς. μυθολογοῦσι δ'
ἐν αὐτῇ τὴν Λητῶν γεγονέναι· διὸ καὶ τὸν Ἀπόλλω
μάλιστα τῶν ἄλλων θεῶν παρ' αὐτοῖς τιμᾶσθαι·
εἶναι δ' αὐτοὺς ὡσπερ ἱερεῖς τινὰς Ἀπόλλωνος
διὰ τὸ τὸν θεὸν τοῦτον καθ' ἡμέραν ὑπ' αὐτῶν
ὑμνεῖσθαι μετ' ᾠδῆς συνεχῶς καὶ τιμᾶσθαι δια-
φερόντως. ὑπάρχειν δὲ καὶ κατὰ τὴν νῆσον
τέμενος τε Ἀπόλλωνος μεγαλοπρεπῆς καὶ ναὸν
ἀξιόλογον ἀναθήμασι πολλοῖς κεκοσμημένον, σφαι-
3 ροειδῆ τῷ σχήματι. καὶ πόλιν μὲν ὑπάρχειν
ἱερὰν τοῦ θεοῦ τοῦτου, τῶν δὲ κατοικούντων
αὐτὴν τοὺς πλείστους εἶναι κιθαριστάς, καὶ
συνεχῶς ἐν τῷ ναῷ κιθαρίζοντας ὕμνος λέγειν τῷ
θεῷ μετ' ᾠδῆς, ἀποσεμνύνοντας αὐτοῦ τὰς πράξεις.
4 Ἔχουν δὲ τοὺς Ὑπερβορέους ἰδίαν τινα διάλεκτον,
καὶ πρὸς τοὺς Ἕλληνας οἰκειότατα διακείσθαι,
καὶ μάλιστα πρὸς τοὺς Ἀθηναίους καὶ Δηλίους,
ἐκ παλαιῶν χρόνων παρεληφότας τὴν εὐνοίαν
ταύτην. καὶ τῶν Ἑλλήνων τινὰς μυθολογοῦσι
παραβαλεῖν εἰς Ὑπερβορέους, καὶ ἀναθήματα
πολυτελῆ καταλιπεῖν γράμμασι· Ἑλληνικοῖς ἐπι-
5 γεγραμμένα. ὡσαύτως δὲ καὶ ἐκ τῶν Ὑπερβορέων

47. Now for our part, since we have seen fit to make mention of the regions of Asia which lie to the north, we feel that it will not be foreign to our purpose to discuss the legendary accounts of the Hyperboreans.⁷⁴ Of those who have written about the ancient myths, Hecataeus and certain others say that in the regions beyond the land of the Celts⁷⁵ there lies in the ocean an island no smaller than Sicily. This island, the account continues, is situated in the north and is inhabited by the Hyperboreans, who are called by that name because their home is beyond the point whence the north wind (Boreas) blows; and the island is both fertile and productive of every crop, and since it has an unusually temperate climate it produces two harvests each year. Moreover, the following legend is told concerning it: Leto⁷⁶ was born on this island, and for that reason Apollo is honoured among them above all other gods; and the inhabitants are looked upon as priests of Apollo, after a manner, since daily they praise this god continuously in song and honour him exceedingly. And there is also on the island both a magnificent sacred precinct of Apollo and a notable temple which is adorned with many votive offerings and is spherical in shape. Furthermore, a city is there which is sacred to this god, and the majority of its inhabitants are players on the cithara; and these continually play this instrument in the temple and sing hymns of praise to the god, glorifying his deeds.

The Hyperboreans also have a language,

⁷⁴ There seems good reason (see R. Hennig, 'Die Anfänge des kulturellen und Handelsverkehrs in der Mittelmeerwelt,' *Historische Zeitschrift*, 139 (1928), 1-33) to see in this people who live 'beyond the north wind' as their name signifies, an early acquaintance of the Greeks, through the medium of the Celts, with Britain and its inhabitants. In this chapter Apollo would be the Celtic Sun-god Borvon, and the 'sacred precinct' of Apollo would be the famous Stone Age remains of Stonehenge. [translator's original footnote]

⁷⁵ i.e. Gaul. [translator's original footnote]

⁷⁶ The mother by Zeus of Apollo and Artemis. [translator's original footnote]

we are informed, which is peculiar to them, and are most friendly disposed towards the Greeks, and especially towards the Athenians and the Delians,⁷⁷ who have inherited this good-will from most ancient times. The myth also relates that certain Greeks visited the Hyperboreans and left behind them there costly votive offerings bearing inscriptions in Greek letters. And in the same way Abaris,⁷⁸ a Hyperborean, came to Greece in ancient times and renewed the goodwill and kinship of his people to the Delians. They say also that the [M]oon, as viewed from this island, appears to be but a little distance from the earth and to have upon it prominences, like those of the earth, which are visible to the eye. The account is also given that the god visits the island every nineteen years, the period in which the return of the stars to the same place in the heavens is accomplished; and for this reason the nineteen-year period is called by the Greeks the ‘year of Meton’.⁷⁹ At the time of this appearance of the god he both plays on the cithara and dances continuously the night through from the vernal equinox until the rising of the Pleiades, expressing in this manner his delight in his successes. And the kings of this city and the supervisors of the sacred precinct are called Boreadae, since they are descendants of Boreas, and the succession to these positions is always kept in their family.

48. But now that we have examined these matters we shall turn our account to the other parts of Asia which have not yet been ...

Ἄβαριν εἰς τὴν Ἑλλάδα κατατήσαντα τὸ παλαιὸν ἀνασῶσαι τὴν πρὸς Δηλίους εὐνοίαν τε καὶ συγγένειαν. φασὶ δὲ καὶ τὴν σελήνην ἐκ ταύτης τῆς νήσου φαίνεσθαι παντελῶς ὀλίγον ἀπέχουσαν τῆς γῆς καὶ τινας ἐξοχὰς γεώδεις ἔχουσαν ἐν αὐτῇ φανεράς. λέγεται δὲ καὶ τὸν θεὸν διὰ ἑτῶν ἑνεακαίδεκα καταντᾶν εἰς τὴν νήσον, ἐν οἷς αἱ τῶν ἀστέρων ἀποκαταστάσεις ἐπὶ τέλος ἄγονται· καὶ διὰ τοῦτο τὸν ἑνεακαίδεκαετῆ χρόνον ὑπὸ τῶν Ἑλλήνων Μέτωνος ἑνιαυτὸν ὀνομάζεσθαι. κατὰ δὲ τὴν ἐπιφάνειαν ταύτην τὸν θεὸν κitharίζειν τε καὶ χορεύειν συνεχῶς τὰς νύκτας ἀπὸ ἰσημερίας ἑαρινῆς ἕως πλειάδος ἀνατολῆς ἐπὶ τοῖς ἰδίοις εὐήμερημασι τερπόμενον. βασιλεύει δὲ τῆς πόλεως ταύτης καὶ τοῦ τεμένους ἐπάρχει τοὺς ὀνομαζομένους Βορεάδας, ἀπογόνους ὄντας Βορέου, καὶ κατὰ γένος αἰεὶ διαδέχεσθαι τὰς ἀρχάς.

48. Τούτων δ' ἡμῖν διεκρινημένων μεταβιβάσομεν τὸν λόγον ἐπὶ τὰ ἕτερα μέρη τῆς Ἀσίας τὰ

Some specialists would rather see the shamanic influences in Ancient Greece as coming from the North East, from Siberia, in line with present-

⁷⁷ The island of Delos was from the earliest period of the Greek civilization a centre of the worship of Apollo. [*translator's original footnote*]

⁷⁸ Abaris is apparently a purely mythical figure, who in some authors sailed on his arrow, as on a witch's broomstick, through the air over rivers and seas. [*translator's original footnote*]

⁷⁹ The ‘Metonic Cycle’ is described in Book 12. 36. The cycle of Meton, which was introduced in Athens in 432 B.C., was designed to reconcile the lunar and the solar year, the latter being reckoned at 365 ⁵/₁₉ days. That this nineteen-year cycle was actually inaugurated at this time has been maintained, most recently, by W. B. Dinsmoor, *The Archoas of Athens in the Hellenistic Age* (1931), pp. 320-1 and *passim*. [*translator's original footnote*]

day associations. It is from there that, for instance, Guthrie (1954: 309 *f.*; echoing a basic distinction made by Nietzsche)⁸⁰ derives the power of Apollo as an rational influence mitigating and balancing the untamed version of ecstatic religion associated with Dionysus. We have seen that shamanic influences surfaced in the Ancient Near East and in Egypt already a millennium before the Presocratics rocked the archaic Greek world. Ancient Iranian and Mesopotamian *Magi*, as well as Scythians and Thracians, are now seen as intermediaries in the transmission process of shamanism to the Aegean (*cf.* West 1983: 146 *f.*).

We came to Kingsley's view on Empedocles as a shaman when examining the application of (what has generally been considered) the latter's four-element to alchemy. Now, the link between alchemy and the four-element system has received ample attention from the psychiatrist Jung.⁸¹ In the alchemical context (specifically Zosimos' *Visions*) the four elements are compared with the human body, and their separation with the tearing apart of that body. The latter, incidentally, is a common image in Antiquity, from the genitor's body supposed to be torn apart in conception according to the embryological views of Ancient Egypt and several other ancient civilisations (Stricker 1965-1989) – to the god Dionysus' body being torn apart by the Titans in Ancient Greek cultic and mythological notions – and may also resonate in the global mythology of dying vegetation gods referred to above. Also in the four-based geomantic divination of the Islamic world, Africa and Medieval to Early Modern Europe, the four basic lines (the 'mothers') are seen as head, trunk, legs and feet – the medieval geomancer Zunbul explicitly admits that the four geomantic lines stand for the four elements (Klein Franke 1973: 31); the latter author – who shows himself as ignorant of basic astrology as he proves to be unheedful of argumentative logic – explicitly suggests a link with Empedocles, but in fact the link is more indirect, the four-element doctrine having been absorbed into Greek astrology and thus passed on to Islamic geomancy, the latter being, as we have seen, *adulterated astrology*.

⁸⁰ *Cf.* Nietzsche 1972 / 1872; Benedict 1946 / 1934.

⁸¹ Jung 1944, 1946, 1987: 91 n. 25 (with references to Berthelot's standard works on the early history of chemistry, 1888 and 1893).

Local variation of element systems may be distinguished along a number of dimensions:

1. Number of elements.
2. Nature of the difference between elements.
 - a) full transformation cycle – elements change into each other according to strict rules
 - b) Intermediate forms between (a) and (c)
 - c) immutable categories without transitions or transformations from one into the other.

As far as the number of elements in the transformation cycle is concerned, Empedocles' four-element system presents the lowest number of elements among fully established element systems although in passing we will encounter inchoate forms with only three, two and even one element. Throughout Greek and Roman Antiquity a five-element system would appear to have been the standard one, adding a 'fifth element' (literally: 'quintessence') to Empedocles' famous series of: Earth, Water, Air and Fire. Nor are literate, formal element systems limited to the West. As Table 4.1 indicates, a five-fold partition is found in many parts of Eurasia, including in Hinduism and Buddhism, Japan,⁸² China (*cf.* Durkheim & Mauss 1901: 67-80), and in the Bön religion of Tibet. It was also found among the Daisanites (the followers of Barðaisan of Edessa, who – according to Ibn al-Nadim's *Fihrist* – by the 10th c. CE had scattered, from their original swamps of Southern Iraq, into Khurasan and China.⁸³ And whereas in Southwestern Asia, Africa and Europe a foursome-based geomantic divination became the rule from the end of the first millennium CE on, exceptionally also a five-some geomancy is found, for instance in the forged or simply pseudo-epigraphical *Napoleon's Book of*

⁸² An earlier version of this book's argument started out with a long description and analysis of the extent to which the Japanese cosmogonic myth on 'Izanami giving birth to Fire' and was destroyed in the process, should be read as another application of the transformation cycle of elements, under the strong classical Chinese cultural influence prevailing in Japan in the early 8th century CE, when the Taoist system had been in existence for over a millennium; *cf.* van Binsbergen 2009 and forthcoming.

⁸³ Drijvers 1966. Their series of elements has a somewhat Chinese ring (in line with West Asian / Chinese continuities to be discussed in Chapter 7, below): Fire, Wind, Water, Light, Darkness, and above these God on high. Southern Iraq was also, of course, the cradle of *'ilm al-raml*, the Islamic form of geomantic divination.

Fate (Parker 1988).⁸⁴

No.	Tradition ⁸⁵	Earth	Water	Air	Fire	5th (Quintessence)	Other
1	Ancient Mesopotamian ⁸⁶	Earth	Sea	Wind / Sky	Fire		
2	Greek	Earth	Water	Air	Fire	Aether / Idea	N/A
3	Latin	Earth	Water	Air	Fire	Quintessence	N/A
4	Hindu and	Earth	Water <i>ap</i>	Air <i>marut</i>	Fire <i>agni</i>	Aether /	

⁸⁴ Throughout this book, the names of elements will be capitalised, except in original quotations when such capitalisation may mean the imposition of a one-sided interpretation.

⁸⁵ Given the severe limitations of my specialist knowledge my rendering of Eurasian traditions in Table 4.1 must inevitably remain based on secondary sources. For many details of this scheme I am indebted to Anonymous 2008; from a more recent version of that text I have inserted the Ancient Mesopotamian entry (*cf.* Rochberg 2002), but not the Egyptian one; instead, I have inserted Diop's and my own view of the Ancient Egyptian system, see below, Section 4.3.2. I have suppressed, as a recent eclectic artefact, a line 'Neo-Paganism' (more or less coinciding with the New Age movement of the later 20th c. CE). For similar reasons I have omitted from this table a line 'Seven Chakras philosophy (combining Hindu and Buddhist themes)', for which the following entries were specified in the original source: *Sahasrara*, 'Crown': Thought / Space; *Ajña*, 'Third Eye': Light / Dark; *Vishuddhi*, 'Throat': Ether / Sound; *Anahata*, 'Heart': Air; *Manipura*, 'Navel': Fire; *Svadhithana*, 'Sacral': Water; *Muladhara*, 'Root': Earth.

⁸⁶ *I.e.* Sumerian and Babylonian; although differing in period and linguistic affiliation, the ritual and mythological system of both civilisations was largely continuous; *cf.* Lambert 1975; Kramer 1959: 79, where the four (not yet five) Sumerian principal gods appear almost as elements. Specialists' attribution of element concepts in the Ancient Mesopotamian context is somewhat uncertain and arbitrary: elsewhere, the same leading Assyriologist Lambert (1980) speaks of three primal elements: Water, Earth and Time.

⁸⁷ The *pancha mahabhuta*, or 'five great elements' of Hinduism; the *mahabhuta* ('great elements') or *catudhatu* ('four elements') of Pali / Early Buddhist literature are Earth, Water, Fire and Air. Also *cf.* Lusthaus 2011; Günther 1996: 115 *f.* The aggregates of the five elements, in other words the actual forms of appearance of things, are called *skandha* in Buddhist esoteric literature – a concept to which we shall return below in the Nkoya context. The *Caraka Samhita*, a major source for the South Asian Ayurveda system of medicine, speaks (IV.v.2-5) of 'six elements: Earth, Water, Fire, Wind, Ether, and the unmanifested Brahman.' However, with Kakar (1983: 229 *f.*) this number is reduced to the first five. Given the strong Hellenistic influence exerted on Central and South Asia from the late 1st millennium BCE onwards (Banerjee

	Buddhist ⁸⁷	<i>khsiti</i> or <i>bhumi</i>	or <i>jala</i>	or <i>pavan</i> (air or wind);	or <i>tejas</i>	Sound and <i>byom</i> or <i>akasha</i> (aether)	
5	Japanese: <i>Godai</i> 五大	Earth 地 <i>chi</i>	Water 水 <i>sui, mizu</i>	Wind 風 <i>fu, kaze</i>	Fire 火 <i>ka, hi</i>	Void / Sky / Heaven (空) <i>Kū, sora</i>	Consciousness
6	Chinese <i>Wu Xing</i> 五行 'Five Phases' ⁸⁸	Earth 土 <i>tū</i>	Water 水 <i>shuǐ</i>	N/A ⁸⁹	Fire 火 <i>huǒ</i>	Void	Metal 金 <i>jīn</i> , Wood 木 <i>mù</i>
7	Bön (Tibet)	Earth	Water	Air	Fire	Space	N/A
8	Ancient Egypt	Earth	Water	Air	Fire		Sky, Aether

Table 4.1. Four or more elements in various Eurasian traditions.

In addition to these Eurasian data, and in considerable and surprising continuity with them, systems reminiscent of a transformation cycle of elements may be found in sub-Saharan Africa and North America, to which I shall devote a separate discussion below.

4.2. The transformation cycle of elements in East Asia: Two classical Chinese correlative systems

The wisdom systems we find in classic, literate East Asian civilisations are known as 'correlative systems':⁹⁰ reality is subdivided into a limited number of named symbolic domains, and each of these domains systematically takes on a specific value on a number of cosmological and hu-

1981), also very conspicuous in the realm of wisdom systems, cosmologies and divination (*cf.* Pingree 1978), probably the Hindu and Buddhist listings in Table 4.1 are far from independent inventions, but instead are indebted to the Greek four-element system attributed to Empedocles, which had become the general Greek norm by Hellenistic times. This is also the view I shall adopt in the concluding Chapter, 9.

⁸⁸ *Cf.* Fung Yu-lan 1952: II, 13; Needham 1975; Needham *c.s.*, II, 260 ff; Maciocia 2005; Eberhard 1993 / 1986: 93, 105, 309 and 1933.

⁸⁹ We note that Air is not a Chinese classical element, although the concept of 氣 Qi / Chi comes close.

⁹⁰ Needham *c.s.* 1956; Fiskejo 2000; Carus 1898; *cf.* footnote 3, above. Gadd 1966 makes clear that from the very beginning (early 2nd mill. BCE) 'the two queens of Babylonian science, the extispicium and astrology', constituted correlative systems.

man-existential dimensions (the heavens, minerals, animal life, plant life, kinship, politics, colours, music, topography etc.) so that the entire cosmos can be subsumed in a matrix whose columns define symbolic domains and whose rows define cosmological / existential dimensions (*cf.* Table 4.2). Correlative systems are, however, not limited to East Asia. A familiar example of a correlative system is Ancient Greek astrology (Bouché-Leclercq 1879, 1899; Tester 1989; Pingree 1978) which developed in the middle of the first millennium BCE under Mesopotamian and Egyptian influence, and subsequently greatly influenced divination, arts and *belles lettres* in Europe, the Islamic world and South Asia. Correlative systems are powerful, comprehensive and tautological cosmological statements, conducive to argued meaning and connections in personal and societal affairs, and therefore an inexhaustible source of inspiration for divination.

At the heart of Taoism as a wisdom philosophy of transformation with divinatory applications, is most clearly a transformation cycle. Earth, Water, Fire, Metal and Wood constantly produce each other and work upon each other in a complex cycle that shows how the specific nature of each 'element' at each moment in each specific situation is ephemeral and incidental, giving way to another element phase under specific circumstances.

Fig. 4.1 renders, as a special case, the Taoist, classic Chinese transformation cycle in its simplest form (*cf.* Needham *c.s.* 1956; Fiskejo 2000). Destruction and Production are the two basic relations between elements in this proto-historic transformation cycle. Derived from Production and Destruction are the secondary relations Furtherance / Blessing and Hindrance / Insult, respectively.

This is essentially a rendering of the formula given by Needham with Ling (1956: II, 260f):

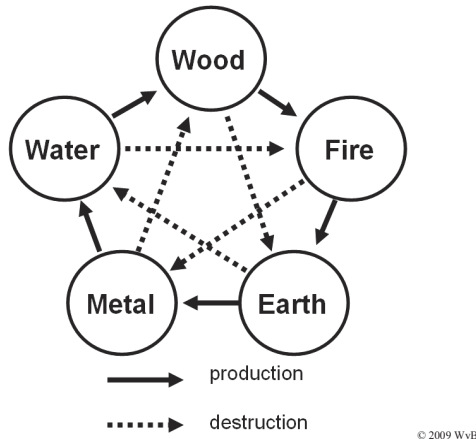
'Wood destroys (conquers(...)) Earth, but Metal controls (...) the process
Metal destroys (conquers (...)) Wood, but Fire controls (...) the process
Fire destroys (conquers (...)) Metal, but Water controls (...) the process
Water destroys (conquers (...)) Fire, but Earth controls (...) the process
Earth destroys (conquers (...)) Water, but Wood controls (...) the process'

with this proviso that in addition to the destruction relations, I have also

shown the productive relations.

This cycle of transformation essentially defines three roles: the Destructor, the Destroyed, and the Catalyst (Fig. 4.2). Even more elaborate versions have been published, in which the cycles shown here are complemented by other cycles.

The essence of the Chinese Taoist transformation cycle of elements is that the difference between each element is accidental and situational, and that each of them may turn into all others in one or two steps. Constituting a particular element is an accidental and incidental condition, not an ontological given. Since the distinctions between the elements are ephemeral and non-essential, there is no fundamental difference between them – absolute, transcendental differences are absent from the Taoist system, which is geared to a constant flow of immanentalism, – in other words, which is an expression of a worldview that at no point needs to take recourse to the idea of an order of Being that is radically and absolutely different from the natural experiential order of the here and now, in which the human experience evolves itself.



In attenuated form, the relationships of Production and Destruction as indicated may also be conceived as furtherance, friendship and praise (for Production), and hindrance, enmity and insult (for Destruction), respectively.

Fig. 4.1. Basic transformations in the classic Taoist cycle of elements.

In fact, however, the model is much more complicated, because for each relation between two elements that produce or destroy each other, there is a third element that controls the process – as some sort of catalyst.

Against this background we can also situate the famous *Yi Jing* system of changes, whose dynamic logic resides in the systematic ways in which superimposed pairs of trigrams (☰, ☷, ☱, ☴, ☲, ☵, ☳, ☶: all the $2^3 = 8$ three-item permutations that can be made of broken and unbroken lines, are combined into $2^6 = 64$ named hexagrams, *i.e.* six-item configurations, *e.g.* ☰☷ ☱☴ ☲☵ ☳☶ etc.); between these hexagrams, and between the aspects of reality to which they are held to refer, systematic transformations are supposed to exist, whose generation and interpretation is the basis of *Yi Jing* as a cosmological, divinatory and psychological system revolving on systematic transformations, the subject of numerous comments in the West, by Legge, Wilhelm, Jung, etc.

These two classical Chinese correlative systems largely set the scene as far as East Asia is concerned. Let us now review the intermediate forms defined in Section 3.1.

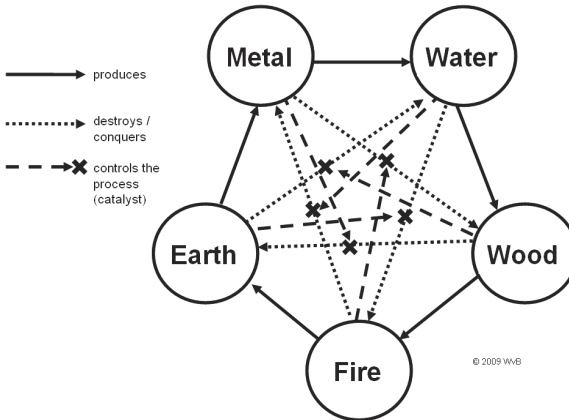


Fig. 4.2. The Taoist five-element transformation cycle according to Needham with Ling.

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
	Trigram Figure (vertical and rotated)	Binary Value	Name	Translation:	Image in Nature	Direction	Family Relationship	Body Part	Attribute	Stage/ State	Animal
1	☰ (☰)	111	乾 <i>qián</i>	the Creative, Force	heaven, aether (天)	northwest	father	head	strong	creative	horse
2	☱ (☱)	110	兌 <i>dài</i>	the Joyous, Open	swamp, marsh (澤)	west	third daughter	mouth	pleasure	tranquil (complete devotion)	sheep
3	☲ (☲)	101	離 <i>lí</i>	the Clinging, Radiance	fire (火)	south	second daughter	eye	light-giving, dependence	clinging, clarity, adaptable	pheasant
4	☳ (☳)	100	震 <i>zhèn</i>	the Arousing, Shake	Thunder (雷)	east	first son	foot	inciting movement	initiative	dragon
5	☴ (☴)	011	巽 <i>xùn</i>	the Gentle, Ground	wind (風), wood (木)	southeast	first daughter	thigh	penetrating	gentle entrance	fowl
6	☵ (☵)	010	坎 <i>kǎn</i>	the Abyssal, Gorge	water (水)	north	second son	ear	dangerous	in-motion	pig
7	☶ (☶)	001	艮 <i>gèn</i>	Keeping Still, Bound	mountain (山)	northeast	third son	hand	resting, stand-still	completion	wolf, dog
8	☷ (☷)	000	坤 <i>kūn</i>	the Receptive, Field	earth (地)	southwest	mother	belly	devoted, yielding	receptive	cow

The translation of the trigram names in column V mainly derives from R. Wilhelm (1924, 1931; cf. Jung 1974; Wilhelm & Cary 1951).

Table 4.2. General overview of the Yi Jing as a correlative system.

4.3. Intermediate forms between the full transformation cycle and the system of four immutable categories

In this section we shall deal with some intermediate forms between the two extremes

- a) full transformation cycle
- b) discarded transformation cycle with elements as fixed immutable positions,

in sub-Saharan Africa, Ancient Egypt, and North America.

Before we set out on this comparative exercise, let us remind ourselves of one mytheme which has very wide distribution and that seems intimately related to the conception of a transformation cycle of elements: this is the combat myth, studied in detail in an impressive cross-cultural study by Fontenrose (1980), and also found in many Flood myths worldwide (Isaak 2006). In 2009 I proposed to interpret the combat theme as the destructive phase of the transformation cycle of elements, which suggests a very wide applicability of this concept, including North America, possibly going back, in some early form, to the Upper Palaeolithic.

4.3.1. Indications of element systems in sub-Saharan Africa

Traces of an element system with four or more categories may be found in sub-Saharan Africa. The most elaborate and convincing case to my knowledge is that of the clan nomenclature of the Nkoya people of Western Zambia, which I discussed in Chapter 3 above. But other examples may be found.

Although complicated by the presence of an overarching Sky god Olorun and of a demiurge Obatala, the pantheon of Yoruba gods does have strong reminiscences of the Hesiodic and Egyptian cosmology, with an implied transformation cycle of elements:

‘Their principal gods are: 1. Olorun, the [S]ky-god [AETHER?], who is the personification of the firmament; he is the equivalent of the Nyan-kupon of the Tshis, Nyonmo of the Gas, and Mawu of the Ewes. The Egyptian equivalent

was Pet (...).⁹¹ The Yorubas, like the Egyptians, believed the [S]ky to be a solid body, which curved over the earth so as to cover it like a vaulted roof. (...) Olorun is too distant, or too indifferent, to interfere in the affairs of this world. He has no images, symbols, priests or temples, and is only invoked in times of calamity when the lesser gods will not answer their worshippers. 2. Obatala, who was made by Olorun, and manages the heavens and the earth for him. He is a [S]ky-god with human attributes. He made the first man and woman out of clay, and his equivalent among the gods of Egypt is Ptah, whom we see at Philae fashioning a king on a potter's wheel. As a judge he possesses some of the attributes of the Egyptian god Osiris. [AIR?, EITHER ?] 3. Odudua, the wife of Obatala, is always represented as a seated woman nursing a child; in this respect she resembles the Egyptian goddess Isis, but as the patroness of love her Egyptian equivalent is Hathor. 4 and 5. Odudua bore her husband a boy and girl called Aganju and Yemaja, who represent Land [EARTH] and Water [WATER] respectively. The brother and sister married, and their son was called Orungan, *i.e.*, the Air. [AIR] The following gods were the fruit of the unlawful intercourse of Orungan with his mother Yemaja: Dada, a vegetable god [WOOD]; Shango, lightning god [FIRE?]; Ogun, god of iron [METAL]⁹² and war; Olokun, sea-god; Olosa, lagoon-god; Oya, Niger-god; Oshun, river-god; Oba, river-god; Orisha Oko, god of agriculture; Oshosi, god of hunters; Oke, god of mountains; Aje Shaluga, god of wealth; Shankpanna, smallpox-god; Orun, the Sun [FIRE?]; and Oshu, the [M]oon. Oshumare, the rainbow, is a servant of Shango, and his messenger Ara is the thunderclap; his slave is Biri, the darkness [CHAOS]. Shango hanged himself, but did not die, for he went into the earth and there became a god (*orisha*).⁹³ 6. Ifa, god of divination, who causes pregnancy, and presides over births. 7. Elegba, a phallic divinity; his symbol is a short knobbed club, which was originally intended to be a representation of the phallus. Circumcision and excision are connected with his worship. 8. Ogun, the war-god. The priests of Ogun take out the hearts of human victims, dry and powder them, mix them with rum, and sell them to people who wish to acquire great courage.' (Budge 1911: 372 *f.*, summarising Ellis 1887: 1-69, my bracketed insertions – WvB).

In Togo, a traditional story featuring *les quatre fils de la veuve* ('the widow's four sons') is a thinly disguised evocation of the four elements (Prilop 1985). What is a widow? An adult woman without a husband – we may consider ourselves to be in the presence of a transformation of

⁹¹ *I.e.* pt , the common Ancient Egyptian designation of 'Heaven' – WvB.

⁹² At this junction I may point out that notions of transformation are detectable in Niger-Congo speaking, especially Bantu-speaking Africa, in the context of metallurgy; *e.g.* De Maret & Gosselain 1993; Herbert 1993.

⁹³ It is a cliché of New Age writing to point out the shamanic parallel between Shango and Odinn (who according to *Havamal, Edda* (de Vries 1980) hung upside down from the world tree for nine days and thus acquired esoteric knowledge *e.g.* of the runes). Dumézil (1979 / 1959: 53 *f.*) minimises the shamanistic strand in Odinn.

the cosmogonic virgin Mother of the Waters, or of a terrestrial equivalent of that concept (where the four sons could be, not just the four elements, but also the four directions – a common ambiguity throughout the comparative study of element systems).

By the same token, Nommo, the culture hero / creator of the Dogon of Mali, was supposed to have woven the four elements together (Griaule 1948; Griaule & Dieterlen 1965).

A further indication of a four-element system in Africa may be seen in the fact that the West African *ohene* king is seen as the incarnation of four deities – although this could just be a reflection of the ubiquitous theme of the four directions, whilst Wescott (1961), applying what I have elsewhere called Fairman's dilemma,⁹⁴ interprets it as a sign of Ancient Egyptian continuity in latter-day West Africa.

In his influential book *At the back of the black man's mind: Or, Notes on the kingly office in West Africa*, the well-informed trader Dennett (1906: 166 *f.*) writes, with reference to the Lower Congo region, of the divine name Nzambi (with slight variations widely distributed throughout West and Central Africa):

'The name for God is NZAMBI and its literal meaning is the personal essence (IMBI) of the fours (ZIA or ZA = four). What then are the fours? They are the groups each of four powers called BAKICI BACI ['basic elements'].'

Foursomes feature prominently in Dennett's ethnography: four great estates, four winds, four days of the week, four walls of the Yoruba kingdom, and a divine foursome Shango / Oya / Oba and Oshun. Remarkably, also the Zambian Nkoya situate some primordial foursome (*mavuma anā*, 'the four wombs / matrilineal descent groups'; *wunā*, 'the four[some]') near the beginning of history (*Likota lya Bankoya*, Ch. 38), and several other fundamental aspects of their politico-mythical organisation are presented in terms of foursomes (van Binsbergen 1992: *passim*), yet no present-day informant could explain the cosmological significance of this emphasis to me.

⁹⁴ Fairman 1965: similarities between (a) Ancient Egypt and (b) sub-Saharan Africa can be attributed to (a)'s influence on (b), but also to (b)'s influence on (a); *cf.* van Binsbergen 2011c.

Dennett also pays some attention (1906: 269 *f.*) to geomantic divination on the basis of such a foursome, in line with the fact that we see an insistence on foursomes in all African geomantic divination systems (*e.g.* Bohannan 1975), from four-tablet divination in Southern Africa to the four symbols making up a geomantic unit in West Africa (also *cf.* *Sixteen Cowries* (Bascom 1980) as a geomancy-derived divination system, where the mathematical properties of four tokens that are clearly distinguished from one another and that can each take two positions – up or down – have been replaced by 16 identical tokens notably cowries). Possible traces of an 8-element model (*cf.* the Nkoya's six-element model) transformed into clan names may be found among the Congolese Bushong people (Cotterell 1989: 190; *cf.* Werner 1916 / 1964: 144). Here the creator is called Bumba, a white and anthropomorphic being with many parallels in Central Africa (*e.g.* Luchele among the Bemba; the cults of Chihamba among the Ndembu and of Bituma among the Nkoya venerate not creator spirits, but nonetheless a white being that is a demiurge, sent by the Supreme God, and associated with food crops). Bumba's first work of creation produced eight creatures: beetle, crocodile, eagle, fish, goat, heron, leopard, tortoise – very possibly an ancient list of clans, fewer in number, yet reminiscent of, the Babylonian and Chinese zodiacs, Moon stations (South Asia: *nakshatra*) and constellations, and of the Nkoya clan names, although we still ought to ascertain whether these eight names were still clan names among the Bushong in historical times.

It is very rare for African clan names to imply a *transformative, cyclical and catalytic* element system – in fact the Nkoya one is my only example. Meanwhile, individual clan names such as 'Mushroom', 'Vulva', 'Crocodile' have a very wide geographical distribution throughout sub-Saharan Africa. They may have been an independent invention from that region. However, for other clan names transcontinental continuity is obvious. Among the Ashanti twelve different clans are distinguished (Stricker 1963-1989; Rattray 1927, 1930); this reminds us, not only of the zodiac, but particularly of the twelve different tribes attributed to Ancient Israel, and of similar 12-based socio-political arrangements in Ancient Etruria, Ancient Greece, modern North Africa, and even Ancient China – a pattern for which often the term *amphiktyony* is used,⁹⁵ and which I propose

⁹⁵ van Binsbergen & Woudhuizen 2011: 112n with extensive references. For the wide

should be counted among the Pelasgian traits emerged in West Asia and from there spread in all four directions according to the ‘cross-model’. Identification as West Asian and Pelasgian suggests a possible link with the putative West Asian highly pigmented proto-Africans, – so that we may have our African cake and eat it at the same time, but the solution seems too uncertain and far-fetched to convince.



Fig. 4.3. A drawing by the Zulu lightning doctor Laduma Madela.

‘Aus dem geborstenen Ei der Mnengischlange erscheinen zwei männliche und

distribution of zodiacal notions all over North and West Africa, perhaps as a further indication of an underlying amphiktyonic pattern, see Pâques 1964 – which at the same time may serve as an indication of the spread of the four-element system in circum-Saharan Africa.

zwei weibliche Schlangenköpfe (...): Überschrift: «Oho! Das Ei der Mnengischlange brach auf. Siehe, es bricht an vielen Stellen auf.» Inschrift unten: «Siehe, es kommen vier Köpfe heraus, zwei von Männern, zwei von Frauen.⁹⁶ Beachte die Kopfringe (der Männer), beachte die Haartürme der Frauen. Wenn das Ei geborsten ist, heißt es, die Buben sollen die Ziegen holen und rasch heimbringen. Wenn sie da sind, ergreift man eine Ziege und wirft sie in die Grube mit dem Wasser, wo das Ei drin ist. Oh, sofort färbt sich das Wasser vom Blut der Ziege, die von der vielköpfigen Schlange getötet wird. Diese Schlange hat ihr Gutes und ihr Böses. Sie ist ein Werkzeug der Medizinmänner, besonders der **onyangamtha-kathi** und der **ohodoba**, die töten und wiederauferwecken (...).⁹⁷

Also Southern Africa offers hints at a four-element system. For many years the German anthropologist Katesa Schlosser worked together with the Zulu lightning doctor Laduma Madela, South Africa, in order to record his complex esoteric knowledge. Fig. 4.3 renders one of his drawings (Schlosser 1992: Farbtafel II, Abbildung 6, pp. 42-43), with an explication (in Zulu) in Madela's own handwriting. The figure is strongly reminiscent of the Cosmic Egg from which four elements emerge – and of Western alchemical symbolic drawings, for that matter.

A case apart in the African context is Madagascar. Here we find, in the locational augury system reminiscent of Chinese *feng shui* 風水, strong emphasis on *four* elements.⁹⁷ Beaujard, one of today's leading authors on Madagascar culture, interprets this in terms of Indonesian influence. However, since over the past two millennia the literate, scholarly traditions of Hinduism, Buddhism and Islam have exercised a considerable influence upon Indonesia, I submit that this Indonesian link should not be considered in its own right but as an expression of South and West Asian

⁹⁶ 'It is characteristic of the Mnengis snake that it has several heads. Its name is derived from *mingi*, "many".' – original footnote. Schlosser's explanation of the name is probably a mere popular etymology (WvB).

⁹⁷ Cf. Berthier 1913; Beaujard 1988; Ferrand 1908. Also, a well-studied Arabian-Malagasy astrological text (Ferrand 1905) sets out the Malagasy variant of geomantic divination called *sikidy*, offering a discussion of illnesses linked to specific days, of sacrifices, and of destinies always with reference to a foursome consisting of Winds, Lands, Waters and Fires – in other words, the four-element system. Meanwhile, scholarship (Steinschneider 1877, 1956 / 1904; Trautmann 1939-1940; Hébert 1961; van Binsbergen 1996a) has firmly established the continuity between Malagasy *sikidy* geomantic divination, West African *Ifa*, and Southern African *Hakata* four-tablet divination, and their common origin in Islamic *ilm al-raml* from Southern Iraq near 1000 CE – cf. Ch. 2, above.

element cosmologies, thus brought to Africa via South East Asia, *i.e.* the ‘Sunda’ connection (*cf.* Oppenheimer 1998; Dick-Read 2005), in which also East Asian components may have been assimilated. My current research⁹⁸ explores the extent, direction and periodisation of transcontinental influence in Africa’s pre- and protohistory. Strong indications have been found of traits (*e.g.* specific genetic markers; musical instruments such as the xylophone, gong and breast harp; Ancient Roman currency; cowry currency; geomantic divination; Buddhist influence in kingship and ritual including ecstatic cults) of Sunda influence travelling from the Indian Ocean, rounding Cape of Good Hope, ending up in West Africa, and from there spreading again into Central and South Central Africa. This Sunda connection might offer a partial explanation of the four-element attestations in West Africa – besides trans-Saharan Assyrian, Egyptian, Graeco-Roman, and Arab influence. Below we shall see that the Nkoya case, with strong indications not only of Upper Palaeolithic and Bronze Age substrates but, exceptionally, also of Asian intrusions in recent centuries, is rather comparable with that of Madagascar.

Above we referred to the claim of a four-element system among the Dogon. Griaule’s Dogon ethnography, however eagerly appropriated and wildly interpreted by a great variety of authors with a New Age tendency, cannot be taken at face value (*cf.* van Beek 1991; Clifford 1988; we come back to this point in Chapter 7). Yet the Dogon and other groups in the African savannah have been recognised (Willis 1994) as a cluster with a mythology that is strikingly rich and elaborate as compared with the rest of sub-Saharan Africa including the Bantu-speaking region. To some extent, the ‘Back-to-Africa’ migration from c. 15 ka BP onward, and the Pelasgian ‘cross-model’ from the Late Bronze Age onward, constitute likely mechanisms to account for the very extensive cosmological, mythological and symbolic (even linguistic) continuities between sub-Saharan Africa on the one hand, West and Central Asia, and Europe, and even the Americas, on the other hand, from the Upper Palaeolithic onward.⁹⁹ Yet I am inclined, just like in the Nkoya and the Madagascar case, to invoke for the Dogon case another, rather more recent influence, stemming from the Ancient Near East including Egypt in the last millennium BCE, and

⁹⁸ My work in connection with the 2012 Leiden conference.

⁹⁹ For an application of these ideas to African mythology, see van Binsbergen 2010a. Brown 1926: 110 *f.* implies great Mediterranean continuities in the Tswana pantheon.

intensified in the course of the second millennium CE under Arab influence.

4.3.2. Indications of an element system in Ancient Egypt

In various Egyptian cosmogonies from the Old Kingdom,¹⁰⁰ personalised and narrative, mythical evocations of a classification scheme can be detected which, in effect, look like a four- or five element system. Claims to this effect were already made by the pioneer Afrocentrist writer Cheikh Anta Diop (1991: 377f; cf. Padró 1980) but were ridiculed under the impact of Eurocentric hegemonic ideology – even though Diop, a physicist and Egyptologist, was eminently placed to appreciate the natural-science implications of the Egyptian proto-scientific classification.

A case in point is Fig. 4.4, which shows that the Heliopolitan cosmology of the Old Kingdom may be read as an element system.

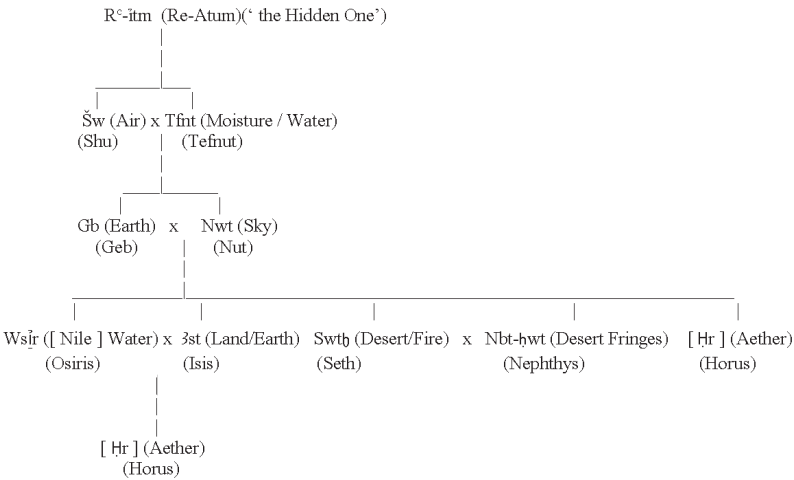


Fig. 4.4. An element system underlying the Heliopolitan cosmogony of Ancient Egypt.

¹⁰⁰ Third millennium BCE, two thousand years before Empedocles; these cosmogonies are attested in numerous iconographical representations, although some of their most important textual attestations e.g. the Shabaka Stone, are much more recent, dating from the Egyptian Late Period (Breasted 1901; van den Dungen 2010).

By contrast to this cosmogony of Heliopolis, there is the Hermopolitan Ogdoad – ‘eightsome’ – consisting of four gendered pairs representing ‘primordial waters’ (Naunet and Nu, *-t* being the feminine suffix), ‘Air or invisibility’ (Amunet and Amun), ‘darkness’ (Kauket and Kuk), and ‘eternity or infinite space’ (Hauhet and Huh). This unmistakably constitutes a quasi-Empedoclean four-element system; there is considerable affinity with the Ancient Greek cosmogonic scheme in Hesiod’s *Theogonia*.

In the Old Kingdom, the nine gods of the Heliopolitan Ennead (Atum > Shu and Tefnut > Isis, Nephthys, Seth, Osiris, Horus > Horus the Younger) could be construed as referring to element positions (as indicated in Fig. 4.4). Although mixed with other personified mythical elements, the themes Water / Air / Earth / Fire can be clearly identified here. In the Hermopolitan cosmogony, we find the original beings as four pairs of amphibian beings of complementary gender, springing from the original chaos. Also the foursome of the sons of Horus (associated with the Canopian vessels in which a mummified person’s viscera are kept (Fig. 4.5) are suggestive of a four-element concept. Many more examples could be adduced, for instance the feline goddess Bastet being depicted wielding her *sistrum* (a rattling instrument) and holding an aegis-like object (*cf.* the Greek goddess Athena, also with Egyptian parallels in Neith) and with her four kittens nicely arranged and sitting in attention in front of her (Ronnberg *c.s.* 2011: 300-301): our Fig. 4.6.



Fig. 4.5. Indications of a four-element system in Ancient Egypt: Four Sons of Horus.
The four sons of Horus represented as lids on the four Canopian Vases containing the

viscera of pharaoh Tut-^cAnḥ-Amon (early 14th century BCE, XVIIIth dynasty, New Kingdom), now in the British Museum, London, United Kingdom. In their iconography we recognise the elements Air (falcon), Water (crocodile), Land (jackal), and Fire (a human with a red face).



Fig. 4.6. The Ancient Egyptian feline goddess Bastet with a foursome of kittens, possibly an evocation of a four-element cycle of transformation, Late Period, c. 664-630 BCE.



Fig. 4.7. Indications of a four-element system in Ancient Egypt.

Four goddesses guarding the viscera of pharaoh Tut-^cAnḥ-Amon (early 14th century BCE, 18th dynasty, New Kingdom), now in the Egyptian Museum, Cairo, Egypt. The foursome may be interpreted as, among other associations, evoking a four-element

system: Neith / Nt (Water), Selket / *srqt* (scorpion goddess, Fire), Nephthys (as spouse of Seth / Swtj she governs the desert fringe, but as ‘Mistress of the House’, Nbt-Hwt, she may be associated with the Air as the House of the Sky god Horus, *cf.*

Ht-Hr / Hathor), and Isis / ʒst (Earth, impregnated by Osiris / Wsir who is often equated with the River Nile). Photograph: © Araldo de Luca, in: Bongioanni & Sole Croce 2001: 303, with thanks.

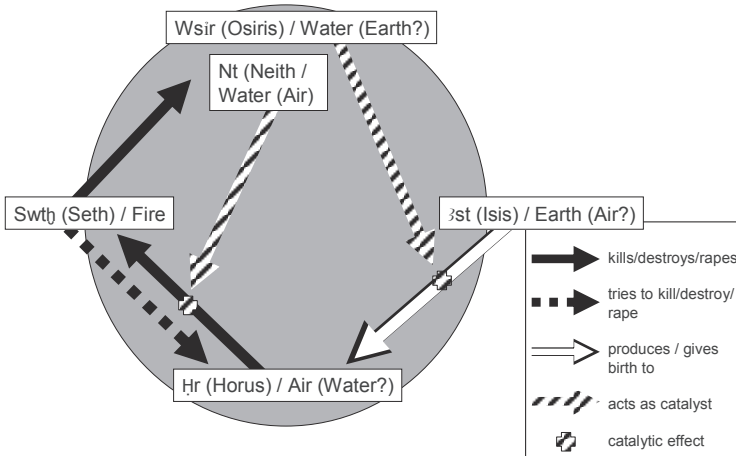


Fig. 4.8. A rudimentary transformation cycle of elements: Seth and Horus.

Although the details are admittedly inconsistent, indications of a transformation cycle of elements may certainly be discerned in the most cherished and sacred mythological narrative of Ancient Egypt, that of the conflict between Seth and Osiris, Isis’ conception from the dead Osiris, her production of Horus, and the latter’s struggle with Seth with physical including sexual violence, which eventually, through the intervention of the ancient goddess Neith (identifying as Sky goddess threatening to bring down the Sky, but in fact as Mother of the Waters including those Above *i.e.* the Sky), resulted in Horus’ victory and judicial vindication. However, that here we have to do with a highly imperfect form of the transformative element cycle, is clear from the fact that various values (Water, Earth, Air) might be attributed to Osiris (often equated with the river Nile), Isis and Horus (whose domain, as a falcon-shaped god, is the Sky) – whereas Horus rapes not only Seth but also his mother Isis (which suggests that she is primarily Earth and Horus primarily Heaven, *cf.* Ancient Greek, Yoruba and Oceanian mythology¹⁰¹ where the pre-cosmogonic contact between Heaven and Earth is one of

¹⁰¹ The Maori myth of the primal gods Papa and Rangi locked in intercourse (Grey 1855: 1 *f*; Cotterell 1989: 244; my fieldnotes); the Nigerian primal gods Obatala and Odudua (Heaven and Earth), similarly engaged (Ellis 1894: Ch. II. 3; Scheub 2000); the Ancient Greek myth of Uranus and Gaia, whose unending embrace was violently disturbed by their son Cronus emasculating his father and opening the way for cos-

incessant intercourse); cf. Hopfner 1940-1941: II, 175; Plutarch 1934-1935, *De Iside et Osiride*; Fairman 1935; Gardiner 1944.

Ancient Egyptian stories are also full of transformations which on closer scrutiny might well turn out to be narrative renderings of a transformation cycle of elements, e.g. the *Story of the Two Brothers*:

‘Bata, Anubis’ brother, flees after a Potifar-like incident [cf. *Genesis* 37:36 f. – WvB], to Syria, where the Ennead has a wife for him made by Chnum. This wife is almost violated by Sea. Bata has emasculated himself and has hidden his heart in a pine tree. Etc. Bata becomes a bull, then an avocado tree, then a piece of furniture, whose plinter kills the bad woman. Bata ends up as king.’ (Willis 1994: 53).¹⁰²

Fontenrose briefly refers to the story as an Egyptian instance of his cherished combat myth (1980 / 1959: 190-192, 207, 258) but he misses the possible element implications. This is all the more regrettable because these implications are particularly compelling in Bata’s case:

‘Now all the main characters in this story are gods: Anpu is Anubis, and Bata is a god who is conceived in serpent form, or rather, mixed form—the Bata snake had four human bodies and four pairs of human legs at each end of his body.’ (Fontenrose 1980 / 1959: 192; cf. Fig. 4.3 from Southern Africa!)

What does emerge in Fontenrose’s treatment is that Bata belongs to a class of gods or heroes whose destruction is caused by a female partner. This of course corresponds with the destruction phase in the transformation cycle of elements, which I have suggested (van Binsbergen 2010e) to be at the root of the combat myth with its near-global distribution. Fontenrose, who sees parallels between the Bata and Humbaba / Gilgamesh narratives (1980: 192) identifies Deianeira¹⁰³ and Delilah (Samson’s partner in the Biblical book of *Judges* 16:4 f.) as equivalents of Bata’s wife – while Fontenrose also indicates the parallel with Potiphar’s wife.

mogony: Hesiod (1914), *Theogonia*, 133 f.

¹⁰² For the full story, the original hieroglyphic text, and extensive commentary and interpretation, cf. Moldenke 1898; Hollis 1990. The story is also included in various collections of Ancient Egyptian stories. The wife’s rape is comparable to that of Isis by Seth and by Horus (see above) and that of Orpheus’s wife Eurydice by Aristaeus (see below), which will be demonstrated to be a transformation of Ancient Egyptian themes.

¹⁰³ Deianeira, wife of the Greek deified hero Heracles; Diodorus Siculus, *Bibliotheca historica*, IV 36; Sophocles, *Trachiniai*, 555; Ovid, *Metamorphoses*, IX, 201; Seneca, *Hercules Oetaeus*, 196; Pausanias, *Descriptio Graeciae*, X, 38 1.

But many more instances could be cited. In Nkoya mythology, King Shihoka Nalinanga meets his doom through sexual intercourse with an artificial woman (*cf.* Bata's wife) that was created by his envious sister Likambi (van Binsbergen 1992, 2010a). Perhaps there is an echo here (I have identified more such echoes) of the Celtic King Arthur meeting his doom through Morgana and Mordred, and of another Celtic mytheme, that of the mermaid-like Melusine (Higley 1999); also note that it was Pandora, engineered by Hephaestus at Zeus' request, that brought disaster over humankind (Hesiod, *Theogonia*, 560 *f.*). In the Hebrew tradition the proverbial evil woman is Lilith, alleged to have been Adam's original wife and implied to be the source of his destruction (Patai 1990). As Higley points out, Melusine and Lilith are akin to the Lamia figure which also features extensively in Fontenrose (1980). Further afield, but relevant to our intercultural argument, is that it is as an artificial woman in the shape of Gautama's wife Yasodhara, that Mara ('Delusion') seeks to seduce the Buddha (Musaeus-Higgin 2000: 237). As for the interpretation of the Bata figure specifically, the parallels with Heracles (whose Levantine equivalent is Melqart, 'City King', *cf.* Marduk as the solar chief god of Babylon), Gilgamesh and Samson (*cf.* Proto-Afroasiatic *šam- 'Sun'; Starostin & Starostin 1998-2008, 'Afroasiatic etymology') suggest that his underlying identity is that of Sun / Light / Life, as opposed to Night / Darkness / Death (*cf.* Anubis, Humbaba). Fischer (1975) claims that the name Bata may be associated with a verb meaning 'beating on the ground', which not only structurally evokes the beaming and setting Sun's down-directed action, but also brings to mind multi-layered features of the geomantic symbolism.

This does not even exhaust the potential of myths to inform us on the existence, or absence, of a transformative element cycle in Ancient Egypt. Myths can often be seen to cross geographical, cultural and linguistic boundaries, and given the tremendous impact Egypt has had on the Mediterranean region during three millennia, we may even expect Graeco-Roman mythical traditions to illuminate us on Egypt. One of the points on which Bernal was attacked by classicists was his claim that Ancient Greek myths were considerably indebted to Ancient Egypt. In one of my early contributions to the *Black Athena* debate I joined in this chorus, arguing that specifically the myth of Hephaestus and Athena had Central Mediterranean and Anatolian echoes, rather than Egyptian ones. I

later expanded this argument into a full-size book draft, revising it completely, and turning my critical attention from Bernal to Blažek and his Hephæstus < Ptaḥ etymological proposal (van Binsbergen 1997d, in preparation (b)). Meanwhile, my detailed analysis of the Aristæus myth as found with Ovid and Virgil was proving me wrong and Bernal right: here the clues for an Egyptianising reading were overwhelming, even though the myth is principally attested, not even from Greek but from Latin sources. We find ourselves here in a position comparable to that of Bruno Stricker (1967-1989): Ancient Greek and Roman writers texts turn out to be so close to the Egyptian world view that the former may convincingly be used to elucidate otherwise obscure aspects and implications of the latter. A summary and Egyptianising reading of the Aristæus myth is here presented in Table 4.3, columns A and B. With the same stone we can kill another bird that is far more relevant in the context of the present book: if read against an Egyptological background, the Aristæus myth turns out to reveal an elaborate evocation of an element transformation system (Table 4.3: right-hand column) – even though we have to admit that (as is to be expected when the transmitters of the myth no longer perceive its element cosmology background) the identification of elements and their specific transformations and catalysts does not come out totally consistently.

As a peasant farmer, more specifically as a culture hero inventing such homely achievements as cheese-making and bee-keeping, Aristæus¹⁰⁴ is a principal agricultural god in the Graecianising Roman tradition. He may be considered an evocation of the Neolithic, early Pelasgian, modes of production – which, as Woudhuizen and I argue in detail elsewhere¹⁰⁵ was also strong in proto-historical Italy, partly but certainly not entirely due to the Etruscan influx. There was also another Aristaios:¹⁰⁶ one of the Gigantes who fled the primal Battle with the Gods and was hidden by his mother Earth in the Island Sicily in the shape of a dung beetle; also for Aristaios-2 there is an unmistakable Ancient Egyptian parallel showing

¹⁰⁴ Sources: Ovid (1838), *Fasti*, 1, 363 f.; Virgil (1886), *Georgica*, 4, 281 f.; Atsma 2000-2008, s.v. ‘Aristæus (1)’.

¹⁰⁵ van Binsbergen & Woudhuizen 2011: *passim*, see that book’s Index of Proper Names, s.v. ‘Pelasgia(n(s))’; van Binsbergen, in press (a).


¹⁰⁶ See: Suidas (1853), s.v. ‘Aristaios’ and ‘Aitnaios kantharos’; Atsma 2000-2008, s.v. ‘Aristæus (2)’.

A. myth and comment	B. Egyptianising interpretation	interpretation in terms of a transformation cycle of elements
<p>1. <i>Aristaeus</i>, [= 'The Best', epithet of several Greek gods] <i>son of Apollo</i></p> <p>2. <i>and Cyrene</i> [= 'Sovereign Queen' / the Libyan town of Cyrene / the Egyptian goddess 'Libyan' Neith]</p>	<p>Hpri / Re^c, the sun-god and male creator-god</p> <p>Neith, mistress of the Waters Above and Below. In Ancient Egyptian mythology, Re^c is occasionally implied to be Neith's son himself. During the Bronze Age, all over the Old World female gods were demoted in favour of celestial male gods (van Binsbergen & Woudhuizen 2011: Table 6.4, p. 142), and the same relationship exists between Neith and Re^c. As son of Neith and Re^c (but as such unattested in documented, the character of Aristaeus seems to be an echo of the confrontation between Neith and Re^c. The Aristaeus character seems to reflect the reconciliation of this tension inherent in this masculinisation and verticalisation of the world view. Moreover it reflects the Early-Dynastic tension – probably mythical rather than factual – between</p> <ul style="list-style-type: none"> • the Neith / theocratic / female-centred / West Asian-orientated / Pelasgian-orientated Lower Egypt, and • the male-centred, bureaucratic, African-orientated Thinite state of Upper Egypt <p>(cf. Wilkinson 2001; Edwards 1971; Emery 1961; Kemp 1989)</p>	<p>Apollo = Sun = FIRE</p> <p>Cyrene = Neith = WATER</p> <p>What could come from the marriage of FIRE and WATER? Vapour, AIR, AETHER, which gives the formula: FIRE*WATER=AIR or AETHER.....(1)</p> <p>However, this does not make sense from the perspective of the transformative cycle of elements. According to the latter discourse, elements do not mate on an equal footing, but just one element produces another by annihilation, under the catalytic influence of a third element. The Egyptian and generally Ancient conception of generation (Stricker 1967-1985) seems to be that the father's body is annihilated, while the mother's body is rather catalytically involved. This suggests the formula</p> <p>FIRE > AIR or AETHER under WATER as catalyst....(2) or (considering the realities of iron production) more likely FIRE > METAL under WATER as catalyst.....(3), in other words in the logic of the transformative cycle of elements Aristaeus is a candidate for METAL (Neith is also the goddess of arms), and less likely for AIR or AETHER. Metal is otherwise absent in the cyclical element transformation systems of the Western Old World – but it could be that the Aristaeus myth is a secret initiatory text for metalworkers, emerged in West Asia, which (while being transmitted East to give rise to the METAL and WOOD cycles there; see Chapter 7, below) subsequently absorbed Egyptian content, and then was transmitted to Italy – not unlike the Etruscans (Woudhuizen 2008; van Binsbergen & Woudhuizen 2011)</p> <p>Whatever element Aristaeus may represent, his rape of Eurydice seems to stand for Destruction of another element (Eurydice), in the transformation cycle of elements</p>
<p>3. (<i>Aristaeus</i>,) <i>master of bee-keeping, has, or covets, illicit intercourse</i></p>	<p>bit, 'bee', high-priestess of Neith (Mistress of the Waters Above and Below), and Ruler of Lower Egypt. In my interpretation of the Ancient Egyptian royal title <i>mswt-bit</i> ('She of the Sedge and the Bee'), the bee represents Heaven, the sedge Earth, confrontation of Upper and Lower Egypt in Early Dynastic times</p> <p>Nwt / Heaven as 'House of the Sun'; Tftt</p>	
<p>4. <i>with Eurydice</i> [= Wide Justice' The first creatures, Shu and Tftt,</p>		<p>Eurydice's name seems to refer to the celestial canopy, therefore she could be AIR or AETHER. That Eurydice is</p>

<p>were often equated with Sun and Moon as the Eyes of Horus; in Ancient Mesopotamia, it is not the Moon but the all-seeing Sun / Šamaš which is the heavenly personification of justice] <i>wife of</i></p> <p>5. <i>Orpheus</i> for which name Bernal 1987: 71 f. suggests the Ancient Egyptian etymology <i>wpꜣt</i> "Hereditary Prince" (but his etymologies have been badly received by most specialists, and this particular one certainly leaves the final -t, normally a feminine suffix, unexplained). Like other Greek heroes including Menelaus and Helena, Orpheus (who like Menelaus wears a leopard skin; van Binsbergen 2004 / 2013) is claimed to have visited Egypt </p>	<p>Geb (Bernal 1987: 71f.); Šw.</p>	<p>specifically killed by a snake, which as argued in the present book has widespread EARTH connotations, implies that she could not be EARTH herself. The solar and watery descent of her rapist Aristaeus (METAL?), leaves us in doubt as to the specific element connotations of Eurydice.</p>
<p>6. <i>Eurydice then flies</i>.</p> <p>7. <i>trips on a snake, is bitten and dies</i>.</p>	<p>an extension of the Neith / Northern motif to that of the primordial snake enemy, Apophis, whom Neith (as Mistress of the Waters [Below]) produced by spitting (Hart 1993, s.v. Apophis] ; alternatively, the pharaoh's protective deity, the cobra Wꜣdyt</p>	<p>chasing is Destruction of one element by another AIR or AETHER destroyed by EARTH (snake), perhaps with METAL (Aristaeus) as a catalyst.....(4)</p>
<p>8. <i>Eurydice's sisters</i></p>	<p>Isis and Nephthys; or Wꜣdyt and Njprt as the Two Ladies (nbty; in the shape of a vulture and a cobra) protecting the pharaoh as Horus</p>	<p>other elements</p>
<p>9. <i>subsequently kill Aristaeus's bees</i>.</p>	<p>Thwarting of Aristaeus's Neith-derived power as bit, or the power of bit in itself, or his bit returne, the Neith priest(ess)hood, curtailed: Heliopolitan theology curbing the Neith cult; Neith priestesses killed as funerary human sacrifices at First-Dynasty royal tombs (Emery 1961)</p>	<p>killing is Destruction in the transformation cycle of elements</p>
<p>10. <i>Aristaeus, on Cyrene's advice</i></p> <p>11. <i>fetters the Pharos-based oracular sea-god Proteus [= "First"]</i></p>	<p>resilience of Lower Egyptian traits and interests Pharos, too, is in Lower Egypt</p>	<p>appeal to the transformative cycle of elements; Proteus evokes transformation; fettering = Hindrance, an attenuated form of Destruction</p>
<p>12. <i>Aristaeus learns that the bees have died in retaliation for Eurydice's death</i>.</p>	<p>the Neith cult's powers curbed by the rise of the masculine, buteocratic pharaonic state as religiously and symbolically underpinned by non-Neith related themes; the Neith</p>	<p>if AIR or AETHER (Eurydice) is destroyed by EARTH (snake) with METAL (Aristaeus) as a catalyst (4), what then is being destroyed in what is narratively represented as bees? Are</p>

	priestesses killed	not Aristaeus and the bees expressions of one and the same identity? The transformative cycle appears to enter into a referential loop here – understandably since the owners of the myth presumably has lost conscious knowledge both of the transformative cycle and of its Egyptian mythological application
<i>13. Aristaeus kills four bulls and four cows as propitiatory sacrifice</i>	The four paired items evoke the Heliopolitan Ogdoad and cosmogony. The Lower Egyptian, female bee /bit element engages with the male and solar bull (k3) element evocative of the Upper Egyptian, male principle; here the male fire-associated sun-god emerges as the ‘Bull of the Ennead’, having usurped female Neith’s watery creative prerogative	the four paired items evoke the four elements and / or the four directions; their killing evokes transformation; the solar bull may be interpreted as AIR or AETHER (celestial aspect emphasised) or as FIRE (heat aspect emphasised), which makes us enter another loop
<i>14. Aristaeus, on Cyrene’s advice, leaves the bovine carcasses in a copse</i>	insistence on the power of the Neith cult or of Lower Egyptian traits and interests in general; the Upper Egyptian bull (k3) element has to be transmuted into the Lower Egyptian bee / bit element through a process of transformation – in other words, the Unification of the Two Lands	FIRE or AIR or AETHER undergoes the transformation of destruction, under WOOD (otherwise absent in the cyclical element transformation systems of the Western Old World) as a catalyst, and produces whatever element the bees stand for.....(5)
<i>15. for eight days [Ogdoad]</i>	the Heliopolitan Ennead minus its leader and progenitor. Atum; Atum is a male primordial god (cf. Aristaeus en Nuah) who produces the first creatures, Sw and Tint, in a way which is variously described (masturbation, spitting) but always in terms implying the absence of female reproductive organs. Atum represents the male usurpation, in the course of the consolidation of the early Egyptian state, through the Heliopolitan theology among other means, of female centred cosmology exemplified in the Neith cult.	the number eight invokes the four elements and/or the four directions, each paired gender-wise
<i>16. After a funerary sacrifice to Orpheus, who had meanwhile died,</i>	evocation of Neith as the mistress of death and the underworld	(a) Destruction of EARTH or AETHER (Orpheus), who here also seems to feature as catalyst in the transformation of bulls into bees – whatever their specific element identification
<i>17. the carcasses are teeming with bees</i>	the bees as the sign of life resurrected from death; but also a symbolic triumph of Neith’s living emblems over the dead and decaying substance of the masculine, bureaucratic state cult; all this amalgamated in the character of Osiris who is at the same time the expression of masculinisation, and (as Neith’s vizier, and as the ultimate pupa resurrecting from death) the continuation of the Neith cult in a new form.	
<i>18. on the ninth day.</i>	the Heliopolitan Ennead	

Table 4.3. The Aristaeus myth analysed as a reflection of Early Dynastic Egyptian history, and as an esoteric text on the transformation cycle of elements

that underneath this pathetic figure lurks a demoted major god: as a symbol of eternity and rebirth,  Hpri, represented as a dung beetle, is one of the principal Ancient Egyptian gods, with Horus a manifestation of Rē^c.¹⁰⁷ Like the Nestis theonym we will discuss below, the Aristaeus myth is another argument for substantial Egyptian influence on Italy in protohistorical times. Viewed from an Egyptological perspective, the Aristaeus myth can be interpreted as a reflection of the legendary struggle in Early Dynastic times – enshrined in the notion of the Unification of the Two Lands by ^cAha or Menes – between¹⁰⁸

- Neith / theocratic / female-centred / West Asian- orientated / Pelasgian-orientated Lower Egypt, and
- the Horus / male-centred, bureaucratic, African-orientated Thinite state of Upper Egypt

The argument on the Aristaeus myth as an esoteric text on the transformation cycle of elements is extensively given in Table 4.3 and need not be repeated here.

By and large, the Egyptian expressions reminiscent of an element system are rather too ornate and too ‘narrativised’ to suggest the very *origin* of such a system in the Nile Delta in the Early Bronze Age.

If we take the view that some rudimentary transformative cyclical element system could be a Pelasgian trait, then its origin should be sought rather in West to Central Asia. However, from its very beginning in the Early Bronze Age, dynastic Egypt has undergone considerable West Asian influence: West Asian gods such as ^cnt / Anat, qdš / Qadesh, ršf /

¹⁰⁷ Aristaeus thus has the trappings, not only of a culture hero, but even of a cosmogonic god. As a (inevitably late, and distorted) compromise (‘son’) between the postulated two successive cosmogonic forces, Primal Waters and Heaven, Aristaeus has something of the framework or matrix out of which reality is being made; *cf.* the biblical נח Nuh (Hebrew ‘Rest’ / Egyptian ‘Horizon of the Primal Waters / of the Primal Waters Above’), who also functions (van Binsbergen & Woudhuizen 2011: Ch. 6) as such a matrix (and, again, even as a cosmogonic god) in regard of his sons (Japhet, Ham and Šem) whose names – as argued *ibidem* – have similar connotations: Heat, Heaven, etc.

¹⁰⁸ *Cf.* Wilkinson 2001; Edwards 1971; Emery 1961; Kemp 1989.

Reshef and pth / Ptah, chariots, Hyksos kings; shamanic influences in leopard-skin symbolism (as on the 1st-Dynasty Nrmr tablet) and in the royal diadem (as in Tut-^cAnḥ-Amon's tomb); even Neith's name (although a surprising Austric etymology is available) may have an Uralic etymology exemplifying the general continuity between Delta culture and West Asia.¹⁰⁹ Egypt has displayed, and like Syro-Palestine has been recognised in Antiquity to display, many Pelasgian traits. It is therefore quite likely that (like the bee and reed themes), also the Egyptian element themes discussed here constitute a predynastic Pelasgian heritage.

Is it conceivable that the Presocratic four-element system is a late adulteration of the Ancient Egyptian element theology? This is an attractive thought. My proposals, below, to read, in the Empedoclean doxology, Nestis as Neith, and to equate, *ibidem*, Zeus and Hera with Šw / Shu and Tfnt / Tefnut, are cases in point. In the few centuries before the emergence of Presocratic philosophy there was an intensive traffic between the declining and fragmented pharaonic state, and the Aegean, the latter being a source of mercenaries and traders – thus continuing an established Bronze Age pattern. Many Greek thinkers of the Classical Age are reputed to have visited Egypt in their quest for learning. If, as we have suggested in connection with Table 4.3, Egyptian influence was strong in Italy, Empedocles could have picked up the Egyptian inspiration even at home. And there is another parallel example of Egyptian prototypes being appropriated and adapted into a formal system, that became a world-wide success: the *alphabet*, based on the acronymic principle available in the Egyptian hieroglyphic writing system, and worked (mainly by the Phoenicians and Aramaeans) into an alphabetical concept that conquered much of Eurasia (Diringer 1996; Gardiner 1916; Naveh 1982).

Whereas these Egyptian attestations refer to Bronze Age contexts, the many extensive references to a specifically four-element system in the Egyptian Hermetic literature (especially the text *Korē Kosmou* / 'Virgin of the World'; Virgin 1885), briefly referred to above, are much more recent (early centuries on the Common Era), and certainly cannot be considered independent from the Presocratic usage.

¹⁰⁹ van Binsbergen & Woudhuizen 2011: Table 28.4, pp. 370 *f.*, Table 4.4, p. 87, and *passim*, and references there.

4.3.3. The recognition of an element system in North America

Let us now turn to an examination of indications of an element system in the New World. The possibility of cultural borrowing from the Old World to the New World across the Pacific cannot be ruled out, considering the long-standing and high quality of East and South Asian navigation, and the numerous studies claiming trans-Pacific transmission with regard to other cultural items. The continuity between Sino-Caucasian, a dominant linguistic macrophylum in East and North Asia, and the Na-Denē cluster is another indication of such transcontinental relationships. By the same token, the possibility of a trans-Atlantic transmission of Bronze Age, relatively developed, element systems is suggested by continuities in the fields of comparative mythology (*e.g.* in regard of agricultural gods producing crops from their dying body), ethnography (incidental cases of circumcision) and population genetics (high incidence of the RH*cde both in Europe among seafaring groups (Basque region and Baltic), and on the mouth of the St Lawrence River (Cavalli-Sforza *et al.* 1994: appendix distribution maps, ‘RH*cde’, no. 88).

We find a six-element system (although articulated in terms of directions rather than elements, with Up and Down added to the usual four direction North, East, South and West) among the NaDenē-speaking peoples especially the Zuni,¹¹⁰ and neighbouring peoples such as the Sia (Parsons 1936), Pueblo (Parsons 1929), and Hopi (Fewkes 1900).

Alexander (1916), in his authoritative overview of North American mythology, dedicates an entire chapter to what he calls ‘the gods of the elements’, but he mainly uses the word ‘element’ in the modern North Atlantic sense of ‘the manifestations of the weather – wind, rain, ice and snow’; and when he uses the word ‘element’ in a physico-cosmological sense, he seems to project onto the North American material notions borrowed from the four-element system as ingrained in North Atlantic culture in the course of the last 2.5 millennia. Even so, we find traces of an element system reminiscent of the East Asian cyclical systems dis-

¹¹⁰ Cf. Li An-Che 1937; Parsons 1916; Judd 1947; Swann 1994. The closely related Navaho are now often claimed to distinguish six directions, which has become an icon of Native American popularised cosmology, but the older ethnographic literature more often attributes only four directions to the Navaho.

cussed above:

‘The tribal circle of the Omaha was divided into two groups, the Sky-People occupying the northern, and the Earth-People the southern, semi-circle. The Sky represented the masculine, the Earth the feminine, element in nature; the human race was supposed to be born of the union of Earth-People and Sky-People; and in the tribe marriage was not customary within either of these two groups, but only between members of Earth clans and members of Sky clans. Each group also had its own chieftain and ceremonial, so that the whole tribe possessed a dual organization, corresponding to the great dualism of nature.

J. O. Dorsey¹¹¹ found a similar scheme prevalent throughout the Siouan stock, and this scheme he generalized by the figure of a quartered circle. The quarters of one half, which was the side of peace, were devoted respectively to Earth and Water; the quarters of the masculine, or Sky half, which was the side of war, were sacred to the spirits of Fire and Air. Powers of Earth, Water, Fire, and Air formed the great groups of the elemental gods.’ (Alexander 1916: 97*f.*).

The iconographic and mythological evidence suggesting the existence of a four-element transformative system in Native North America could be augmented *ad libitum*, for instance with the pattern of four, apparently cosmogonic, frogs near a water pool, in Wilito Wilson’s 1942 Navaho sand painting rendered here as Fig. 4.9. Like in Ancient Egypt, frogs with their amphibian ambiguity between water and land, seem to evoke the pre-cosmogonic state of boundary-less chaos, to be resolved, at the moment of cosmogony, by the Separation of Water and Land, or (by a typologically later cosmology), by the Separation of Heaven and Earth; in the local emic explanation however, the reference is not cosmogonic – the frogs at the level of the actors’ consciousness represent maize-eating humans transformed into amphibians (Ronnberg *c.s.* 2011: 191 after Haile & Wyman 1957: 193).

Another pictorial indication of what could be a cycle of elements, is found in the rock art of the Lower Pecos River, Texas, USA, attributed to the 2nd-3rd millennium BCE (Fig. 4.11).

¹¹¹ J.O. Dorsey, missionary and ethnographer, writing in the 1880s-90s, his publications on the Siouan tribes are listed in Alexander 1916: 321 – WvB.

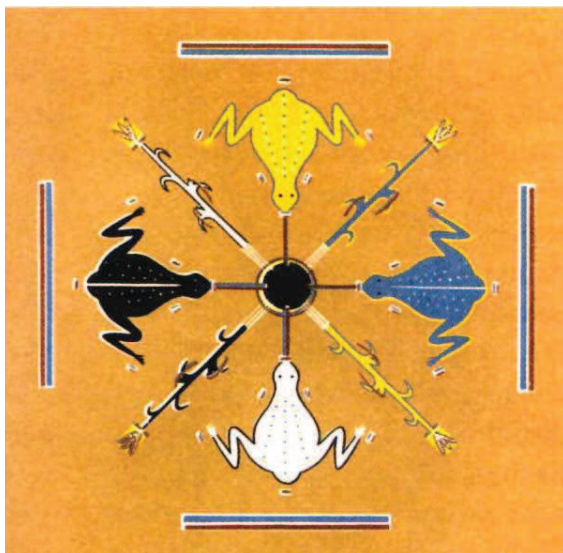


Fig. 4.9. Navaho sand painting arguably suggestive of a four-element transformation cycle.



Fig. 4.10. Anasazi wall painting from New Mexico, ca. 16th c. CE.

Fig. 4.10 demonstrates that even in the absence of indigenous texts, images can present clues as to ancient thought systems. An element cosmology appears to be represented, as is clear from the accompanying scholarly description:

‘ABB. 29 - Wandgemälde, Kuaua, N. M. In dem hier gezeigten Ausschnitt aus einer größeren Szene, die mit Aussaat, Regen und Fruchtbarkeit zu tun hat, sind, von links beginnend, folgende Figuren zu sehen: Eine Wildgans [AIR], aus deren Schnabel Regen [WATER] strömt. Eine menschliche Figur, mit Maske und Federkrone geschmückt, die einen Stab in der Hand hält und wahrscheinlich den »Blitzmacher« [FIRE] wiedergeben soll. Ein Fisch [WATER], von dem aus einerseits Regen [WATER] herniederfällt, andererseits ein Regenbogen [AIR] zu einem schwarzen Adler [AIR] geht, in dessen Schnabel er sich mit einem Blitz [FIRE] und einem zur Erde [EARTH] fallenden Strome von Samen vereinigt. In dem Samenstrom fliegt [AIR] eine Pfeilspitze [AIR] oder eine Fledermaus [AIR], die wieder Regen [WATER] verteilt. Feuchtigkeit [WATER] geht auch von dem unter dem Adler [AIR] befindlichen Topf aus, aus dem ein Blitz [FIRE] aufsteigt. Ganz rechts sind Fußspuren [EARTH], Pfeilspitzen und rote Steine [EARTH] zu sehen, die mit einem zeremoniellen Wettlauf [CYCLICITY?] zu tun haben. Stilistisch läßt sich das Gemälde nicht mit denen des Jeddito-Tales in Verbindung bringen. Layer G-26, Südwest-Ecke, Kiva III, Kuaua, N[ew M]exico, Ca. 16. Jh., Regressive-Pueblo-Periode, Anasazi-Tradition... (Haberland 1965: 97 and Fig. 29; my bracketed insertions – WvB).



Original painting by Forrest Kirkland. Photo scans courtesy of the Texas Archaeological Research Library, the University of Texas at Austin; cf. Turpin 1990.

Fig. 4.11. Revolution on the celestial axis, or evidence of transformation cycle of elements, as depicted in Lower Pecos River Art, Texas, USA, 3rd-2nd mill. BCE.

In addition to these iconographic indications, there is the mythological evidence of a transformation cycle of elements in North America in the form of Flood myths. In native, ideal-typically pre-conquest North America, some Flood myths, at one of the several possible levels of interpretation, appear to revolve on permutations within the transformation cycle, with Flood being simply the Water element dramatised, while a divine trickster in animal shape tends to both activate, and efface, all boundaries and systematics at the same time.¹¹² Cases in point are the following:

FROM THE SALISHAN-SPEAKING SKAGIT PEOPLE OF THE STATE OF WASHINGTON, USA: The Creator made the earth and gave four names [FOUR ELEMENT SYSTEM?] for it – for the *Sun*, [FIRE?] *waters*, [WATER] *soil* [EARTH] and *forests* [WOOD].¹¹³ He said only a few people, with special preparation for the knowledge, should know all four names, or the world would change too suddenly. After a while, everyone learned the four names. When people started talking to the trees [WOOD] the change came in the form of a Flood. [WATER] When the people saw the Flood coming, they made a giant canoe and filled it with five people and a male and female of all plants and animals. Water covered everything but the summit of Kobah and Takobah (Mts. Baker and Ranier). The canoe landed on the prairie. Doquebuth, the new Creator, was born of a couple from the canoe. He was told to go to a lake (Lake Campbell) and swim and fast to get his spirit powers, but he delayed. Finally he did so after his family deserted him. The Old Creator came to him in dreams. First he told Doquebuth to wave his blanket over the water [WATER] and the forest [WOOD] and name the four names of the earth; this created food for everyone. Next, at the direction of the Old Creator, he gathered the bones of the people who lived before the Flood, waved the blanket over them and named the four names, and made people again. These people couldn't talk, so he similarly made brains for them from the soil. [EARTH] Then they spoke many different languages, [CONFUSION OF LANGUAGES AFTER THE FLOOD] and Doquebuth blew them back to the places they lived before the Flood. [WATER] Someday, another Flood [WATER] will come and change the world again. (source: Clark 1953: 139-141, via Isaak 2006; bracketed insertions mine).

FROM THE (ORIGINALLY PROBABLY HOKAN-SPEAKING) SHASTA PEOPLE (NORTHERN CALIFORNIA INTERIOR, USA): Coyote [a widespread trickster figure] encountered an evil water spirit [WATER] who said, 'there is no wood' [WOOD] and caused water to rise until it covered Coyote. After the water receded, Coyote shot the water spirit with a bow and ran away, but the water followed him. He ran to the top of mount Shasta; the water followed but didn't quite reach the top. Coyote made a fire, [FIRE] and all the other animal people swam to it and

¹¹² The question whether these North American Flood myths could be considered derivations from the Judaeo-Christian-Islamic tradition, I have considered elsewhere and answered, *grosso modo*, negatively (van Binsbergen with Isaak 2008).

¹¹³ This is unmistakably a series of four elements 'Fire', 'Water', 'Earth' and 'Wood'.

found refuge there. After the water receded, they came down, made new homes, and became the ancestors of all the animal people today. (source: Clark 1953: 12, via Isaak 2006; bracketed insertions mine).

FROM THE MENOMINI / MENOMINEE PEOPLE (WISCONSIN-MICHIGAN BORDER, USA, ALGONKIAN-SPEAKING): Manabush [a trickster figure] wanted to punish the evil Manidoes, the Ana Maqkiu who had killed his brother Wolf. He invented the ball game and asked the thunderers to play against the Ana Maqkiu, who appeared from the ground as Bears. After the first day of play, Manabush made himself into a pine tree [WOOD] near where the Manidoes played. When they returned the next morning, the Manidoes were suspicious of the tree, so they sent for Grizzly Bear to claw it and Serpent to strangle and bite it. Manabush withstood these attacks, allaying their suspicion. When the ball play took everyone else far away, Manabush shot and wounded the two Bear chiefs with arrows and then ran away. The underground [EARTH] Ana Maqkiu soon came back, saw the wounded Bear chiefs, and called for a Flood [WATER] from the earth. Badger hid Manabush in the earth [EARTH], so the Ana Maqkiu gave up the search just as the water [WATER] was starting to fill badger's burrow. The underground people took their chiefs to a wigwam and sent for an old woman to heal them. Manabush followed, took the old woman's skin and disguised himself in it. He entered the wigwam, killed the two chiefs, and took the bear skins. The Ana Maqkiu at once pursued; water poured out of the earth [EARTH] in many places. Manabush climbed a great pine tree [WOOD] on the highest mountain. When the waters [WATER] still rose to threaten him, he commanded the tree to grow. This he did four times, but the waters still rose. He called to Kisha Manido for help, who commanded the waters [WATER] to stop. Seeing water everywhere, Manabush called to otter to dive down and bring up some earth [EARTH]. Otter tried but drowned before reaching bottom. [EARTH-DIVER THEME] Mink failed similarly. Then Manabush called on Muskrat, who also returned drowned but had some mud in his paw. Manabush blew on Muskrat to return him to life. Then he took the earth [EARTH], rubbed it between his hands, and threw it on the water [WATER], thus creating a new earth. Manabush told Muskrat that his tribe would always be numerous. He gave the skin of the Gray Bear chief to Badger and kept the skin of the White Bear chief. (source: Judson 1914: 21-25, via Isaak 2006; bracketed insertions are mine – WvB).

Especially in the last story it is evident that the elements are distinguished and that they are systematically invoked as producing or destroying (or furthering or constraining, respectively) each other – as in a transformation cycle of elements.

While in the above North American mythological cases the presence of an element system has to be inferred through interpretation, the situation is rather more conspicuous though not less puzzling in Ancient Mexico, where the anthropologist Nuttall claimed to find the following parallels with the Old World:

‘In the Old and the New World alike, are found, in the same close association, (1) the purple industry and skill in weaving; (2) the use of pearls and conch-shell trumpets; (3) the mining, working and trafficking in copper, silver and gold; (4) the tetrarchial form of government; (5) the conception of ‘Four Elements’; (6) the cyclical form of calendar. Those scholars who assert that all of the foregoing must have developed independently will ever be confronted by the persistent and unassailable fact that, throughout America, the aborigines unanimously disclaim all share in their production and assign their introduction to strangers of superior culture from distant and unknown part’ (Nuttall 1909: 383 as quoted in Smith 1929: 11).

We shall return to Nuttall’s work in Chapter 8. Meanwhile, let us proceed to Western Eurasia, where in the last two millennia a correlative system of four immutable categories has established itself as the norm – until it was supplanted, in turn, much less than two centuries ago, by Modern science’s atomic theory of numerous categories that are mainly immutable but many of which have in fact turned out to be mutable under conditions of radioactivity. Time to consider, at the Western end of the Eurasia, the Presocratic nature philosophers.