A. The Primitive View of Nature

As H. Frankfort pointed out, modern primitive men regard all objects we call inanimate as beings who are alive, sentient and purposeful. Primitives would say, ‘Stones fall on purpose to frighten away our quarry’; or ‘winds blow away our tent through malice’, and to them the thicket would have planned to capture a ram for Abraham to sacrifice in place of Isaac, whilst the burning bush would have kindled of its own volition.

Men camouflaged themselves to hunt and trap beasts and birds and decorated themselves for their rituals. Trees grow leaves in spring and lose them in autumn: the earth produces flowers and young grass in spring which wither away or produce autumn seed crops. The sky changes colour at dawn and sunset and decks itself with stars at night. Further, it gathers clouds at times and releases water from them like a man urinating — Ζεύς υει! To early men, earth and sky would seem intelligent like man because they appeared to act in a manner similar to our human behaviour.

Men, birds and animals all move to gather food, kill prey, or avoid predators. Therefore the power of locomotion of men and beasts over the earth, of fish through the water, birds through the air and even worms through the earth would be the proof sign of both life and purpose. A dead creature ceases to pulsate, breathe or move its limbs. These acts are all forms of motion. It is easy to then think that the sun, moon and stars which the sky wears as its light-giving ornaments are also living purposeful beings because they are observed both to move and to change movements in some cases. Hence planetary gods arose and the general belief in astrology as showing the will of the Gods and of Fate. Likewise the winds (which like the stars received proper names from the Greeks and Romans) were also alive by the same criterion although invisible to sight. Equally vital and alive is fire, with its flickering flames and its power to spread and transform all it touches into smoke, ash and charcoal.

Water is essential to prevent creatures from dying of thirst. Rain in the

2. Genesis, XXII, 13
3. Exodus, III, 2
5. cf Homer, Iliad, VI, 146–9
6. cf Psalm 65, 8
7. H. Frankfort, op cit, p.30
desert causes immediate plant growth. Fish seem to live in water as we live in air. Not merely alive, water is life-giving, especially in hot arid lands.

Fire is essential to comfort and technology, but some primitives still live without it, and the legends of Prometheus¹ and Agni with the firesticks⁹ remind us that our earliest forebears lacked it. But when it is kindled by friction it appears to be released from its fuel rather than lit. Yet after it burns out only ash and charcoal is left. Does fire then supply texture, shape, and colour and life to objects which collapse into ash upon its release?¹⁰ Is the world of phenomena a mixture of fire and the inert matter found as ash? Furthermore, is fire divine as well as creative and intelligent? Because primitive men of the earliest ages saw it arise only in response to volcanicity or lightning strikes, they naturally regarded it as something divine associated with the cosmic earth and sky deities.

B. Animate Life in the First Philosophers

Clearly the water of Thales, the apeiron of Anaximander and the air of Anaximenes¹¹ are postulated as intelligent and self-conscious living substances which possess the power of self-transformation. Let us consider Xenopha­nes’ fragments 27 and 28¹² Taken in conjunction with 37¹³, which reads ‘and in some caves water drips’, they suggest that this thinker also envisaged a single such basic substance, namely earth, as the self transforming source of all.

With Heraclitus we have Bywater’s fragments 20–25¹⁴ affirming that all things become fire, and fire becomes all things; but fragments 19, 28 and 65¹⁵ assert that Zeus and the thunderbolt are both wisdom, whilst presumably ‘Zeus’ or ‘wisdom’ is the ‘God’ of fragments 96–99!¹⁶ Let the texts speak for themselves¹⁶a —

(20) This world, which is the same for all, no one of gods or men has made; but it was ever, is now, and ever shall be an ever-living Fire, with measures of it kindling, and measures going out.

8. Hesiod Works and Days, 507–584
10. cf Aetius, I, 7.33, p.305 (Diels)
11. Aristotle, Metaphysics, A, 3, 983b7f
12. (27) ‘All things come from the earth, and in earth all things end.’ R.P.103a
(28) ‘This limit of the earth above is seen at our feet in contact with the air: below it reaches down without a limit.’ R.P.103. (Burnet’s translation).
13. Diels
14. R.P.35–39
15. R.P.35b and 40
16. R.P.45
16a. Burnet’s translation.
(21) The transformations of Fire are, first of all, sea; and half of the sea is earth, half whirlwind.

(22) All things are an exchange for Fire, and Fire for all things, even as wares for gold and gold for wares.

(23) It becomes liquid sea, and is measured by the same tale as before it became earth.

(24) Fire is want and surfeit.

(25) Fire lives the death of air, and air lives the death of fire; water lives the death of earth, earth that of water.

(19) Wisdom is one thing. It is to know the thought by which all things are steered through all things.

(28) It is the thunderbolt that steers the course of all things.

(65) The wise is one only. It is unwilling and willing to be called by the name of Zeus.

(96) The way of man has no wisdom, but that of God has.

(97) Man is called a baby by God, even as a child by a man.

(98, 99) The wisest man is an ape compared to God, just as the most beautiful ape is ugly compared to man.

Though the sayings of the ‘dark philosopher’ are never likely to find unanimously received interpretations, these passages could fit a similar view of fire to that held by the earlier Ionians regarding their basic substances, that it is self-conscious, intelligent, life-giving, and capable of self-transformation. This last may be the point of fragment 22. When gold is exchanged for wares it is transformed into another possession. If the object so acquired is resold by the purchaser he receives in its stead some gold once more — possession of an object is transformed into possession of gold again. Though ancient sources may assign too much influence upon Zeno of Citium to the Ephesian philosopher, there is otherwise a need to offer an adequate explanation from some other source for the πῦρ τεχνικὸν concept of creative rational cosmic pneuma.

C. Medicine and Stoicism

In the treatise ‘On Ancient Medicine’ the writer observes that early men often died through eating unfamiliar earths, plants or creatures. However, the experience of those who perished taught their friends and neighbours which were poisonous or injurious and which were nutritious or salutary.

17. R.P.35
18. Aetius, I, 7, 33
19. Hippocrates, on Ancient Medicine, iii
So here we have a model for the Stoic ideal of οἰκείωσις or assimilation so as to achieve harmony with the Cosmos.  

But in clinical observation a living body breathes, inhaling and expelling air in rhythmical cycles: breath or πνεύμα is the mark of life. Whilst this process continues, the body generates heat and excretes solid dung and fluid urine whilst also exuding sweat even if no food or drink has been recently administered. In fact, the heart action causes body heat and the excretion process; but to ancient observers it seemed that the breath rather than the blood coursed through our veins; and thus one could imagine that heat, fluids, and solids were separated out of the same breath or pneuma. Further, a last exhalation of warm breath accompanies death; it is easy to regard this as the life force departing. Was this also another model for the ‘four element’ system begun by Empedocles and canonised by Plato and Aristotle?

We see thus from medical data one can justify the statement of Alexander of Aphrodisias regarding the pneuma.  

Furthermore, if the pneuma, consisting of fire and air, roams through all bodies and mixes with all of them, and the existence of each depends on that, how could it still be a simple body? If pneuma is composed of simple components and therefore a secondary substance, how can fire and air exist, by the mixture of which pneuma is generated — that pneuma without which no body can exist.

This is one of the many cases where a philosopher’s example is used by a critic to demolish the theory for which it is meant to be an analogy. Pneuma cannot be a mixture of air and fire; but because as Galen observes, the Stoics took it as an axiom that water and earth were passive and made coherent, being themselves hyle-like, by the pneuma-like air and fire, it follows that, in the cosmic pneuma into which all is resolved at the epyrosis, qualities like those of air and fire will dominate, as Cleopatra claims they do in her soul at her death scene in Antony and Cleopatra. All that is meant is that the residual undifferentiated rational pneuma, which is not converted into the elements of matter at palingenesia so that it can give form and intelligence to the Cosmos, has qualities also found in air and fire among its characteristics. So no one really says pneuma is steam or smoke; just that it shares some characteristics with them.

For the usage of the word the ninth edition of Liddell & Scott is most in-

20. Stobaeus, Eclogae II, 138
21. de Mixtione, p.233, 6ff
22. de Multitudine 3 = Arnim SVF, II 43q
23. Shakespeare Antony & Cleopatra V, ii, 289-90
24. Anaximander’s Apeiron — Olympiodorus in Berthelot, Collection des anciens alchimistes grecs, p.38
structive. Sir Henry Stuart Jones offers us from the poets the senses 'blast', 'wind' or metaphorically 'influence'. Under II he offers us 'breathed air' or 'breath' and 'exhaled odour' as well as 'breath of life'. The Hippocratic sense of 'respiration' and the grammatical sense of the expiration with which a vowel is pronounced are also cited. Finally from Pindar we have an instance meaning 'divine inspiration'. It is perhaps interesting that many of these are shared with the Hebrew word יַעַשׂ 'ruah'.

D. Influences from the East

Professor M. L. West has done good service in drawing our attention to possible debts to the Persian Magi who might have influenced Greece between 550 and 480 B.C. Similarly, Professor E. R. Dodds brought to notice analogies of early Greek thought with Siberian Shamanism. Though fruitful analogical comparisons are possible, the issue of influence requires demonstration. As we see, the Greeks could have generated the notion of pneuma from observing themselves and their own environment. Finally, the Elder Pliny reminds us that the Roman world alone is devoid of a priestly caste, drawing our attention to Magi, Nobiles and Populus in Persia and Druides, Equites and Plebs in Celtic lands, while modern Bali preserves the original similar three-caste system inherited from early India. Many parallels with Magian doctrine might well have a common Indo-European origin, or be results of early Sumerian influence on Iran and also on Greece through Syria and Asia Minor. The case for unilocal innovation and cultural diffusion was not established by all the wit and learning of Grafton Elliott Smith, and remains still to be proved.

27. E. R. Dodds, The Greeks and the Irrational, (Berkeley 1951)
28. Pliny, NH XXX, i-v