GLOTTA

Zeitschrift für griechische und lateinische Sprache

> Herausgegeben von Gerhard Meiser, Klaus Nickan und Klaus Strunk

LAXII. Band · 1.-4. Heft · 1994 [1995]

Human vocabulary and naturalist vocabulary in the Presocratics

By Francisco R. Adrados, Madrid

I. General Remarks

The creation of a philosophic system or an ensemble of philosophic systems in a certain country and age implies the creation in turn of a particular philosophical language. In later cultures, from Rome on, that philosophical language is indebted to an earlier tradition, to be precise, to Greek philosophical language. In our own languages not only philosophical language, but intellectual language overall constitute in fact a sort of quasi Greek. They include a large number of terms originated in Greek which have been either adapted to or translated into the new language.

The question posed by the philosophical Greek language is, therefore, somewhat different. It does not borrow anything and comes to be instead as an evolution from common Greek speech. Philosophers spoke first the common language of Ionia enhanced by the literary tradition of Homer, Hesiod, and certain lyric poets, all of which were their predecessors too in regard to doctrine and ideas. However, the Ionic vocabulary was inadequate at times to express concepts newly worked out. In these cases, two options were available: one solution was to bestow a new meaning (or new meanings depending on the philosophers and the time) upon the old word, the other was to create new words.

¹⁾ E. Loew, "Die Ausdrücke φρονεῖν und νοεῖν bei den Vorsokratikern", PhW 49, 1929, p. 426.

, few comprehensive works.2) It is well known that philosophic and scientific language tends to take shape in the form of univocal, monosemic terms defined once and for all regardless of the context. These terms are opposed to each other within a set of systemic correspondences by virtue of privative oppositions. Everything emotional, emphatic and ambivalent is avoided as well as synonymy. Within this systemic network of semantic correlations only one form belongs to each meaning and there is only one meaning for each form.

This is the kind of vocabulary Philosophy and Science did and do strive to develop. Besides, in our own cultures there is a noticeably international vocabulary. In my opinion, the study of the gradual creation of this type of vocabulary in Greek is specially interesting. Some conclusions may be drawn from research on different aspects of word formation, such as the development of abstract vocabulary, the adjectival derivation of nouns, the symmetry of verbal, nominal, ad-

ectival, and adverbial paradigms in Greek.

For instance, everyone is acquainted with the development among the sophists of abstract terms in -τικός and with Plato, Aristotle and the Hellenistic philosophers' contributions to scientific and philosophic vocabulary. Some of the latter have even been incorporated into the intellectual vocabulary of other languages around the world through derivation from Greek or import of the Greek term. Thus, oppositions like Nature / Man / God, body / soul, matter / energy of spirit, language / thought, sensation / knowledge and many others have a Greek origin.

But I have no notice of any systematic, comprehensive research on this topic; only studies about specific details have been produced. Among mine there are some works on Plato in which it is demonstrated how the semantic content of some common Greek words was altered by Plato on account of his philosophy.3) I have produced also a work on the language of Socrates4) and have encouraged my stu-

3) Specially "Lengua, Ontología y Lógica en los Sofistas y Platón", in: Palabras e Ideas, Madrid 1992, pp.113-57 = Revista de Occidente 96, 1971, pp.340-65; and 99, 1971, pp. 289-309.

^{2) &}quot;La Lengua en la Ciencia Contemporánea y en la Filosofia Actual", in: Estudios de Semántica y Sintaxis, Barcelona 1975, pp. 43-67 = RSEL 3, 1973, pp. 297-321; "Scientific Language: Instrument and Obstacle. Examples from the field of Linguistics", in: Wissenschaftssprache und Gesellschaft, ed. Theo Bungarten, Hamburg 1986, pp. 13-21; "Les Définitions Linguistiques", Alpha 5, 1992, pp.51-63.

^{4) &}quot;La Lengua de Sócrates y su Filosofia", op. cit., pp.251-98 = Methexis 5, 1992, pp. 29-42.

dents to undertake works on this topic.⁵) The truth is that the isolation of linguists and historians of the Philosophy from one another turns out to be very damaging for the production and appreciation of this kind of works.

Let us address ourselves to the Presocratics now. It is obvious that we find in their texts the Greek philosophic vocabulary in an embryonic stage. For this reason it is not strange if we find traces of the general use as opposed to the philosophical one, as well as hesitations, contradictions, synonymy, quasi synonymy and so forth. It is, therefore, necessary a systematic study from a linguistic point of view keeping in mind each term's place within the system (oppositions) and in the context (distribution). This is what I sought to do in respect of Heraclitus years ago.6) And it is evident that very valuable interpretations and materials suitable for the kind of general study which I propose may be found in the most important comprehensive works about the Presocratics as well as in many works related to more specific questions. But a systematic and structural approach to the issue is still lacking.7) Here I simply intend to make some general statements and outline a convenient design for future research in this direction. And also to introduce a general theme, namely, the universal philosophic value attained among the Presocratics by two distinct sets of vocabulary, one related originally to the human world, the other, related to the natural world. In this way we clearly place ourselves in the sphere of common languages with philosophical specialization.

Let us summarize again the main features of the problem we are facing now. Philosophical vocabulary is created:

- a) through the specialization of words belonging to poetic speech, ionic dialect, or common speech.
- b) through the creation of new terms by means of derivation and word composition in accordance to the normal procedures of the Greek language.
- c) By building up systematic lexical frameworks to organize the world: negative adjectives (with prothetic ά- like ἀπίνητος, ἄπειρος) or

⁵) For instance, Elvira Gangutia, Estudios de Semántica Estructural referidos al Griego: El Campo Semántico Vida / Muerte de Homero a Platón, Madrid 1966, and the Ph. D. dissertation of Ángeles Durán, El Vocabulario Moral de Platón, Málaga 1992.

^{6) &}quot;El Sistema de Heráclito: Estudio a través del Léxico", in: *Palabras e Ideas*, Madrid 1992, pp. 35-90 = *Emerita* 41, 1973, pp. 1-43.

⁷⁾ This is what happens in an otherwise very useful book: F.E. Peters, Greek Philosophical Terms. A Historical Lexicon, New York-London 1967.

adjectives denoting identity (formed with αὐτο-) opposed to abstract nouns denoting action; numerous and diverse opposing pairs among which the best known are the ones coined by Heraclitus and the Pythagoreans (but there are others more general like εἰμί / γίγνομαι, γένεσις / φθορά, βίος / θάνατος); adjectives and nouns running parallel to verbs (I am referring to sets like αἰσθάνομαι, αἰσθησις, αἰσθητός, etc.; νοέω, νοῦς, νόησις, νόημα, etc.). A variable material is used: common words are used in their common sense, while others are endowed with more evolved meanings, or new ones are created having from the outset philosophical meaning.

These are partly old systems given a new purpose, partly new ones. The procedures of word derivation are the normal ones at first, but some formations increase their frequency. That is the case with abstract nouns in $-\mu\alpha$ and $-\sigma\iota\varsigma$, adjectives with $\dot{\alpha}$ -, or neuter adjectives

substantivized like τὸ ἄπειρον.

It is also noteworthy that the meaning of some words may change from one philosopher to another and that the systems of opposition change accordingly. Anaxagoras' opposition between $vo\tilde{v}_{\zeta}$ and $\tilde{v}\lambda\eta$ is not at all the same as Xenophanes' $\delta\epsilon\mu\alpha\zeta$ and $v\delta\eta\mu\alpha$; this philosopher approaches $vo\tilde{v}_{\zeta}$ to $\varphi\rho\tilde{\eta}v$ (B 25). But Parmenides rejects $\varphi\rho\sigma\tilde{v}\tilde{v}$ so important for Heraclitus and identifies $vo\tilde{e}\tilde{v}$ with $\epsilon\tilde{i}v\alpha\iota$; Empedocles, however, places on the same level $\varphi\rho\delta\eta\sigma\iota\zeta$ and $v\delta\eta\mu\alpha$ (B 110.10). Of course, if we turn to socratic and platonic $\varphi\rho\delta\eta\sigma\iota\zeta$, we will see that it is now integrated in the system of the moral concepts. This is just an example among many other possible.

We insist, nevertheless, that we are facing a seminal vocabulary anchored in myth and religion and quite different from the philosophical vocabulary of later times. We must, therefore, dwell briefly

on these singularities of the Presocratic vocabulary.

II. Some features of the Presocratic vocabulary

1. Relations with the vocabulary of Cosmogonies and Theogonies, orphic ones in particular

It is well known the relationship between the principles of Presocratic philosophy and the cosmogonic traditions included in Homer, Hesiod, and the orphics. In some cases the roots of these traditions go back to poems and cosmogonic speculations of the Near East.

Suffice here to mention the books by W.Jäger and Seligman ⁸) I do not know of any in depth study about this topic, but I will make here some observations.

It is evident the presence of the elements $\mathring{v}\delta\omega\varrho$, $\mathring{a}\acute{\eta}\varrho$, $\mathring{a}\acute{v}\acute{\eta}\varrho$, $\mathring{n}\acute{v}\varrho$ in the Cosmogonies. Scholars have often noted their active and divine connotations as they unfold and reveal themselves in the creation of beings. But there is more to say. The terms $n\acute{e}\varrho\alpha\varsigma$, $\mathring{a}nei\varrho\alpha\varsigma$, and 301) and in other passages by Homer and Hesiod in which $\mathring{a}nei\varrho\alpha\varsigma$ is an attribute of $\gamma a \mathring{a} \alpha$. No doubt this is the source for Empedocles $\mathring{a}nei\varrho\alpha\alpha$ $\mathring{a}nei\varrho\alpha\alpha$ $\mathring{a}nei\varrho\alpha\varsigma$ are also said by several authors of the cosmos, the beings, the atoms, and the ether, all of them primordial entities. The substantival use by Anaximander and the Pythagoreans $(n\acute{e}\varrho\alpha\varsigma, \varkappa\alpha)$ $\mathring{a}nei\varrho\alpha\alpha$ Pythag. B.8) represents a further step in the progessive abstraction of these terms

Γένεσις comes too from the same Homeric passage (Il 14.201): Υρκεανόν τε θεῶν γένεσιν; cf. Il. 14.246. From this sense comes Parmenides' use of the term rather than from more common meanings like 'race'. It appears likewise in cosmogonic passages by Aristophanes (Aves 691), Plato, and other authors related to the birth of the gods (see Hdt. 2.146 and DGE s.v.). The verb γίγνομαι appears too in these and other similar passages, from which it has developed the meaning 'become'.

The latter were just two examples, but we could bring in some other ones like αὐτοφυής (Hes. Thg. 813; cf. Critias, Fr. Trag. 4.1), τὰ ἐναυτία (Pherecyd. Syr. 3), or even φύσις.

2. Relationship with the poetic vocabulary in general

In addition to the cosmogonies part of the philosophic vocabulary managed by the Presocratics proceeds from Homeric poetry in its wider sense (Homer, Hesiod, Hymns). Sometimes, in our documentation, there are not any intermediary steps, sometimes there are. This is not surprising, as Xenophanes, Parmenides, and Empedocles write in hexameters and, in general, poetic speculation precedes the philosophical one.

⁸⁾ W. Jäger, La Teología de los Primeros Filósofos Griegos, 2nd. ed., México 1952; P. Seligman, The Apeiron of Anaximander, London 1962.

This is what happens with certain negative terms, like ἀνόητος found in H. Merc. 80 and then in Parm. B 8.16; or ἀνώνυμος found first in Od. 8.552 and later in Parm. B 8.17. Obviously we can see here the model for terms like ἀνώλεθρος, found in Anaximand. B 3, and Parm. B 8.3. Later on, we have ἀίδιος, found first in the Homeric poems and hymns and then in Gorgias and Melissus. Likewise, the terms meaning Love and Hatred, namely, Φιλότης and Νεῖκος, the two opposing forces that create and destroy the worlds in Empedocles, come from Homer. From the Homeric sense of κόσμος, that is, joint, bonding (Od. 7.492 regarding the Trojan horse), comes the meaning world' for this word in Pythagoras and Heraclitus according to Jula Kerschensteiner.9) Similar interpretations have been advanced for other terms.

The lyric poets play a leading role in this process too. Aiw meaning 'eternity', 'time' with no limits derives no doubt from the posthomeric use of the word (meaning III. 1 in DGE), where it is said in reference to gods and divine personifications; our earliest notices go back to Simon. 79, 4, A. A. 554 and then appear in Emp. B 16.2, and Heraclit. B 50, etc. 10)

3. Problems in the interpretation of elements and entities

In the course of their investigations the Presocratics discovered under the surface of sensory perception deeper and more inclusive realities; entities beyond the range of the senses. But, what are they? I have called them concepts and abstraction, which is in fact an Aristotelian way of speaking; Platon spoke of ideas, that is, independent, somewhat bodily entities. What are they for the Presocratics?

Perhaps, Hesiod may serve as a guide. He sees in the primordial world a series of physic elements (sky, earth, mountains; or even night, day...); a series of abstractions (love, memory...); and a series of gods (Aphrodite, Titanes, Cronus...). The two first series are treated as being synonymous, they are material entities and gods at once. Earth is a goddess and inside her womb her children are swarming. But, at the same time, that womb is a cave of the earth.

⁹) KOSMOS. Quellenkritische Untersuchungen zu den Vorsokratikern, Munich 1962.

¹⁰⁾ About the conception of time in the presocratics see A. Bernabé, "Κατὰ τὴν τοῦ χρόνου τάξιν. Εί Tiempo en las Cosmogonías Presocráticas", Emerita 58, 1990, pp.61–98.

As I mentioned before, we find in the Presocratics entities which are hypostasis of divine or semidivine entities. They are at once iso lated and not; they underlie reality and yet permeate reality; they are not mere abstractions. When talking about lyric poetry E. Frankelly called them "Wesenheiten", namely, essences, hypostasis, like Hebe Theia, etc. They were the forerunners of ideas and concepts.

It is difficult to express in our vocabulary active principles like Fire which sometimes is identified with the One, and sometimes is more or less a synonym of Sun and Lightning. Equally problematic are

structural, not substantial elements like Logos or Love 12)

4. The unity of Nature. Man and God

Greek philosophy, by virtue of its rationalist slant, drove forward the differentiation between Nature, Man, and God. This process can already be detected in the Presocratics. However, we find in them the same essential unities we found before in Hesiod. I mentioned above the divine nature of principles, the combination of hypostasis proceeding from human life (Memory, Youth, Love) with strictly natural elements like Water or Fire.

All this is inevitably reflected in the vocabulary, which turns out to be neutral in regard to these oppositions. For instance, Heraclitus (B 67) said that god is night and day, summer and winter, hunger and satiety. Now, the student of the origins of Greek philosophical vocabulary finds that terms regarding human life have come down to the realm of Nature and vice versa. Δίκη, Justice, has become for Anaximander (B 94) a term meaning natural law. Likewise, in other philosophers their terms λόγος, νοῦς, νόμος, etc. permeate everything and suppress the two worlds we are dealing with; there is even a tendency for them to acquire the meaning of God. The same happened in Hesiod with Eros and some other concepts. The opposite happens with φύσις, which is bound in origin to the use of φύω to designate the birth of plants and animals, as well as with the elements belonging to the natural order.

There may be doubtful cases. There are conflicting theories about the origin of κόσμος. It is not clear if its meaning derives from a

¹¹⁾ Dichtung und Philosophie des frühen Griechentums, New York 1951, p.613ff.

¹²⁾ See my work on Heraclitus "El Sistema de Heráclito: Estudio a través del Léxico", in: Palabras e Ideas, Madrid 1992, pp. 35-90 = Emerita 41, 1973, pp. 1-43.

material entity, as we said above, or from the legal world.¹³) Other terms are equally debatable.

Synchrony and diachrony

The philosophical vocabulary of the Presocratics is achronic. The principles, ἀρχαί, existed in the primeval time, which explains their generic name. But they continue to be a hidden, basic reality. To be sure, they antecede not only sensory realities, but also κόσμος, τὰ ἐναντία, τὰ ὄντα, τὸ θερμόν, τὸ ψυχρόν, etc. And yet they are inside of these posterior entities, which in turn are themselves implicit in them. According to Heraclitus (B 123), Nature likes to hide itself away, but it always underlies apparent reality, not just at the beginning. Thus, Aristotle, in accordance with the principle of entelechy, investigates the evolution of tragedy till the point of reaching its own nature (Poet. 1449 a 15).

It is, therefore, useless to delineate temporal limits. Heraclitus' 16γος is both a structural law and a rule of evolution. The same happens with chance and necessity in Democritus, and Anaxagoras' νοῦς. Empedocles' Love and Hatred are active from the beginning of Time and will remain active. The descriptions of birth, becoming, and death, or the descriptions of different creations and destructions of the world have a general value. This is the case too for the natural laws referred to by terms like νόμος, ἀνάγκη, χρεών.

It is true that things which existed in the beginning, like Pherecydes' Chaos and Chthonia, do not exist any more, but, as I am showing,

there are others which are panchronic.

6. Adherences and traditions

However elaborate this set of vocabulary may be, it is only natural that traditional lexical remnants have been carried over with it owing to its strong traditional origins. This is what happens, for instance, with the so laboriously arrived to concept of natural law. I have outlined above some lexical origins of this concept; I will look now at its relationship with the idea of necessity, fate.

¹³⁾ In addition to Kerschensteiner's book mentioned above see W. Kranz, "Kosmos und Mensch in der Vorstellung des frühen Griechentums", NGWG II 7,1938, pp. 121-61; and H. Diller, "Der vorphilosophische Gebrauch von κόσμος und κοσμεῖν", Festschrift Bruno Snell, München 1956, pp. 47-59.

'Aνάγκη comes from Homer and the lyric poets, but it means natural law already in Hdt. 2.22, in Leucipp. B 2 and in some other Presocratic fragments. 'Ανάγκη is also the physical and logical necessity which makes the world to be what it is in Parm. B 8.30, 10.6; Emp. 115.1, etc. The same with χρεών, derived from χρή which appears in poetry and in Parmenides and Democritus as well. In these cases the words still preserve signs of their old religious meaning.

Somewhat different is the case of $v \acute{o} \mu o \varsigma$. Here, side by side with the $\theta \epsilon i o \varsigma$ $v \acute{o} \mu o \varsigma$ or divine law (Heraclit. B 114, etc.), the meaning of law of the city for $v \acute{o} \mu o \varsigma$ is present in the same text. And the trivial traditional use of the words is as frequent as the philosophical use. Sometimes it is not easy to distinguish one from the other.

7. Gaps in the system. The problem of fragments A and B

The Presocratic lexical systems are never complete. At times they take shape gradually from author to author. To try to present a total system including all of them is, to some extent, a fallacy. Only Plato and Aristotle display often times systems completely worked out. This can be seen very clearly in Peters' book mentioned above. But we must not forget that our knowledge of the Presocratics is very fragmentary and we can not, therefore, establish exhaustively their lexical systems. The problem grows bigger if we keep in mind that not always is possible to assign beyond doubt to the Presocratics (fragments B) the vocabulary transmitted by later witnesses and commentators (fragments A). There is a tendency to contemplate this vocabulary as belonging to these later witnesses and commentators and as being independent from the Presocratic texts under consideration.

For instance, if we look at διαίρεσις both in LSJ and DGE, we see that the philosophical use (DGE III 1 acción de distinguir, distinción, diferenciación) starts with Plato and Aristotle. The same for διαιρέω. But if we go to Diels-Kranz's lexicon, the situation changes. Both words appear in the Presocratics (Leucippus, Parmenides, Empedocles, Archytas, etc.), but in the A fragments. The problem is to know if the authors which transmit these terms are using their own vocabulary or are quoting the Presocratics.

Many times this issue has not even been raised. Attention is directed to the contents while the words themselves are neglected, even though these words and the systems built with them are important. And when the problem has been addressed the solutions advanced have been contradictory. Thus, in her long study about πόσμος J. Kerschensteiner

maintains that the use of the word μόσμος meaning 'world' does not appear until Pythagoras and Heraclitus. Its presence in the A fragments of Thales, Anaximander and others should be attributed to the authors that are making the quotes. But Diller, ¹⁴) based on Kranz and Hölscher's authority, says that the term was no doubt used by Anaximander.

The situation is at times inconclusive. We saw that $ai\omega v$ meaning 'eternity' is found in Heraclitus and Empedocles (fragments B); and in Anaximander, Anaximenes, and Democritus but only in the A fragments. Should we attribute the term to these thinkers? And, what to think of the use of $\chi \varrho \acute{o} vo_{\varsigma}$ as a synonym in other A fragments? Its presence in cosmogonic speculations as being one of the primeval elements of the world points to an affirmative answer (cf. Pherecyd. Syr. B 1).

In general I am inclined to think that this terminology must be attributed to the Presocratics or at least to some of them. Of course, every case should be studied on its own.

III. Some conclusions about the vocabulary of the Presocratics

It is evident that the working methodology must be inductive: to gather up the vocabulary of each Presocratic philosopher, to decide to what extent authorical attributions are safe ones, to study the terms' meaning or meanings, to establish their position as part of a system (oppositions) and within the text (classification of their distributions). It is useless to establish general parameters.

This is what I tried to do for Heraclitus about whom our documentation is relatively important. The procedure followed there is similar to the one I applied to the study of the semantic field of love in Sappho. 15) On my opinion, the whole system is organized on one side around $\pi \tilde{v} \varrho$ and its synonyms and quasi synonyms, on the other, around $\lambda \delta \gamma \sigma \varsigma$ and its semantically close terms. In a concluding table I give the parameters according to which the terms are organized:

14) H. Diller, "Der vorphilosophische Gebrauch von κόσμος und κόσμεῖν", Festschrift Bruno Snell, Munich 1956, p. 59.

¹⁵) "El Campo Semántico del Amor en Safo", in: Estudios de Semántica y Sintaxis, Barcelona 1975, pp. 247-65 = RSEL 1, 1971, pp. 5-23. Regarding the theory in general see, among other studies included in this book and other publications, Estudios de Lingüística General y Teoría Literaria, Barcelona 1988.

whether they are related to being, to becoming, whether they denote agents, whether they are divinized, whether wisdom, secrecy, commonness, unity are attributed to them or not. All this is not based on a priori criteria, but on grammatical distributions and oppositions. Here I can not go that far. I will make just a few remarks about the terms and the system in which they are integrated.

1. Terms whose meaning has been modified

I indicated above the different origins for some specific terms in cosmogonies, epic, and the earlier religious vocabulary. Of course words should be studied one by one with the available bibliography about their evolution and their new meaning or meanings in philosophy.

It is impossible to give here a complete bibliographical list, which must include general works like the ones by Guthrie and Zeller-Mondolfo as well as particular studies, some of which I have already mentioned. I will limit myself to give a few brief references about the complex νοῦς, νοεῖν, and φρένες, φρονεῖν, φρόνησις. 16) I also give a brief list of words, some of which have been studied above.

For example, as I have said, the nouns of most of the elements come from an earlier tradition: $\mathring{v}\delta\omega\varrho$, $\mathring{a}\mathring{v}\varrho$, $\mathring{a}\mathring{\eta}\varrho$, $\mathring{a}\mathring{\eta}\varrho$, $\mathring{a}\varrho$, $\mathring{a}\varrho$, $\mathring{a}\varrho$ having a sense which goes beyond naturalism not only in the Presocratics but also in the cosmogonic tradition. Their origin is, nevertheless, rooted in natural elements. From the physical world proceeds, as it appears, the new use of $\mathring{u}\acute{o}\varpi\mu o \varsigma$; $\mathring{a}\pi\acute{e}\imath\varrho w v$ was applied to physic, spatial entities before its meaning being extended. It is spatial and also denotes hostility the use of $\mathring{e}vav\imath \acute{a}$ by Pherecydes Syr. 3 and by almost all the Presocratics. These spatial meanings are made more abstract by them.

Then we have the temporal terms. Also from an earlier tradition come $\alpha i \acute{\omega} v$, $\chi \varrho \acute{\omega} v o \varsigma$, which have acquired new and more specialized meanings, ¹⁷) and $\acute{\alpha} i \acute{\omega} i o \varsigma$. The concept itself of $\acute{\alpha} \varrho \chi \acute{\eta}$ implies an important evolution. From Homer on we know the strictly temporal meaning 'beginning', and from it has to be derived the meaning 'principle' in Anaximander B 1 (the spatial and hierarchical meanings come from an independent evolution in the Vth. century).

¹⁶⁾ E. Loew, "Die Ausdrücke φρονεῖν und νοεῖν bei den Vorsokratikem", PHW 49, 11, 1929, pp. 426-29 and 492-95; K. von Fritz, "Nοῦς, νοεῖν and their Derivatives in Pre-Socratic Philosophy (excluding Anaxagoras)", CPh 40 (1945) 223-42; B. Snell, "Φρένες - φρόνησις", Glotta 55, 1977, 34-64.

¹⁷) See A. Bernabé, quoted in note 10.

It must be added too yéveoic, which as I said before, has enlarged is sense. On the contrary φύσις has evolved from the meaning 'birth', origin' to the meaning 'nature'. Likewise, γίγνομαι has evolved from the sense 'to be born' to the meaning 'becoming' in opposition to being'. There are always more abstract senses which go beyond the mere temporal meanings.

There is one more semantic domain in the earlier literary tradition that has been refined for the benefit of rational conceptualization. I am referring to the semantic field of necessity. A religious conception has turned into the idea of natural law. In the same way from the commonplace uses of ὄντα, ἐόντα in Homer to signify 'that which exists and is true' derives the 'Being' in Xenophanes, Parmenides,

Zeno, and Melissus.

Within the realm of Man Φιλότης and Νεΐκος acquire a cosmic value and the same happens to δίκη, νόμος, νοῦς, λόγος, and even ψυχή. All this represents a great progress towards the unification of the human and the natural, which is in turn connected to the divine.

Not so original is the fact that the intellectual and sensory operations expressed in various ways by αἰσθάνομαι, νοέω, φρονέω, δοκέω and their corresponding nouns αἴσθησις, νόημα, νόησις, φρόνησις, δόξα are related to interior knowledge as much as to exterior knowledge. The same happens with the adjectives applied to men having that knowledge. But there are new senses and new series of oppositions are created now bringing out an advance in the Greek language.

We make some remarks about them, but a more thorough study is needed. For example, αισθάνομαι referred to sensory perception appears only starting with Alcmaeon (B 1 a), Democritus (B 11) and it is opposed to φρονεῖν, διανοεῖσθαι, etc. Other times a new word is given a philosophical meaning. That is the case with διαιρέω and διαίρεσις if it is true that only in the Presocratics is found for the first time the new sense.

I have also indicated the presence in the Presocratic texts of a series of adjectives with the prefixes a- and auto- proceeding from the old poetry. These adjectives produced, by analogy, growing series of new adjectives connected with verbs, nouns and adverbs.

2. New terms

New terms are normally derivations from existing ones but incorporating a philosophical meaning. They are nouns derived from adjectives, and verbs or adjectives derived from other words. A good example is τὸ ἄπειρον, Anaximander's principle. As I was saying, the adjective ἀπείρων is used in a spatial sense or meaning 'countless' from Homer on. But it is only found in the philosophical language of Empedocles, who uses a great number of poetic words. Philosophers have opted for the substantivized use of ἄπειρος, which is used in a spatial sense by Herodotus and Euripides and later by the Presocratics in spatial und numeric contexts. See, for instance, Anaxagoras B i ἄπειρα καὶ πλῆθος καὶ σμικρότητα (there are similar examples in the A fragments of Anaximander, Zeno, Leucippus and Democritus with μέγεθος).

Two operations have taken place: a) to opt for the adjective ending $-o\varsigma$; b) to transfer old uses of adjectives in $-\omega v$ to the adjectives in $-o\varsigma$. This is explained by the easiness with which a noun like $\alpha \pi \epsilon i \rho \sigma v$ was created merging both values. This is a systematic phenomenon. The Presocratics begin to develop substantivized uses like $\theta \epsilon \rho \mu \dot{\rho} v$ and $\psi \nu \chi \rho \dot{\rho} v$ (Pythag. B 1 a, Anaxag. B 12, etc.). These will be extremely productive later on in Physics, Philosophy, and Medicine. The principle $\alpha \pi \epsilon i \rho \sigma v$ is known from Anaximander (B 1), Pythagoras (B 5), etc. It is a new creation.

This is only an example of the Presocratics' innovations. Among other nouns which appear now for the first time, there are αἴσθησις (Anaxag. B 2, Democr. B 9, etc.), διαίρεσις (see above), δίζησις (Parm. 1.33, 4.2), νόησις (several B quotes from Diog. Apoll. and some A quotes from Leucippus, etc.), νόημα (Xenoph. B 23.2, Parm. B 16.4, Emp. B 105.3, etc.).

In some other cases both the adjective and the noun appear for the first time in the Presocratics: ἄτομος, τὸ ἄτομον (ἡ ἄτομος is a late term). It is always the sense 'indivisible', 'the indivisible'. The adjective appears in Empedocles (A 43 a) and the noun in the atomist philosophers. It is obviously a creation based on an easy derivation from τέμνω (worked out by Empedocles). It is noteworthy that ἄτομος 'not cut' is also possible. It appears at the same time in Sophocles (Tr. 200). They are no doubt parallel creations. There are also adjectival creations already mentioned, like ἀνώλεθρος and αὐτοκρατής.

3. Lexical systems in the Presocratics

In the archaic period the archaic lexical systems achieve gradually completeness. Sometimes the completion affects the whole language, some other times it affects only a particular genre and author. This has been demonstrated by Elvira Gangutia for the vocabulary regard-

ing life and death and by myself for the semantic field of love in

Sappho.

Here there are some examples of how old incomplete lexical paradigms were filled in, even though their perfection would be attained only in later ages. We have, thus, the series αἰσθάνομαι / αἴσθησις / αἰσθητός (and later αἰσθητήριον, αἰσθητής, αἰσθητικός) in connection with the opposing systems based on φρονέω and νοέω. I said something above about these systems and their fluctuations in the philosophers' hands. Also about negative adjectives like ἀνόητος, ἀναίσθητος in the A fragments.

The task to accomplish is the study of verbs, nouns, adjectives, and adverbs, or even several words from each class, in order to establish the system of morphological derivations, symmetries, and asymmetries. The position of these groups within broader semantic fields must be also accounted for, as the systems may be comprehensive or

simply limited.

These systems and subsystems should be outlined by means of establishing distributions and oppositions, as I did for Heraclitus. Note that diverse words with the same stem face within a semantic field words with a different stem. Let us keep in mind here the list of opposing terms worked out by the Pythagoreans (two series related with $\pi \epsilon \rho \alpha c$ and $\tau \delta \tilde{\alpha} \pi \epsilon \iota \rho c \nu$ respectively) and the well known Heraclitus' oppositions. The system of oppositions is inherent to Greek thought and continues developing in Plato and Aristotle.

Finally, this is the research project which I propose. This work would pave the way for the study of the later evolution of the Greek philosophical vocabulary, in Socrates, Plato, Aristotle as well as in the

Hellenistic philosophies and their heirs of later ages.