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THE PATHWAY AND THE BRIDAL GIFT
The 'Mixed' Theogonies of Alcman and Pherecydes

Siemen Terpstra

ABSTRACT

The author shows how the cosmogony of Alcman is consonant with his tradition, and that his intriguing term *tekmor* also points to the concerns of Anaximander. Pherecydes is put into the context of Orphic and Pythagorean traditions. Specifically, his distinctive mythological images (such as the 'embroidered' cloth and the winged oak) are shown to confirm an Orphic world-view, whose premises are musical-magical.

*'Things taken together are wholes and not wholes,
something which is being brought together and brought apart,
which is in tune and out of tune;
out of all things there comes a unity, and out of a unity all things.'*
-Heraclitus, fr. 10

ALCMAN'S COSMOGONICAL FRAGMENT

The Spartan lyricist Alcman flourished around 600 B.C., making him roughly a generation older than Thales. However, this date is not firm, and he may have come from the same generation as Thales. A few fragments of his poetry are extant, but our interest here lies with his mysterious theogonical cosmogony. The publication of the *Oxyrhynchus Papyrus no. 2390* in 1957 revealed its existence, perhaps arising out of an invocation of the Muses as children of **Earth** and **Sky**. This possible context alerts us to musical issues which go hand in hand with the Muse of poetry.

The papyrus was written by an anonymous person of the second century A.D. Alas, the poem itself is not preserved, only parts of a prose commentary, heavily influenced by Aristotle. The Hellenistic writer was evidently puzzled by the cosmogony, and he mentions that there were several other attempts at interpretation (col. i, 27f). Nevertheless, the cosmogony apparently fell into the same category as other Presocratic efforts, since the writer says that (fr. 3, col. i, 26) '*in this song Alcman concerns himself with nature (physis)*.' The commentary contains *lemmata*, short phrases from Alcman on which the comment was hung. We can be sure that these words and phrases were definitely used by Alcman, although the commentator's explanations are obviously post-Aristotelian. He tries to assimilate Alcman to Aristotle's discussion of the four 'causes,' the preconditions or aspects of physical existence, derived from *Physics B*. Here is the central section of the commentary¹...

¹ Alcman, fr. 3, col. ii, 7-20, from Page, *Lyrica Graeca Selecta* (Oxford, 1968).

*'For when matter began to be arranged there came into being a kind of way [or passage, **poros**], as it were a beginning [or origin, **arche**]. So Alcman says that the matter of all things was disturbed and unmade; then someone [masculine] came into being who was arranging everything, then a way [**poros**] came into being, and when the way had passed by, a limit [or goal, **tekmor**] followed on. And the way is like a beginning [or origin], whereas the limit is like an end [or limit, **telos**]. When **Thetis** had come into being these became beginning and end of all things, and the totality of things has a similar nature to that of the bronze material, **Thetis** to that of the craftsman, and the way and the limit to that of the beginning and the end...'*

We can be sure that Aristotle's four-point schema was *not* the original intention of Alcman. Yet the Hellenistic interpretation is understandable, since it *does* make some sense of Alcman's problematic terms **poros** and **tekmor**. Although not directly stated in the fragment, we can infer that the *material* cause is 'all things' or 'the totality of things;' in other words, it is the physical **kosmos**. Its nature is 'like the bronze material' because the limits of the **kosmos** (**Ouranos** and **Tartaros**) were imagined to be solid and immovable, like bronze. This 'place' defines the substrate or persistent substance out of which things come to be and abide. Change takes place *here*.

Poros is then the *formal* cause, that shape or configuration into which the universe is coming-to-be and changing. It is the 'pathway' or process-pattern of becoming, or its underlying principle (**arche**). It describes the essential characteristic of this 'becoming.' Meanwhile, **Thetis** is the *efficient* cause, that by which change is brought about. She is the craftsperson who initiates the activity and actually makes the **kosmos**. Finally, **tekmor** is the *final* cause, the purpose or goal (**telos**) for which the **kosmos** was made. It is that for the sake of which the whole process of change takes place. The implication is that, by following this 'way' (**poros**) from the beginning (**arche**), one reaches a limit or goal (**tekmor**).

While this scheme is certainly tidy, it probably has little to do with Alcman. We are understandably cautious about this particular use of **poros** and **tekmor**--it doesn't feel quite right. Specifically, it is not exactly clear in what manner a 'way' or passage can be likened to an originating principle or **arche**. Also, he may be too hasty in assimilating the meaning of **tekmor** to that of **telos**. In addition, **Thetis** was a goddess, yet the traditional association of the craftsman was always with a masculine figure, for example **Hephaistos**. Moreover, earlier in the commentary, the person who 'arranged everything' was indeed already described as masculine. Finally, the statement that matter was 'disturbed and unmade' shows us strong Stoic and Heraclitean influences. We are left unsatisfied by this analysis, although parts of this interpretation may yet be relevant to Alcman.

If the ancient commentator was confused about Alcman's poem, modern interpretations are perhaps worse. None of them seem really compelling, although Alcman has been the source of much recent speculation. According to Burkert,² **tekmor** is the *sign*

² W. Burkert, 'Orpheus und die Vorsokratiker,' *Antike und Abendland* 14 (1968), p.93-114.

that shows the way or *poros*. For West,³ *poros* represents *paths* in the primeval sea (*Okeanos*), while *tekmor* gives *signs* of direction through it. He came to this conclusion partly because *Thetis* was a sea-goddess, who had a cult centre in Alcman's Sparta. Vernant⁴ substitutes the stars for the sea. Page⁵ suggests that *poros* has a meaning similar to Hesiod's *chaos*. None of this appears promising.

As an example of the arid abstraction and sheer perplexity of modern attempts to understand Alcman's mysterious cosmogony, consider this analysis from an otherwise fine philosophical history⁶... *For Poros and Tekmor we must hesitate between more concrete and more abstract meanings, with a natural inclination to the former: between physical path or track, and the way or means of passage or progress; and between visible sign, and mark or limit, and end or culmination (both of these being Homeric). And the degree of abstraction or the reverse must correspond for the two different terms; thus 'limit' in a more concrete sense might conceivably be Okeanos, especially if Thetis has her sea-goddess connotation among others; but it is not easy to see what the 'path' might then be.* We get the sense that this commentary is even further removed from Alcman's intention. Compared with the modern efforts, the Aristotelian schema begins to look more attractive.

In the light of the musical thesis outlined in the last essay--SEPARATING EARTH AND SKY, here is another interpretation of Alcman. This alternative explanation will put him back into the mainstream of cosmogonical thinking. In other words, Alcman's cosmogony may be seen as but another poetic variant of the same old sonically-based musical orientation that underlies archaic thinking in general. By this interpretation, Alcman will not stand out as the peculiar eccentric he now appears to be. In addition, this interpretation connects his cosmogony more naturally with coming developments in Anaximander, so that he can more properly be seen as a 'man of his time.'

'For when matter began to be arranged...' Whenever we see the beginning of the cosmos described as an arrangement (or putting into order) we are alerted to the old musical orientation. In the archaic viewpoint, ordering the *kosmos* was more akin to setting or generating a harmony (a pattern of relatedness between vibratory 'entities'). We should not interpret the term 'matter' in the Aristotelian sense as physical substance alone; rather, we should assume the older Archaic and Presocratic sense, which is much more musical. Here matter takes on a lot more of the characteristics of a harmony; in some sense, matter is related more to *ratio* and the hierarchy of ratios as 'entity.' We are here assuming a more sonic orientation to 'matter.'

³ M. L. West, 'Alcman and Pythagoras,' *CQ* n.s. 17 (1967), 1-15.

⁴ J. P. Vernant, *Myth and Society in Ancient Greece* (London, 1980).

⁵ Page, *Lyrica Graeca Selecta* (Oxford, 1968) p.6.

⁶ G. S. Kirk, J. E. Raven, and M. Schofield, *The Presocratic Philosophers*, 2nd edition (Cambridge University Press, 1995) p. 48.

'there came into being a kind of way (*poros*), as it were a beginning (*arche*). ' The implication is that the *kosmos* came into being through first principles, by a method or procedure (a pathway or passage) which generates the 'coming-to-be.' Here we are on firm musical ground. The first principles generate the Elements, the roots of harmony. The pathway is then the methodology of monochord arithmetic--the taking of the musical *means*. We could say that the pathway is exemplified by the Emanation Table, and the musical *Genera*. The origin of the universe at large was imagined analogically to be akin to the generation of the vibratory realm (exemplified by a monochord and its mystical arithmetic).

'So Alcman says that the matter of all things was disturbed and unmade;' This sentence is highly Stoic in character, but the Stoics were heavily influenced by Heraclitus, who was known as the 'Ionian Muse.' If we assume that Alcman's sense of 'matter' is Presocratic rather than Aristotelian, then the sentence conforms very closely to the Heraclitean viewpoint. The One becomes the Many in the same way that perfect harmony (Unity) gradually allows the intrusion of complexity and becomes disturbed (at 'war'). Unity is 'unmade' in that it is sacrificed in order to generate the Multiplicity. This process is not haphazard, but involves *logos*, the ordering principle of *ratio* which underpins the pathway itself. The idea that the Many emanate from the One by a mysterious process which is somehow akin to music had wide appeal in ancient cultures, and permeates not only Heraclitus but also the other Presocratics. It is reasonable to assume that Alcman is expressing the same outlook.

'Then someone came into being who was arranging everything'... This someone is the *Demiurge* who generates the complexity (ideally the numbers 3 and 5 in the context of tuning work). Alternatively and more likely, it is the intelligence (*Nous*, Egyptian *Ptah*) who decides on the division and carries it out. Mythologically, it is the craftsman who 'does the deed.' In this sense, it is a little like Aristotle's efficient cause.

'then a way (*poros*) came into being, and when the way had passed by, a limit (*tekmor*) followed on. And the way is like a beginning, whereas the limit is like an end.' The way or passage is the monochord technique which starts from Unity and generates some Multiplicity. Following these arithmetical procedures one inevitably establishes some *limit*, some resultant scale pattern which was presumably initially desired. The notion of 'limit' permeates monochord thinking and ancient cosmology, and emerges with various meanings in different contexts. Using the direct analogy of the monochord, the passage could signify the pattern along the monochord string, and its limit is the open string (the highest number in the division series, the representative of *Ouranos*). More abstractly, the limit could be whatever defined Multiplicity is generated from the initial Unity. It would appear that Alcman's term *tekmor* is just another poetic description of the concept of *limit*, a key term in Presocratic philosophy. The difficulty (in fact, the impossibility, given that we have such meager fragmentary evidence of Alcman's work) is in deciding which aspect of this ubiquitous concept of *limit* that he wants to highlight by the use of his term *tekmor*.

'When *Thetis* had come into being these became beginning and end of all things, and the totality of things has a similar nature to that of the bronze material.' This whole creation is underpinned by the female principle which must *first* be invoked. Only with the prior establishment of the *mese* position as a 'firm seat' or 'house' can the *kosmos* serve for the production of the various alternative scales (worlds). The *mese*, defining the 'centre of the circle,' highlights the two fixed boundaries (*Ouranos*, *Tartaros*) of the *kosmos*, traditionally made of bronze. *Thetis* is then yet another name for the original *mese* goddess who rules 'procreation.'

Interestingly, the name *Thetis* may be associated with the root meaning of 'to place' or 'to set in place.' Such an etymology is perfectly suited to her role as the *mese*, as the centre of the circle. The very act of making a musical tuning involves a judicial decision over alternative archetypes. Consequently, we 'place' or 'set' musical tunings. In many different languages, the verbs 'to place' and 'to set' serve as a description for the task. Hence the appropriateness of the symbolism of the circle and the *mese*-point. *Thetis* is thus a functional substitute for *Tethys* (note the similarity of spelling), who is traditionally paired with *Okeanos*. In addition, *Thetis* was a sea-goddess, further enhancing her connection with *Okeanos*. She could be interpreted as the female 'consort' or aspect of *Okeanos*. She functions musically in the same way as old *Tethys*; moreover, she acts as the 'craftsman' in the sense that the DYAD itself is the power behind the generation of the complexity, through the principle of cyclical identity.

This interpretation of the fragment emphasizes the continuity between Alcman and the other archaic cosmogonists. Various other *lemmata* scattered through the Hellenistic commentary confirm this continuity. For example, the *lemma* about *skotos* (darkness) suggests an affinity with *Nyx* (Night), which is set at the stage at which 'matter' was still 'unseparated' or undivided. Symbolically, this is the stage before the separation of *Gaia* and *Ouranos*. We see nothing particularly new or out of the ordinary in all this. Alcman was expressing the same musically-based cosmogony as we find elsewhere.

And yet, there *is* something special or striking about Alcman's formulation. It has a certain 'compression' or concentration on essentials. The terms *Poros* and *Tekmor* point to the heart of the monochord 'environment'--they encapsulate the musical process and its resultant state quite admirably, and with brevity. *Tekmor* is an especially intriguing term. We wonder to which different aspects of 'limit' he refers, exasperated by the lack of any corroborating evidence with which to make a decision.

Perhaps he emphasized purely traditional aspects; on the other hand, perhaps he faced more problematic issues which will soon be exploited by Anaximander. Questions concerning the meaning of 'limit' (and its opposite) inevitably underly any cosmology which assumes that it arises from a model of resonance. The notion of 'limit' implies some conception of 'unlimit' or the infinite as its obverse. We have seen that archaic mythologies tended to image this aspect of experience which is 'beyond comprehension' as some colossal serpent which must be subdued (defined, some limit imposed on it). To

face it was to negate it into the positive--'tame' it by the imposition of some numerical order. Anaximander was ready to face the immense implications of the 'unlimited' itself, thus opening a new chapter in Greek cosmology. Perhaps Alcman, with his poetic term *tekmor*, was grappling with some of these same issues.

In some sense, the whole history of Presocratic philosophy is 'entangled' with the implications of limit and the unlimited. As we move into the Presocratic Era, the term broadens to become *Peras-Apeiron*, which can be translated in various ways. Besides the above, it was also bounded-boundless, finite-infinite, particular-indeterminate, defined-indefinite, digital(discrete)-analog(plenum), and rational-irrational (with regard to ratios). Among some circles it became purely *dualistic*, for example, in the later Pythagorean dualism between the MONAD and the DYAD. The term also had archaic meanings associated with Unity-Multiplicity, the One-the All, the source and the ocean, and, (lest we forget), also the One-the Silent (0), and MONAD-*Okeanos*. Somehow, the two ends of the sonic spectrum of the comprehensible, the Silence and the raucous plenum, meet in the common mythological imagery of 'the waters.' *Peras-Apeiron* became the central metaphor for the sacred process.

Alcman has the distinction of being the first in a long line of philosophers who will have something to say on the meaning of 'limit.' On the continuum between the traditionalists and the radicals, it is impossible to place him with any certainty. But just his presence alone reminds us of the fact that there may be more early cosmologists, whose words have simply been totally lost to us.

A generation or two after the time of Alcman, Anaximander paid a visit to Sparta, if we are to believe Diogenes Laertius.⁷ Is it possible that Alcman's ideas influenced Anaximander? We will never know, but the incident brings up an important point. The ancient Greeks were great travellers. During the seventh and sixth centuries they established colony cities all around the Mediterranean and Black Sea. They travelled for trade, cultural ties, religious pilgrimages, Olympic games, and so on. Even though the early history of philosophy is dominated by the one city of Miletus, with its giants Thales Anaximander and Anaximenes, it is refreshing to find 'quasi-philosophical' activity in other places as well. Besides the mainlander Alcman, Pherecydes was also an 'outsider,' hailing from Syros, one of the islands.

These people alert us to the fact that cosmogonical speculation was 'in the air' around the time of Thales. Perhaps novel metaphorical cosmological ideas were being fostered by the growing internationalization of culture. Soon, the benign governmental control of the Persian Empire would make possible the ability to safely travel between the Caucasus and Ethiopia, between Anatolia and India. Too much emphasis has been put on the social-intellectual isolation of the Greeks from surrounding regions. Surely the inevitable blending of cultural ideas influenced the content and direction of ancient philosophy.

⁷ Diogenes Laertius II, 1-2 (DK 12A1).

PHERECYDES OF SYROS: HIS DATE

Pherecydes was certainly a major figure, since there were so many references to him in the fourth century B.C., a crucial time for the transmission of information about the Archaic and Presocratic periods. His book continued to be copied, and it survived until at least the time of Diogenes Laertius in the third century A.D., although by then bits of it may have survived only through handbooks or anthologies. We know that Pherecydes was active at some time in the sixth century B.C., but it is impossible to say for sure exactly when, probably around the middle of the century.

We have two divergent ancient authorities on his dates, but neither of these chronological traditions looks particularly verifiable. The late Hellenistic chronographers assigned dates to various philosophers on largely *a priori* grounds--usually in order to specify 'school' affiliation and teacher-student relations. These dates may actually be quite fictitious, we just do not know. According to one tradition, he was a contemporary of Thales, whose *floruit* is conventionally placed around the historical eclipse of 585/4 B.C. This dating is seen in the *Suda* (DK 7 A 2) and in Diogenes Laertius I, 42 (DK 9 A I, after Hermippus). The other tradition is dependent on Apollodorus, and seen, for example, in Diogenes Laertius I, 118 (after Aristoxenus) and I, 121 (after Apollodorus). By this later dating Pherecydes had his *acme* in the 59th Olympiad, 544-541 B.C. In that case, he would be a contemporary of Cyrus of Persia, a full generation younger than Thales, and a younger contemporary of Anaximander. He would in fact be an exact contemporary of Anaximenes, whose traditional *acme* was during the epoch-year of the capture of Sardis by Cyrus, 546/5 B.C. during the 58th Olympiad.

The later dating is more likely, although impossible to prove. It accords better with persistent later Pythagorean traditions, which say that Pythagoras cared for Pherecydes in his old age, and that he in fact buried him. Although this event is also unprovable and possibly fictitious, it demonstrates that there were close affinities between Pherecydes and Pythagoras. According to widespread tradition, Pherecydes was a teacher of Pythagoras. We shall see that both men had strong Orphic connections. Pherecydes was possibly the first great cosmologist from the more conservative 'wing' of the Presocratic movement, the grouping which also includes Pythagoras, Empedocles, and Philolaus. These cosmologists used Orphic mythological imagery and defended an Orphic outlook.

HIS LIFE

What little is known of his life is mostly focused on his relationship to Pythagoras. It was certainly accepted that Pythagoras was his pupil, not only in Pythagorean circles, but also in Aristotelian Peripatetic circles. When Pherecydes fell ill of louse-disease in

Delos his disciple came and cared for him until his death.⁸ Although the story cannot be verified, it was so widespread that there must have been something behind it.

Many miracles were attributed to Pherecydes, for example, predictions of an earthquake, a shipwreck, the capture of Messene, and so on. These events were located in various places: in Sparta (home of Alcman), near Ephesus (home of Heraclitus), in Samos (home of Pythagoras), in Syros, and other places. These same miracles were also attributed to Pythagoras. According to Apollonius the paradoxographer (DK 14, 7)... *'Pythagoras afterwards indulged in the miracle-working of Pherecydes.'* Porphyry also disclosed (as quoted by Eusebius, DK 7 A 6) that, according to the fourth century B.C. writer Andron of Ephesus, the miracles really belonged to Pythagoras; but that Theopompus plagiarized the miracle-stories from Andron, assigning them to Pherecydes, changing a few details and locations. Andron himself invented another Pherecydes of Syros, an astronomer⁹, who may or may not be our same Pherecydes. We see no certainty in these stories. Confusion and disagreement about Pherecydes' life was already evident in the 4th century B.C., showing that reliable details were lacking even then.

However, we can infer from these miracle-stories that Pherecydes was likely a *magus* with aspects of the shaman, just as were Pythagoras and Empedocles in the same tradition. This proto-alchemical tradition was closely connected with ancient medicine, and was especially strong in Italy. We can see this same magical orientation still alive in the Hellenistic Bolus of Mendes and the alchemist Zosimus of Panapolis within the Hermetic tradition.¹⁰

Another connection between Pherecydes and Pythagoras is suggested in the well-known 5th century B.C. comment:¹¹ ... *'Ion of Chios says about him [Pherecydes]: 'Thus did he excel in manhood and honour, and now that he is dead he has a delightful existence for his soul--if Pythagoras was truly wise, who above all others knew and learned thoroughly the opinions of men.'* What the fragment probably means is that if Pythagoras is right about the continued existence of the soul, then Pherecydes' soul should be enjoying a blessed existence, since he was so faithful to the 'Orphic way.' The immortal aspect of the *Soul* which was purified by various rites and rituals was a common belief between the Orphics and the Pythagoreans. We see no reason to exclude Pherecydes from this 'club.'

One more interesting testimony of the relationship between Pherecydes and Pythagoras comes from the *Suda* s.v. *Pherecydes*:... *'There is a story that Pythagoras was taught by him; but that he himself had no instructor, but trained himself after obtaining the secret books of the Phoenicians.'* The assertion that he was self-taught may only mean

⁸ Diogenes Laertius I, 118, Diodorus X, 3, 4; DK 7 A 1 and 4. Aristoxenus and Dicaearchus also confirmed it according to Porphyry *Life of Pythagoras* 56.

⁹ Diogenes Laertius I, 119, DK 7 A 1.

¹⁰ See, Peter Kingsley, *Ancient Philosophy, Mystery, and Magic, Empedocles and the Pythagorean Tradition*, (Clarendon Press, Oxford, 1995).

¹¹ Ion of Chios *ap.* Diogenem Laertium I, 120.

that the biographers could not find a teacher that they could conveniently assign to him. On the other hand, it may be true. As for the secret books of the Phoenicians, most scholars dismiss it as an unlikely story, even though most will admit 'oriental' influences on his cosmogony, especially concerning the battle of *Kronos* and *Ophioneus*, which has strong Phoenician affinities.

Later ancient writers also connected him with Zoroastrianism. We have already noted in the former essay the many links between Orphism and Persian Magianism. We could dismiss the above statement as isolated, but another backs it up, from Philo Byblius¹²... *'From the Phoenicians Pherecydes, too, took his impulse, when he wrote about him whom he called the god Ophioneus, and the children of Ophioneus.'* It is also possible, though unprovable, that there actually were secret Phoenician books which were made available to him. Certainly ancient Lebanon had very close cultural and historical ties with Egypt, which definitely had its own tradition of secret books: the *Books of Thoth*. According to one school of thought, Orphism itself originated in Egypt. Unfortunately, we can only speculate on these matters, but one lesson can be drawn from all this. It is quite likely that Pherecydes absorbed whatever influences were available to him from various diverse regions and cultures in creating his own version of the cosmogony.

One more incident can be related concerning the life of Pherecydes. According to Diogenes Laertius (I, 119)... *'There is preserved of the man of Syros the book...and there is preserved also a solstice-marker in the island of Syros.'* Perhaps by tradition he introduced the instrument to the community. However, it is quite unlikely to be literally true, and he certainly did not invent the device. It had long been known in Babylonian-Assyrian astronomy. Unfortunately, no other extant evidence exists that he was a practical scientist; on the other hand, most other sixth century sages, especially the Milesians, were known to have interests in 'applied' astronomy, geometry and arithmetic, taking part in engineering projects and so forth. Even though there is no other evidence extant, it is nevertheless quite possible that Pherecydes was also such a person. Moreover, in the archaic system of Greek education, practical monochord manipulation was a highly esteemed skill, so that it is highly likely that he was also 'literate' about Music.

HIS BOOK

According to a widespread tradition, Pherecydes' book was the earliest prose book written. This position is exemplified by the fragment¹³... *'This man is said by Theopompus to have been the first to write on nature and the gods.--Some relate that he was the first to bring out a book in prose.'* What the fourth century B.C. writer Theopompus probably meant was that Pherecydes was the first to write about the gods in prose. Earlier writers, such as Hesiod and Alcman, wrote in poetic verse. Of course, prose annals existed before Pherecydes, but he and Anaximander, whose book may have been roughly contemporary with his (and assigned to around 547 B.C.), may have been the first substantial prose

¹² Philo Byblius *ap.* Eusebium P.E. I, 10, 50.

¹³ Diogenes Laertius I, 116.

writers whose work has survived in the Greek world. This consideration alone makes his book quite significant.

We have the beginning of his book¹⁴... 'There is preserved of the man of Syros the book which he wrote of which the beginning is: '**Zas** and **Chronos** always existed and **Chthonie**; and **Chthonie** got the name of **Ge**, since **Zas** gave her **Ge** as a present [or prerogative].' Here we sit in familiar Orphic-musical territory. **Zas** and **Chthonie** (**Ge**) are alternative names for **Heaven** and **Earth**, or **Ouranos** and **Gaia**, the root pair of the MONAD-DYAD which underly vibratory emanation. **Chronos** (*Time*) is to be equated with **Kronos** (the Father of the gods). *Time* is the eternal generative power behind the vibratory emanation, closely allied with **Eros**. **Chthonie** receives the name **Ge** (meaning **Earth**) when she receives the present of the embroidered cloth as a wedding present. The implication here is that she apparently takes over the control and guardianship of marriages, in close conformity to the musical symbolism. The whole process of monochord arithmetic is controlled or 'ruled' by the special properties of the DYAD, the prime number 2. Its ability to act as cyclical identity allows further vibratory 'entities' to be born through the 'marriages' between numbers as least common multiples.

We can also assimilate Pherecydes' triad **Zas-Chthonie-Chronos** with the traditional triad **Zeus-Hera-Kronos**. Although **Hera** was perhaps not an earth-goddess in origin, she sometimes replaces **Gaia** as the *mese* goddess. For example, she appears to be the mother of **Typhaon** in the *Homeric Hymn to Apollo*. Traditionally, **Hera** signified the aspect of the central goddess who controls marriages, an all-important function of the original *mese* goddess.

Pherecydes was attracted to the use of etymological forms for his cosmogonical terms. We have seen that **Ge** became **Chthonie**, **Zeus** became **Zas**, **Kronos** became **Chronos**. In addition, we shall see that **Okeanos** was called **Ogenos**, and the gods were named a 'table' ('watcher over offerings' DK 7 B 12). Sometimes he used idiosyncratic derivations of familiar cosmogonical names. For example, he used **chaos** not in the traditional Hesiodic sense, but apparently connected it with the **primeval waters**. This use of etymological variants alerts us to the possibility that he is trying to clarify or justify the core inner meaning of the traditional mythological images, a characteristic of Presocratic philosophy in general. He wants to rename and perhaps 're-vision' the essential characteristics of the musical emanation.

Zas, Chthonie, and Chronos 'always existed.' This statement is analogous to the declaration of Heraclitus, two generations later, that the world-order was not made by god or man, but always was, is, and shall be. In other words, he is speaking of the divine element in nature which is eternal. The ubiquitous Presocratic term *nature* (**Physis**) has as its root meaning 'that which grows,' indicating the biological orientation of the ancient Greek science. The implication is that its growth is 'natural' and not arbitrary. This growth through **logos** has a strong affinity for the unambiguous and demonstrable properties of

¹⁴ Diogenes Laertius I, 119.

monochord arithmetic, which are ruled by *Necessity* and generate a process of ordered emanation. The wider world of nature was assumed to embody the same musical properties.

This meaning has implications for certain issues of Presocratic philosophy. Various philosophers are classified according to whether they believe that the *kosmos* began once, begins over and over, or always existed. Again, we have the question over whether there is only one *kosmos*, or many. To a certain extent, the differences between all of these various positions are irrelevant to the underlying musical perspective. One can argue decisively for all of them *at once*. The *kosmos* begins over and over because the process of setting a tuning (in essence, a judicial decision) happens repeatedly within the passing of time, yet the very first or imagined cosmogonical division is not in essence any different. Hence the principles-processes which accompany this 'setting' are judged eternal, they have no beginning. In addition, even though the *kosmos* is by nature *one* and whole, yet at the same time one can generate innumerable *kosmoi* through alternative divisions. The One and the Many 'co-exist' as a higher unity. Hence the argument over whether the universe began or did not begin is a bit of a red herring.

THE RECESSES

We have a tentative title for Pherecydes' book, although it was probably also known by the title given to the books of the other Presocratic philosophers--*On Nature*. Much confusion exists over Pherecydes' intention in this cryptic title--the *Recesses*. Specifically, there are two traditions over the title of his book. In the first tradition, it is called '*of the seven recesses*.' In the other tradition, which is more likely, it is called '*of the five recesses*.' We will put forth arguments in favour of both approaches, even though this author favours the second as more probable.

The intriguing title '*Seven Recesses*' comes from a fragment from the *Suda* s.v. *Pherecydes*... '*Everything he wrote is as follows: Seven Recesses or Divine Mingling or Theogony. (And there is a Theology in ten books containing the birth and successions of the gods.)*' The titles Divine Mingling and Theogony have obvious relevance. It is, after all, a Theogony or account of the birth of the gods. As such, it defines a Divine Mingling, since the various *Roots* or *Elements*, such as the MONAD and the DYAD are 'united' by *Eros* to generate the *kosmos*. The 'ten volume theology' could be seen as an early instance of the Pythagorean veneration of the number 10. But more probably it refers to a confusion with a ten volume work on Attic history (which, no doubt, also begins from gods and heroes) by another Pherecydes, who was a 5th century Athenian genealogist. Perhaps this whole fragment is suspect, but nevertheless we are wise to consider it.

The precise reference to *seven* recesses and not some other number in this mysterious title is unclear. Division of a body into seven parts usually has some reference to an astrological source, since there are seven planets. This symbolism is expressed in various ways. The Babylonians had seven regions of the dead. In the Hippocratic treatises, the world was sometimes divided into seven parts to correspond to the seven parts of the

human body. In India we have the related notion of the seven Chakras along the spine. The reference was usually planetary, but also sometimes initiatory, as seven 'gates' or 'thresholds.' In the Babylonian myth of the Descent of *Ishtar*, she must pass through seven gates before she reaches the centre of the underworld.

Porphyry also saw these doors and gates in Pherecydes¹⁵... *'when Pherecydes, the man from Syros, talks of recesses and pits and caves and doors and gates, and through these speaks in riddles of the becomings and deceases of souls.'* This statement is itself cryptic, and does not clarify Pherecydes' problematic idea of the 'recesses.' However, if he is 'riddling' about 'becomings,' then the musical context is again implicated, since a musical model was thought to rule the world of becoming. *Pits and caves* were traditionally places of initiation, where a person had an experience of rebirth. Such an experience was characteristically described as an emergence from the cave--a transformation of consciousness. The process of transformation or initiation has obvious musical associations, since the cave becomes the serpent *Okeanos*, and the release births the MONAD, or some new *Zeus*. The imagery of the cave re-surfaces in Empedocles and in Plato. *Doors and gates* traditionally stood for the threshold position, fundamental to initiations. This image is also prominent in Parmenides' cosmological poem.

The reference to *'the becomings and deceases of souls'* relates Pherecydes to the Milesians, for whom the concept of a soul (even a world-soul) was quite prominent. The process of re-incarnation is also implied, a characteristically Orphic doctrine. As we move into the Presocratic era, a peculiar focus on the meaning of *Soul* is evident, as cosmologists ponder the wider implications of the TRIAD. The reference to *'becomings and deceases'* could possibly be related to the process of emanation and its reverse direction.

The tradition of *five recesses* is also consistent with the old musical cosmogonies. We are given this interpretation in a remarkable fragment from the Neoplatonic Damascius¹⁶... *'Pherecydes of Syros said that Zas always existed, and Chronos and Chthonie, as the three first principles...and Chronos made out of his own seed fire and wind [or breath, pneuma] and water...from which, when they were disposed in five recesses, were composed numerous other offspring of gods, what is called 'of the five recesses,' which is perhaps the same as saying 'of five worlds.'*

In this fragment we get a much clearer idea of the likely root meaning of the 'recesses.' *Chronos*, as *Time*, creates out of his own seed (his own inherent power) the Root Elements of the musical realm--**fire** (MONAD), **air** (TRIAD) and **water** (PENTAD). The fourth Element **earth** (DYAD) has already been given as *Chthonie*. In this version of the 'story,' **fire** has already been distinguished from *Zas*, so that we have two images of the MONAD's aspects. The fifth 'element' is likely the initial state of the pre-existence (*Okeanos*), the initial silence. These primary constituents are made from the

¹⁵ Porphyrius *de antro nymph.* 31.

¹⁶ Damascius, *de principiis* 124 bis.

seed of *Chronos*, which is another poetic manner of describing *Eros*, the urge to generation. We have already seen this 'seed' or 'semen' in the Egyptian cosmogonical accounts where the original world constituents are produced by the onanism or masturbation of the primeval god *Atum* or *Atum-Ra*. The 'seed' stands for the power of *Chronos* to 'father' generation as *Eros*. The *recesses* then describe the original elements of the vibratory emanation, the progression ruled by the numbers 0, 1, 2, 3, and 5. In other words, the *recesses* have a similar meaning to the *pathway* defining the stages of emanation. Thus we can favorably compare Pherecydes' *recesses* to Alcman's *pathway*. These 'first parents' (the Elements) then birth numerous offspring, which are temporal, yet immortal; that is to say, they are born and die under the auspices of *Time*, but the principles of their 'architecture' are eternal as perceptual form.

Many mainstream scholars are deeply troubled by this fragment of Pherecydes, because it 'smacks of 5th century four-element theory.' According to the orthodox viewpoint, the very idea of the four Elements was discovered or invented by Empedocles, in spite of the overwhelming use of the Roots concept in all of the earlier philosophers, Hesiod, Homer, and in the cosmogonies of Asia from Egypt to India and China! For some reason, they want to restrict the notion of the Elements to as narrow a confine as possible, in much the same way that they want to restrict musical elements in ancient Greek cosmology only to Pythagoras, pretending that Music had little to do with ancient conceptions of order.

Many modern scholars try to undermine the authenticity of Damascius' fragment. The usual way is to consider the seed and its products as a later Stoic intrusion, or perhaps an intrusion from Anaxagoras. Alternatives, they accept the seed as genuine, but have *Chronos* place it directly into the *recesses*. Characteristically, they have no idea what the *recesses* could refer to, but vaguely (rightfully) connect them with the *earth*, which is female and does have recess-like connotations. Of course, this image can be variously understood in musical ways. *Chronos* places his seed inside *earth* because the DYAD establishes the link between macrocosm and microcosm, serving to define the *place* of the sacrifice. From this unshakable 'House' the families (the Medial Elements) are born.

The orthodox manner of reconciling the fragment of Damascius with the *Suda* is to add *Zas* and *Chthonie* to the five *recesses* connected with *Chronos*. However, this procedure makes little sense from a musical perspective. As soon as we see the additive aspects of numbers prominent, rather than the proper multiplicative aspects, we have a good sign that we have left the realm of harmonics, and have likely entered into the 'harmonically-bogus' realm of numerology and abstract number games. We could just as well add *Chronos* to the group and make eight *recesses*. Of course, such numbers as 5, 7, and 8 have prominent musical characteristics, but these are almost always ignored both by Hellenistic numerology and modern interpretations. Consequently, the numbers are robbed of their archaic and universal *power* as vibratory entities. It is not inaccurate to describe modern efforts to interpret ancient cosmology as strictly *a-musical*.

We are left with the necessity of choosing between the two alternative versions, the 'seven' and the 'five.' The later version is perhaps more consistent with its own premises, although either version could be satisfactory. When the recesses are accepted as the traditional emanatory pathway, then the fragments of Pherecydes become largely consistent within themselves, and, of course, consonant to the Orphic traditions examined previously. His book is perhaps best interpreted as yet another creative Orphic cosmogony, in the same tradition as the many Orphic cosmogonies that we have examined in the last essay. The same cosmogonical 'characters' are employed, only their roles are slightly shifted in the latest 'story.' We shall see that Pythagoras and Empedocles can also be connected to this tradition.

This willingness to shift the story becomes much more marked in the later Hellenistic era, when cosmogonies were not so firmly tied to underlying musical realities. Here is an example, which probably has no direct connection to Pherecydes, but also uses the story of *Chronos* placing his seed into *Ge*. Note the presence of the same cosmogonical characters that we find in earlier Orphic cosmogonies:¹⁷

'They say that Ge in annoyance at the slaughter of the Giants [Titans] slandered Zeus to Hera, and that Hera went off and told Kronos about this. He gave her two eggs, smearing them with his own semen, and telling her to store them underground: from them, he said, a daimon would be produced who would displace Zeus from power. And she in her anger put them under Arimon in Cilicia. But when Typhon had been produced, Hera had become reconciled to Zeus, and revealed everything; and Zeus blasted Typhon and named the mountain Aetna.'

One sees strong Orphic imagery here, although the eggs are placed in the **earth**, and not the *Aither* or *Erebos* (which at any rate is often a proxy for **earth**), as in the *Orphic Rhapsodies*. *Kronos* impregnates two eggs, not one, perhaps an illusion to the DYAD of **earth**. They are placed underground in a recess, here a mountain in Anatolia. Note that the name for this mountain is cognate with the Persian *Ahriman*. From the eggs are born *Typhon/Typhoeus*, a possible analogue of Pherecydes' *Ophioneus*. The serpent is blasted, in that *Zeus* fulfills his function as the 'tamer' of the complexity.

We recognize a likely possibility that Pherecydes also used the image of the Egg, although no evidence is extant. We can also speculate that Pherecydes used the imagery of the 'seed' or 'semen' and connected it to his notion of *chaos* as the **primeval waters**. According to Achilles,¹⁸ Pherecydes, like Thales and practically everyone else, declared that the initial element was **water** (*Okeanos*), which he called *chaos*. The *Suda* also says that (DK 7 A 2) *'he imitated the opinion of Thales.'* None of this is at all surprising. It shows that Pherecydes likely followed the old musical cosmogony, only expressed it in a new or creative way in order to bring out some 'truth' about the musical universe. Just how much of Pherecydes' story is traditional and how much is novel is impossible to say.

¹⁷ Scholion in Homeri *Iliad* II, 783. It is found in: H. Erbse, *Scholia Graeca in Homeri Iliadem I* (Berlin, 1969), xii.

¹⁸ Achilles, *Isagoge* 3, DK 7 B 1 a.

THE WEDDING GIFT

Central to Pherecydes' story, like the other ancient cosmogonies, is the relationship between **Heaven** and **Earth**. A bond, or *Eros*, is formed between them, symbolized by their marriage. This reference confirms it¹⁹ ... *'But consider also the work of the man from Syros, and Zas and Chthonie and the Eros between them, and the birth of Ophioneus and the battle of gods and the tree and the robe.'* The marriage between the MONAD and the DYAD is fundamental to the musical perspective. In the DYAD, the Two are One as cyclical identity. The marriage of the DYAD and the TRIAD and/or the PENTAD generates the multiplicity. The production of marriages is the essential feature of monochord arithmetic, as simple prime numbers generate larger (composite) numbers through the use of multiplication--appropriately described as the marriage between numbers. The fertility image of 'marriage' thus has a natural close affiliation to the musical perspective. The fragments imply that *Ge*'s authority over marriages, an authority also engined to *Hera*, was a wedding gift from *Zas*. This is certainly consistent with underlying musical realities. Although the DYAD rules marriages, the MONAD is the primary giver of the gift, since it can be represented by any number. Pherecydes elaborates on this gift, given by the aetherial *Zas* as *Eros*.

We learn more about Pherecydes' marriage gift from a commentary found within a late papyrus of the 3rd century A.D.²⁰ ... *His halls they made for him, many and vast. And when they had accomplished all these, and the furniture and manservants and maidservants and everything else necessary, when everything was ready, they hold the wedding. And on the third day of the wedding Zas makes a great and fair cloth and on it he decorates Ge and Ogenos and the halls of Ogenos... 'for wishing [or some such word] marriages to be yours, I honour you with this. Hail to you, and be my consort.'* And this they say was the first Anacalypteria: from this the custom arose both for gods and for men. And she replies, receiving from him the cloth... Wedding festivities traditionally took three days, and the Anacalypteria was the Unveiling of the Bride, an aetiologial element in the story. *Zas* then makes a great cloth, decorating it with *Ge* (earth) and *Ogenos* (water), presenting it to *Chthonie* as a gift, after which she takes the name *Ge*.

Much confusion has reigned among modern scholars over how to interpret this fragment. The consensus answer appears to consider *Chthonie* as the solid structure of the earth. Then the gift consists of the variegated surface of the earth (the land and waters, which is *Ge* and *Ogenos*). But then why is it decorated or 'embroidered' and described as a cloth? We can assume that the whole incident must be an allegory for the creative act, but most scholars remark that it seems somewhat 'unmasculine' for *Zas* to do this embroidery, especially if it has no more significance than an Unveiling-gift.

We propose that an interpretation consistent with a musical perspective is more in order here, especially given the highly musical context of a 'wedding.' *Zas* is the MONAD

¹⁹ Maximus Tyrius IV, 4, p.45, 5 Hobein.

²⁰ Grenfell and Hunt *Greek Papyri* series II, no. 11, p.23.

source, but *Chthonie* is the DYAD who makes the variegated 'web' or matrix of harmonic relations possible. This web of relations is described as a 'cloth' or 'robe' in several ancient contexts, a fitting description for the matrix of interval relations. It is decorated with *Ge* and *Ogenos* because it is 5-Limit. We have already seen that 5-Limit interval patterns are best represented by a triangular-hexagonal 'cloth' or web, the classical 'pebble pattern' exemplified by the Pythagorean *Tetractys*. On a more abstract note, the 'cloth' is whatever complexity of pattern the DYAD generates as an expression of the One. It is equivalent to the mythological *Omphalos stone* (the One, the center) which is covered by a net or cloth (the *kosmos*). It could also be mythologically described as the net which catches the fishes. The cloth is an excellent metaphor for the matrix of harmony, since it is made up of warp and woof (traditionally 3-limit and 5-limit ratios), and because it covers or clothes the One. Unless this fabric is judiciously limited in its scope, we witness friction (Heraclitus' war) between its components, as comma relations make decisions over alternative archetypes necessary.

THE WINGED OAK TREE

We learn more about the decorated cloth from this fragment²¹ ... *'that they may learn what is the winged oak and the decorated cloth upon it, all that Pherecydes said in allegory about the gods, taking his idea from the prophecy of Ham.'* The prophecy of Ham is another reference to Zoroaster, although the decorating of a tree with a cloth does not appear to be part of Persian tradition. However, it is obvious that the imagery of the cloth is to be closely related to the tree.

The tree is another ubiquitous ancient symbol for the cosmic nature of the Elements. Often it would be called the 'world-tree,' which forms the axis of the universe. Traditionally, its branches pointed to the Pole Star (**heaven**), and it sends its roots deep into the **earth**. The image is quite widespread, in Scandinavia being called *Yggdrasil*. Although the tree is a highly visual image, its associations are quite musical, since it denotes the Elements and the growth of diversity from the original unity (the seed). In Pherecydes' use of the image, it is an oak because the oak was sacred to *Zeus*, witness the prophetic oaks in his shrine at Dodona (Odysseus xiv, 328). It is winged because it is associated with **Heaven** and *Zas*. The tree was an example of the 'sacred plant,' which was a widespread source for religious veneration in ancient societies. Some of the earliest pictures from the Middle East show two goddesses caring for the sacred tree, the source of all the abundance of nature.

In Pherecydes' story, *Zas* weaves a cloth, decorating it with **earth** and *Ogenos*, and spreads it over the tree. The implication is that the matrix or web of harmony is derived from the Elements as centre and source. The Elements form the core 'characters' for the expanding matrix of relations. The Elements, as it were, clothes the One. Their composite children (the diatonic scalar harmonies) then clothe the central trinity of Elemental powers (the numbers 2, 3, and 5, the primal masks for the One).

²¹ Isidorus (the Gnostic, 1st-2nd century A.D.) *ap. Clement. Al. Strom. vi, 53, 5 (DK 7 B 2)*.

Scholars trying to make sense of Pherecydes' fragments have understandably been somewhat confused about the winged oak, and put forth some imaginative explanations for the cryptic image. Some explanations are highly absurd, some are ingenious. In the former category consider the suggestion of H. Gomperz²² that the oak represents the frame of the loom on which **Zas** made the cloth. But it is highly unlikely that a loom would be described as an oak tree. This interpretation seems highly unlikely.

Much more interesting is the suggestion of Diels²³ and some of his associates, saying that the oak represents the mast on which Athena's **peplos** was carried in the Panathenaic procession. The fragment given above... *'the battle of the gods and the tree (peplos) and the robe'* uses this term, and 'winged' could refer to the cross-piece on which the robe was hung. The procession represented the victory of Athena over Enceladus in the battle between gods and giants. Diels was impressed by another passage, where Origen reports that Celsus interpreted certain rites and mythological incidents as symbolizing the subjection of matter by god.²⁴ ... [Celsus] says that with this interpretation of these Homeric lines in mind Pherecydes has said: *'Below that portion is the portion of Tartaros; the daughters of Boreas, the Harpies, and Storm, guard it; there Zeus expels whosoever of the gods behaves insolently.'* The **peplos** is meant to show that 'a motherless and immaculate deity prevails over the boastful Earthborn.' While this statement is also highly musical, it is still unlikely that the winged oak tree can be directly connected to the Panathenaic procession. The reference to **Tartaros** appears quite traditional, **Storm** is a colleague of **Night**, and **Zeus** behaves in a proper musical manner by expelling numbers which are not part of the 'family.'

The symbol of the winged tree also reminds us of the symbol of the winged disk, representing **Ahura Mazda** in Zoroastrian traditions. Like the symbol of the tree, the circle is another image ubiquitously associated with the Elements. Early traditions of angelology, the depiction of gods or beings with wings representing birds, have been traced back into ancient Persia. Indeed, the ancient vulture-cult has been tracked back to 6500 B.C. in archaic Turkey at Catal Huyuk. The association of the bird image to the sacred is very widespread in ancient cultures. Witness the Egyptian falcon, who is **Horus**, the protector of the pharaoh. Perhaps Pherecydes used the wing image in order to further sanctify his tree of **Zeus**. At any rate, the novel image of the winged oak, like the potentially dualistic image of **Kronos-Ophioneus**, tends to connect Pherecydes with Persian influences.

THE BATTLE OF THE GODS

Evidently, Pherecydes described an encounter between **Kronos** (who, we would assume, is also **Chronos**) and **Ophioneus**, a cosmic serpent²⁵ ... *'Pherecydes, who lived*

²² H. Gomperz, *Wiener St.* 47 (1929), 22.

²³ Diels, *SB Ber.* 1897, 147f.

²⁴ Celsus *ap.* Origen. *c. Celsum* vi, 42 (DK 7 B 5).

²⁵ Celsus *ap.* Origen. *c. Celsum* vi, 42 (DK 7 B 4).

much earlier than Heraclitus, made the myth that army was drawn up against army, and he gave **Kronos** as leader of one, **Ophioneus** of the other, and recounted their challenges and struggles, and that they made an agreement that whichever of them fell into **Ogenos**, these were the vanquished, while those who thrust them out and were victorious were to possess the sky.' This battle evidently must be the same one as that between **Zeus** and **Typhoeus** in Hesiod's *Theogony*. **Ophioneus** is derived from **Ophion**, meaning snake. The agreement that the vanquished would fall into **Ogenos** and that the victor would possess the sky presents us with a highly musical image. The winner then represents **Heaven** or **Zeus**, therefore possessing the sky. The image of the loser falling into **Ogenos** may only mean that the 5-Limit is the fullness or completion of harmony. Alternatively, it may mean that the vanquished is silent! Again, it could mean that the 5-Limit is being simulated within the 3-Limit. Perhaps **Ophioneus** is symbolic of the sacrifice, who then becomes **Ogenos**. Clearly, we cannot decide on a consistent interpretation unless we have some idea of the source meaning of **Kronos-Ophioneus** in Pherecydes' cosmology.

This fragment cites Pherecydes as an influence on Heraclitus, who emphasized the potential conflict between the elements of the *logos*-generated matrix. Specifically, we have noted the comma-shifted 'war' between two alternative versions of the diatonic scale--the 3-Limit archetype, and the 5-Limit version. Such a prestigious example is only one of a further series of potentially dissonant 'conflicts.'

Consistent with this underlying musical reality, perhaps **Kronos** represents the 3-Limit, and **Ophioneus** represents the 5-Limit, the principal 'warring families' within the traditional matrix. Under this interpretation, **Kronos** is equivalent to **Zeus** as the *Demiurge* or the male principle associated with 3-Limit harmony. **Ophioneus** then represents **Okeanos** as the 5-Limit 'completion.' This interpretation is a subtle but real shift away from the traditional interpretation of the fragment. From the archaic viewpoint, **Kronos-Ophioneus** is but another mythological image for the old relation between **Okeanos** (the pre-existent) and the MONAD (the existent, the emanation).

On the other hand, perhaps the antagonism between **Kronos** and **Ophioneus** is to be interpreted in a more dualistic Persian sense, as the cosmic eternal battle between the forces of order and disorder. As we have seen, Pherecydes has been connected with Zoroastrianism from several ancient sources. In such an interpretation, the pair **Kronos-Ophioneus** would then include various aspects of the traditional **Heaven-Earth** within a primal polarity. Unfortunately, our information on Pherecydes is so scant that it becomes impossible or extremely difficult to make an informed interpretation with any certainty. In the following section, we examine the case for equating **Kronos-Ophioneus** with the key Milesian pair **Peras-Apeiron**. We shall see that such an interpretation is perhaps less likely. In the case of Pherecydes, we are faced with a situation in which it is impossible to clarify his version of the cosmology, since the evidence is so scarce.

Pherecydes' 'war' story can nevertheless be related to the Orphics. According to Apollonius²⁶ ... 'He [*Orpheus*] sang how first of all *Ophion* and *Eurynome*, daughter of *Okeanos*, held sway over snowy *Olympus*; and how by strength of hands the former yielded his lordship to *Kronos*, the latter to *Rhea*, and they fell in the waves of *Okeanos*; and the other two meantime held sway over the blessed gods, the *Titans*, while *Zeus*, still a boy and still having childish thoughts in his heart, dwelt by the Dictaeon cave...' Here *Ophion* has a consort, *Eurynome*, who is daughter of *Okeanos*. *Kronos*' consort is *Rhea*. *Ophion* and *Eurynome* are likely mythological substitutes for *Okeanos* and *Tethys*, or else *Eurynome* is but a female aspect of *Okeanos*, who is by nature indefinable as the source. *Olympus* is an analogue for *Heaven*, the sacred mountain top, or for the monochord itself (*Olympus* was a famous mythical musician). It is here snowy because it is pure and undivided during the rule of *Okeanos*. However, *Kronos* (*Time*) has the ultimate power, and rules over the other blessed gods, the *Titans*, and any further divisions of time. *Okeanos* falling into the waves of *Okeanos* seems a bit paradoxical, but it must be remembered that *Okeanos* was not only the primordial Silence, but also the fullness of the 'waters.' *Kronos* and *Rhea* could also here be serving as mythological substitutes for *Ouranos* and *Gaia*, and we assume (although it is not stated) that they will eventually be replaced by *Zeus* and *Hera*. This cosmogony reported by Apollonius would appear to be yet another Orphic variant, and not directly related to Pherecydes.

The cosmic battle between the sky-god and the snake-god is a common cosmogonical theme, not only in Indo-European contexts but also in Semitic mythologies. For example, we have *Marduk* against *Tiamat* in the Babylonian creation myth, the victory of the storm-god over the dragon *Illuyanka* in the Hurrian-Hittite story, and the nightly overcoming of the dragon *Apophis* by the Egyptian sun-god *Ra*. The battle between *Zeus* and *Typhoeus* or *Typhon* was often equated with the Egyptian conflict between *Horus* and *Set*. In all of these stories, the symbolism centres around the establishment of order out of disorder in a dualistic sense, or the release of the 'world' (the cosmic waters) from the initial inertia of the *Okeanos*, the pre-existent dormant state. Perhaps it is prudent, given the unfortunate circumstances, to interpret Pherecydes' *Kronos-Ophioneus* as a close variant of this traditional meaning.

PHERECYDES AND ANAXIMANDER

If we assume that Pherecydes lived in the generation of Anaximenes or somewhat earlier, it is reasonable to suppose that he may have been influenced by the great Anaximander, or even by Anaximenes himself. As we shall see, the close similarity between these two Milesians is such that we need not distinguish them for now. Unfortunately, the ancient evidence is also scanty. One late fragment from the Neoplatonic Proclus can conceivably relate Pherecydes to Anaximander²⁷ ... 'Pherecydes used to say that *Zeus* had changed into *Eros* when about to create, for the reason that, having composed the world from the opposites, he led it into agreement and peace and sowed

²⁶ Apollonius Rhodius I, 503.

²⁷ Proclus in *Tim.* II, p. 54 Diehl.

sameness in all things, and unity that interpenetrates the universe. ' The first statement, that **Zeus** became **Eros** to create the cosmos, is typically Hesiodic-Orphic, and also consonant with Pherecydes' other imagery. The third statement is highly Stoic and Neoplatonic. But sandwiched between them is the generation of the world from the opposites, a doctrine that originated with Anaximander, and was found in many of the Presocratic philosophers.

Aristotle informs us²⁸ ... *'the others say that the opposites are separated out from the One, being present in it, as Anaximander says and all who say that there are one and many, like Empedocles and Anaxagoras; for these, too, separate out the rest from the mixture.'* From a traditional musical standpoint, the conception of the opposites refers to the *reciprocal* relation that underlies all musical phenomena. On a practical level we can call it the Arithmetic and Harmonic Means, or the tuning methods based on a monochord and based on string harmonics--the reciprocal between rising and falling pitch, the Sub-harmonic and Harmonic Series. The Harmonic Series by itself is not symmetrical--it is a 'spiralling off' in vortex fashion, based on the generation of prime factors. But this reciprocal movement is as yet only a potential within the One, where it finds its source. In the DYAD the reciprocal becomes actual, but the harmony is yet symmetrical, so that it shares special qualities with the One. The subsequent articulation of the 3-Limit and 5-Limit matrix actuates the vortex itself, where the contents of the Emanation Table present a 'spinning out' towards complexity.

This traditional musical interpretation of the opposites may not be the end of the story for Anaximander. Simplicius is more explicit about his intention²⁹... *'It is clear that he [Anaximander], seeing the changing of the four elements into each other, thought it right to make none of these the substratum, but something else beside these; and he produces coming-to-be not through the alteration of the element, but by the separation off of the opposites through the eternal motion.'* It is clear that Anaximander wants to posit something more fundamental than the generation of the Elements which form the 'material' of the Emanation Table. This does not mean that he is invalidating the Table, only generalizing it, in order to accommodate the irrational *Geometric Mean*. He wants to replace the discrete Elements with a more universal principle that includes all aspects of the *plenum*. For Anaximander it is called the *Apeiron*; for Anaximenes it is infinite *Aer* as a 'quasi-element.' The Elements themselves are but specific instances in this generation.

We get a better idea of the 'layout' of this generation from a late fragment:³⁰ ... *'He says that that which is productive from the eternal of hot and cold was separated off at the coming-to-be of this world'* in other words, the 'space' between **heaven** and **earth** is to be seen as a continuum between opposite polarities, here called hot and cold. This continuum is more explicitly developed in Anaximenes. We see here a shift from the old

²⁸ Aristotle *Physics* A4, 187a20.

²⁹ Simplicius in *Phys.* 24, 21.

³⁰ Ps.-Plutarch *Strom.* 2.

digital language of harmony to an *analog* conception of the vibratory world. The cosmos between **Heaven** and **Earth** is re-visioned as 'full,' a plenum housing the infinite.

Anaximander and Anaximenes will be closely examined in up-coming essays, but this brief survey is intended to show that Pherecydes' *Kronos-Ophioneus* pair could also be interpreted as a mythological description of Anaximander's *Peras-Apeiron*. If we interpret it as such, then Pherecydes should possibly be classed as an early member of the radical camp, which strove to re-evaluate the Elements. However, the general tone of the other fragments tend to associate him more with the traditionalists. Consequently, we are naturally skeptical of any obvious close relation to Anaximander. Again, it is difficult to come to any conclusions given the little available evidence for his cosmology.

Various scholars have tried to link Pherecydes with Anaximander, but their arguments have also been tentative and unconvincing. Diels and K. von Fritz tried to connect Pherecydes winged tree with Anaximander's statement that the **earth** is cylindrical in shape, like a tree-trunk.³¹ *'He says that the earth is cylindrical in shape, and that its depth is a third of its width. Its shape is curved, round, similar to the drum of a column; of its flat surfaces we walk on one, and the other is on the opposite side.'* It is winged because it floats in space. However, the description uses a column, not directly a tree-trunk. The connection is rather tentative.

Anaximander's reference to tree-bark shows the context to be quite different.³² *'He says that that which is productive from the eternal of hot and cold was separated off at the coming-to-be of this world, and that a kind of sphere of flame from this was formed round the air surrounding the earth, like bark round a tree. When this was broken off and shut off in certain circles, the sun and moon and the stars were formed.'* It is clear that Anaximander is here describing the actual formation and structure of the cosmos. This structure is the familiar one, the 'egg' or sphere with **earth** in the centre, surrounded by **air** and then flame (**heaven**), which is somewhat like tree-bark. He is using the 'bark' image here as a simile for the surrounding fiery sphere, a substitute for the older bronze material. On the other hand, Pherecydes uses the tree image for the Elements. Thus the connections are again tentative, although Pherecydes probably had the same cosmic structure in mind (the egg), which was shared by almost all of the ancient cosmologists.

Finally, Pherecydes has been compared to Anaximander in that they both made *Time* an extremely important principle. However, this is not unusual. All of the Presocratic philosophers were intensely focussed on *Time*, its power and its measurement of cyclical periodicities, its ability to generate the cosmos. In Anaximander's famous and exquisitely musical fragment that the coming-to-be of the world is in accordance with 'the assessment of time,' he uses deliberately judicial or legalistic language to describe this process as 'justice and injustice' in the relations engendered. *Time* is the ultimate judge, like *Thoth* in

³¹ Ps.-Plutarch *Strom.* 2 and Hippolytus *Ref.* 1, 6, 3.

³² *Ibid.*

the archaic mythology of Egypt. This emphasis on *Chronos* or *Zurvan* was already seen as a dominant Orphic mythological image.

The *court of Time* is also mentioned in a very early fragment by Solon, which is thought to come from the time of Alcman.³³ *'Why did I cease before I gained the objects for whose sake I brought together the people? The great mother of the Olympian dieties would be my best supporting witness for this in the court of Time--black Earth, whose boundary-stones, fixed in many places, I once removed; formerly was she enslaved, now is she free.'* Here **Earth** justifies Solon's claim, because, over time, the **Earth** has become free. This fragment also has many musical associations. **Earth** is the great mother of the Olympians. The boundary-stones, fixed in many places could refer to the positions of the monochord division, or again to the patterns of the 'pebble arithmetic.' The whole fragment shows how musical imagery permeated many aspects of ancient thought. However, to make a direct connection between this fragment and the fragments of Pherecydes and Anaximander is problematic.

CONCLUSIONS

Pherecydes is certainly a fascinating figure, but we simply cannot come to any firm conclusions about his cosmogony, for lack of evidence. Unfortunately, the situation is even worse with Alcman. *Time* has lost the record. Who knows how many more creative cosmogonists have simply fallen into the *Ogenos*? In the case of Alcman and Pherecydes, we are left only hints, but hints of greatness.

We have a natural tendency to classify Pherecydes with the traditionalists, and, perhaps, Alcman with the radicals, simply on the strength of his terms *poros* and *tekmor*. But such classifications are at best speculative. The traditional association of Pherecydes with the Pythagoreans tends to make us judge his mythological images as variants of the Orphic-Pythagorean outlook. After all, the mythological approach is not dissimilar to other ways of describing first principles. As Aristotle said³⁴ ... *'He also who loves myths is in some way a philosopher.'* Yet we are reluctant to classify Pherecydes as purely a traditional mythographer in the tradition of Hesiod. In some way he seems to be progressive, considering his long-standing high reputation among following generations.

Perhaps we should trust the indications of Aristotle, that Pherecydes was not entirely (but mostly) mythological in his approach.³⁵ *'...since the 'mixed' theologians, those who do not say everything in mythical form, such as Pherecydes and certain of the others, and also the Magi, make the first generator the best thing.'* Just where to draw the line between traditional mythological images and more radical transformations of the old imagery is impossible to judge. This ambivalence is also to be found in certain other Presocratic philosophers, such as the Pythagoreans, for whom myth-religion and science

³³ Solon fr. 24 Diehl, lines 1-7.

³⁴ Aristotle *Metaphysics* A2.982b18.

³⁵ Aristotle *Metaphysics* N4, 1091b8.

are inextricably entangled. If Pherecydes seems more mythographer than 'scientist,' it may still be possible that some science enlightens his work, some essential insight which is lost to us.

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