
The dialectical unity of Greek Philosophy

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Key concepts/Trefwoorde:

one and many	ene en vele
universality and what is individual	universaliteit en wat individueel is
constancy and change	konstansie en verandering
form and matter	vorm en materie
conceptual knowledge	begripskennis
concept-transcending knowledge	begripstransenderende kennis
rationalism and irrationalism	rasionalisme en irrasionalisme

ABSTRACT

The Journal *Phronimon* strives towards establishing innovative perspectives against the background of Greek philosophy in dialogue with African and other World Philosophies. The all-pervasive striking feature of Greek philosophy is that since its inception it evinced an inherent tension between two radically opposing motives. In his *Metaphysics* Aristotle captures this philosophical development (preceding but not excluding his own stance) by employing the terms *form* and *matter*. This tension appears to be *dialectical* in nature, in the sense that the poles not only *oppose* each other but also *presuppose* each other. This presentation intends to highlight this dialectic with reference to the main contours of the development of Greek philosophy in the light of the shift in primacy that took place within this development. The opposing elements of this dialectical development received various designations, such as the *one* and the *many*, the *finite* and the *infinite*, the *limited* and the *limitless*, and the *constant* and the *changeful*. In the thought of Plato it is portrayed in the opposition between the static *eidetic world of eternal ontic forms* on the one hand and the *world of becoming* on the other. Also Aristotle struggled with this ultimate dualism between *pure form* and *pure matter*. Assessing this dialectical unity of Greek thought will also draw upon the views of well-known scholars who published extensively on the development of Greek philosophy (amongst whom Eduard Zeller, Theodor Comperz, Frederick Copleston, W.K.C. Guthrie and Herman Dooyeweerd). The analysis highlights the different modes of

explanation explored in Greek thought and also explains how terms derived from the aspects of number, space, movement and the physical were used in conceptual and concept-transcending ways.

What this article intends to argue is not a straight-forward implication of what is in general understood by the term *dialectic* - in the sense in which Plato and Aristotle employed it. In *The Sophist* Plato circumscribes *dialectic* as the science whose function it is to divide according to Kinds, not believing that the same Form is a different one or vice versa (*The Sophist* 253) – compare the phrase *διαλεκτική ἐπιστήμη* (*dialektikè epistémè*). This view is directed at the unique human capacity to think in a logical-analytical way, that is, to identify and distinguish (normally done on the basis of discerning what is similar and different). A similar situation is found in the thought of Aristotle who relates dialectic to the syllogism. He holds that there is a difference between a demonstrative premiss and a dialectical premiss. In the former case the premiss is laid down, while a dialectical entails a choice between two contradictories. Yet both types argue syllogistically: “But this will make no difference to the production of a syllogism in either case; for both the demonstrator and the dialectician argue syllogistically after stating that something does or does not belong to something else (Aristotle 2001, *Analytica Priora* 24a21-24b13; see also Aristotle 2001, *Topica* 100a30 ff.; as well as Aristotle 2001:65 and Aristotle 2001:188).

In both cases the term *dialectical* is related to the logical-analytical abilities of human beings – either to *discern* or to *infer*. It will turn out, however, as will be argued below, that the kind of dialectic found on the level of ultimate commitments, not only *transcends* the realm of logical-analytical thinking but at the same time *informs* it. During the early medieval period the entire *trivium* (grammar, rhetoric and dialectics) became known as *logic* – a practice which lasted until the 17th century (Risse 1972:166-167).

1. Orientation

Most philosophers and courses in philosophy appreciate the significance of Greek philosophy for the development of Western civilisation. The multiple orientations and even differences in view displayed by Greek philosophy do prompt us to ask if there is not perhaps an underlying *unity* that may serve as a justification of referring collectively to

“Greek philosophy.” It indeed seems quite difficult to discern a shared *motivation behind* all the multifarious stances found in Greek philosophy.

One reason may be found in the *interpretative* nature of investigating the history of philosophy, which may lead to diverging assessments. Copleston even suggests that the “point of view” or “standpoint” of the historian will have an effect on the outcome of historical investigations because the historian must “have a principle of selection.” The “own personal philosophical outlook” of the historian is “bound to influence his selection and presentation of the facts” and to affect her search for an understanding of the directing “motif” manifest in the history under consideration (Copleston 1985: v). A slightly different approach is found in the consistent *problem-historical method* employed by the Dutch philosopher Vollenhoven. He holds that contemporaries mutually influence each other and also exert an influence upon subsequent generations of philosophers. He does not want to suggest that any chosen problem stood in the centre of all philosophical approaches, because such a view easily leads to a one-sidedness that cannot do justice to those schools of thought for which this problem was not central or in which it perhaps did not even feature (Vollenhoven 1950: 5-6). Bril expanded the approach of Vollenhoven in confrontation with prominent scholars of the 20th century, such as Foucault, Van den Berg, Kuhn, Poortman, and Lovejoy (with his notion of “unit-ideas”) (Bril 1986: 11-109).

Clearly, the historian of (Greek) philosophy has to respect the “data,” the *sources* – and the cultural, historical and societal background cannot be ignored either. However, the aim of our current investigation is indeed to see if these sources do not reveal an *underlying unifying motive*, even if this motive itself may turn out to be caught up in or be struggling with a basic *split, divide*. We will argue that this is not merely a *logical* issue, but one reflecting the role of ultimate commitments, for within in this supra-rational sphere a radical and central dialectic is operative – in the sense that two ultimate poles are both threatening and presupposing each other.

2. **Is there a shared concern during the initial phase of Greek philosophy?**

Copleston identifies something of extreme importance for the Ionian philosophers, the fact of *change*, of *birth* and *growth*, *decay* and *death* (Copleston 1985: 17). Yet, so he continues a few pages further, these philosophers had the wisdom to discern “that, in spite of all the change and transition, there must be something permanent. Why? ... There must be

something which is primary, which persists, which takes various forms and undergoes this process of change.” *Change* therefore does not merely concern “a conflict of opposites,” which explains why Ionian philosophy is characterised by the attempt to find out what this *basic stuff* (*Urstoff* in German) is, exemplified in the well-known respective choices of *water* (Thales), *air* (Anaximenes) and *fire* (Heraclitus) (Copleston 1985: 20).

Copleston argues that Ionian materialism was *abstract* in nature and displayed a philosophical inclination, because in their original elements they discerned “the notion of unity in difference and of difference as entering into unity” (Copleston 1985: 21). An acknowledgment of this inclination makes it understandable why Heraclitus at once affirmed the *changefulness* of the world and simultaneously accepted the world law (*logos*) as an *untransgressable measure*: “The sun will not transgress his measures: were he to do so, the Erinyes, abettors of Justice, would overtake him” (Comperz 1964: 73). The fact that the Erinyes, the abettors of Justice, will punish the sun is significant, because it highlights the dialectic of *order* and *transgression*. If one associates *order* with what is *limiting* and transgression with the *unlimited*, then the claims of Philolaus also fit the dialectical picture. He holds that the universe as a whole, with everything in it, is fitted together “from the Non-Limited and the Limiting” (Freeman 1956: 73-Fr.1).¹

Philolaus connects this also with *harmony* because he says the latter “is a Unity of many mixed (*elements*), and an agreement between disagreeing (*elements*)” (Freeman 1956: 75-Fr.10). This kind of thinking is typical of a *dialectical* mode of thought, where the way in which opposites are united is informed by a supra-theoretical dialectic. Dooyeweerd mentions a writing erroneously ascribed to Hippocrates, *Peri Diaites*, in which such an approach is asserted: “For all things are alike in that they differ, all harmonize with one another in that they conflict with one another, all converse in that they do not converse, all are rational in being irrational; individual things are by nature contrary, because they mutually agree. For rational world-order [*nomos*] and nature [*physis*], by means of which we accomplish all things, do not agree in that they agree” (Dooyeweerd 2003: 45).

¹ One of the leading contemporary scholars within the domain of physical theorizing, Brian Greene, is convinced that the ideal to formulate a unified field theory could be accomplished by what is currently known as *super-string theory*. The view of Philolaus, namely that the *whole* is such that everything in it *were fitted together* is closely imitated by the belief of Greene that *super-string theory* will find a framework in which every insight is *fitted* into a “seamless whole,” a “single theory that, in principle, is capable of describing all phenomena” (Greene 2003: viii - also compare pages 364-370, 385-386).

3. The apparent ambiguity present in different modes of explanation

At this point we have to account for the employment of different *modes of explanation*. The term *mode* is derived from *modus quo* and it designates a *manner* of existence, the ways in which concretely existing entities and events *function*. Therefore these *modes of existence* are at once *functions* or *modes* as well as *modes of explanation*. Initially Greek philosophy by and large explored the following four modes of explanation, namely number, space, movement and (physical) change. Greek mathematics wrestled with what Becker designated as the *abyss* between *integers* and *continuity* (Becker 1965a: xix). The Pythagoreans were impressed by the apparent possibility to *arithmetise* musical consonants and it prompted them to claim that *everything is number*. However, the discovery of *incommensurability* (irrational numbers) caused Greek mathematics to explore an alternative mode of explanation, namely *space*. Since it is possible to construe irrational numerical relationships spatially, Greek mathematics became “geometrised,” that is to say, it made a choice for a *spatial* mode of explanation in giving prominence to spatial problems.

This does not mean that Greek philosophy now turned into geometry. What happened was merely that in exploring the spatial mode of explanation, key elements of the meaning of space were discovered, while at the same time specific spatial features obtained a *metaphysical connotation*, because they were employed in service of a more encompassing understanding of reality as such.

Within the context of spatial continuity (coherence), the most primitive awareness of infinity, understood as endlessness, is turned “inwards” - any spatial continuum could be divided *ad infinitum*. Thus it was realised that *continuity* allows for an *infinite divisibility*. Aristotle claims that it is self-evident that “everything continuous is divisible into divisible parts which are infinitely divisible” (Aristotle 2001, *Physica* 231 b 15 ff.).² However, the meaning of spatial wholeness was also explored in order to deny that such a continuous whole entails a *multiplicity of parts*. But advancing this view required a *more-than-spatial* use of spatial terms.

² In the current context we may leave aside the intriguing difference between mathematical space (which is continuous and infinitely divisible) and physical space (which is neither continuous nor infinitely divisible (Maddy 2005: 455 - see where she refers to Burgess; and Strauss 2009: 236 ff.).

4. Conceptual knowledge and concept-transcending knowledge

Particularly in the school of Parmenides the idea of *being* was largely articulated by employing spatial terms in a *twofold* way. Sinnige speaks of “spatial images”:

It is fairly clear that Parmenides gives us two distinct descriptions of Being. The first of these is intended to be understood in a metaphysical sense: Being is determined in all respects (B Fr.8 verses 26-42), the second is formulated in cosmological terms: Being is a spatial whole, kept in balance from within and not bordered upon by another Being (vs. 42-49). The two descriptions overlap each other to a certain extent, which means that most terms have at the same time a metaphysical and a spatial connotation (Sinnige 1968: 86).

The chief point to be observed here is that understanding *Being* requires the employment of terms derived from the spatial aspect. Sinnige calls them *cosmological terms*. Claiming that *Being is a spatial whole* accounts for the way in which *Being* manifests itself within the boundaries of the spatial aspect. Instead of calling this mode of speech *cosmological*, one can rather discern in it a *conceptual use* of spatial terms. However, what is important for a philosophical understanding of *Being* only surfaces when a *metaphysical connotation* is attached to spatial terms. In such instances spatial terms are stretched *beyond* the confines of the spatial aspect - and the best way to capture their meaning is to realise that they employ terms derived from the aspect of space in a *concept-transcending* manner. Concept-transcending knowledge can also be labelled as *idea-knowledge*. Parmenides has *static being* in mind, in the sense of not being subjected to change (*atremes*). It is supposed to be stripped of all *movement* and therefore to be *immutable*. This fully determined static reality is reflected in our thinking, for Parmenides actually was convinced that *thought* and *being* are the same (Diels & Kranz 1960, B Fragment 3). Parmenides holds that being has no “coming-into-being and no destruction” (Diels & Kranz 1960, B Fragment 8 vs. 4 - see Freeman 1956: 43). Although the implicit intention is to abstract from *phoronomic* and *physical* considerations, the metaphysical idea-use of spatial terms is inevitably connected to the intuition of *uniform motion* and *change* - the former is elevated to the metaphysical idea of *immutability* while the latter is metaphysically *negated*: *being* is not subject to *change*.

The apparent ambiguity in the use of a specific mode of explanation disappears when it is realised that this ambiguity simply reflects the difference between a conceptual and a concept-transcending use of modal (aspectual) terms. The conceptual and concept-transcending sides of the spatial coin are both present when Parmenides accounts for crucial features of being, for he believes that being "... was not and will never be because it is connected in the present as an indivisible whole, unified, coherent" (Diels & Kranz, 1960, B Fragment 8, 3-6).³ Being *coherent* and *connected* conceptually applies to spatial configurations such as *line stretches*, *squares* and *circles*, but claiming that being is an *indivisible unified whole* exceeds the confines of the spatial aspect in employing spatial terms in a concept-transcending way. Shapiro correctly points out that *coherence* (being *connected*) is actually an undefined primitive (spatial) term, every attempt to define it therefore turns out to be circular: "coherence is not a rigorously defined mathematical concept, and there is no noncircular way to characterize it" (Shapiro 1997: 13).

When Parmenides articulates his idea of "... an indivisible whole, unified, coherent" (Diels & Kranz, 1960, B Fragment 8, 3-6), he at once introduces a split between the "one" and the "many". The numerical awareness of one, another one, and so on, underlies the notion of the "one and the many" which could easily be expanded, in a concept-transcending way, to the idea of *unity and diversity*. Stokes wrote a work on the one and the many in Pre-Socratic philosophy in which he explores two themes:

... the precise place of the antithesis between 'one' and 'many' in early Greek (especially Ionian and Eleatic) thought, and the degree to which the early philosophers failed to recognize the distinctions between different kinds of unity and plurality (Stokes 1971: 1).

We noted that Aristotle acknowledged the infinite divisibility of continuity, which explains why he also realised that the one and the many are not necessarily antithetically opposed. He distinguishes two senses of the *one* and the *many* (Aristotle 2001, *Physics*, 185b32 ff.).

³ Within the vitalist tradition a truly living entity is also indivisible and it is not composed out of parts. This view derives from Aristotle's vitalism. In his definition of the soul the word '*organikon*' has always been misunderstood (see Bos 2003: 85 ff., 93-94, 107-108, 162, 174, 200.) Aristotle's vitalism is still alive in the twentieth century in the thought of neo-vitalists such as H. Driesch, A. Haas, P. Overhage and EW. Sinnott.

5. Wholeness and multiple parts

An analysis of the interconnections between number and space shows that our traditional distinction of different kinds of numbers is actually dependent upon the imitation of basic spatial features. The designation *integers* imitates the element of *wholeness* of spatial continuity, while the *fractions* (rational numbers) reflect the many *parts* of a spatial *whole*, captured in the mentioned insight that continuity is *infinitely divisible*.

The assumed “oneness” of being as an *indivisible whole* inevitably clashes with the very nature of the infinite divisibility of a continuum. But it is precisely for this reason that Zeno advanced his metaphysical idea of *oneness*. His aim, after all, was to argue against *multiplicity* and *movement*. If each “one” is *divisible* it would have had *multiple* parts and therefore it would be a “many” and not a “one.” Consider B Fragment 3 of Zeno where the following argument is advanced: “...if there is a plurality, it must contain both a finite and an infinite number of components: finite, because they must be neither more nor less than they are; infinite, because if they are separate at all, then however close together they are, there will always be others between them, and yet others between those, ad infinitum” (Guthrie 1980: 90-91). When plurality is accepted the contradictory conclusion follows that it contains at once both “a finite and an infinite number of components.”

Surely a whole contains all its parts, as it is still positively affirmed by the 20th century mathematician, Paul Bernays. He holds that “wholeness” i.e., the *totality-character* of spatial continuity stands in the way of a “perfect arithmetization of the continuum” (Bernays 1976: 74). If we understand the first argument of Zeno from the perspective of the whole-parts relation, then these parts must be limited in number, because they are constitutive for the world as a whole. Alternatively, if we argue from the whole to the parts, then the infinite divisibility evinced by these divisible parts will imply that “there will always be others between them” - and so on indefinitely. Fränkel indeed uses the relation between parts and the whole in explaining what Zeno had in mind in his third *Fragment* (Fränkel 1968: 430). Zeno's B Fragment 3 may indeed be appreciated as the first analysis of the relation between the whole and its parts and the relation of the parts to the whole.

From a systematic point of view, it is clear that the spatial whole-parts relation turns infinity, in the primitive sense of endlessness, *inwards*, that is to say, embodied in the *successive infinite divisibility of a continuum*. Zeno's paradoxes directly follow from his metaphysical attempt to eliminate the aspects of number and movement, instead of

realising that one has to acknowledge both the *uniqueness* of each one of these aspects of reality as well as their *unbreakable mutual coherence*. Motion is interconnected with a path (*space*) and speed can only be specified by a *number*.

In the metaphysics of space found in the thought of Parmenides, the starting-point is given for Zeno's argument concerning a *unitary wholeness* excluding plurality. The effect is that Zeno attempted to deny the *part*-element of the spatial whole-parts relation, while at once holding on to the trait of *wholeness* entailed in it. In a different context Strauss compared this view of Zeno with those of Wittgenstein and modern intuitionistic mathematics as follows:

Whereas Wittgenstein had to throw away the ladder after climbing it (*Tractatus*, 6.54), Zeno started on top, with wholeness, and then discarded the ladder of infinite divisibility supporting it. The reverse took place in intuitionist mathematics, which started with the original spatial whole-parts relation, but then distorted it by accentuating the part element (with its implied infinite divisibility) at the cost of the element of wholeness (with its givenness as a totality all at once). The intuitionistic theory of the real numbers and the continuum followed a similar kind of Wittgensteinean approach – it used the ‘spatial ladder of wholeness,’ but immediately discarded it while preserving the infinite divisibility it implied (Strauss 2009: 407).

6. **Constancy and change**

We pointed out that early Greek philosophy, since its inception, primarily wrestled with the *changefulness* of reality which inspired the urge for an underlying *persistency* or *constancy* amidst all change. From the perspective of *modes of being* and *modes of explanation* the meaning of constancy and change relates to the kinematic and physical aspects of reality. In the former modern physics recognises *uniform flow* (rectilinear motion) and in the latter it discerns the dynamics of material operations, *causes and effects*.

Heraclitus is perhaps most famous for his emphasis on change, captured in the statement that it is not possible *to step into the same river twice* (Diels & Kranz 1960, B Fragment 91 and Freeman 1956:31). The lasting influence of the problem of constancy and change is first of all detected in the early dialogues of Plato and in fact it played an important role in formulating his theory of supersensory, eternal ontic forms (ideas). In his

dialogue *Euthypro* the words *eidos* and *idea* (*εἶδος* and *ιδέα*) appeared for the first time. The concern of the narrator is to affirm that through *one idea* what is pious is pious such that all actions conforming to this *paradeigma* could be called pious (Aristotle 2001, *Euthypro* 6e4 ff.).

Here it is already clear that both Heraclitus and Parmenides influenced the intellectual development of Plato. The dialogue *Cratylus* is perhaps most instructive in this regard. Anticipating his theory of ideas (*eidè*) Plato here presents us with a dreamed-of pre-design of his eventual theory. On the one hand Plato acknowledges that things named are subject to continuous flow and becoming (Aristotle 2001, *Cratylus* 411 c). If this changefulness obtained the upper hand no knowledge would be possible, for the moment we want to acquire knowledge of something, it already would have become something else (*Cratylus* 439 e – 440 a). Aristotle points out that Plato was acquainted with the views of Heraclitus. Cratylus and Heraclitus taught that “all sensible things are ever in a state of flux and there is no knowledge about them” (Aristotle 2001: 700, *Metaph.* 987a30 ff. At the end of the dialogue *Cratylus* Plato even related the good and beauty to their respective static *eidè*. Aristotle also alludes to the nature of a *definition* as it was developed by Socrates: “Plato accepted his teaching, but held that the problem applied not to sensible things but to entities of another kind - for this reason, that the common definition could not be a definition of any sensible thing, as they were always changing” (Aristotle 2001: 701, *Metaph.* 987b4-6 ff.).

Plato introduced the static being (*auto to eidos*) as suprasensory guarantee for the possibility of knowledge. Without it, “knowing” would change into something else and this would cancel knowing altogether (*Cratylus* 440 a-b). This static Eleatic orientation motivated the *form motive* in Plato's theory of ideas. But soon the dynamic concentration tendency acquired the guiding role in the further development of Plato's philosophy. In *Politeia* the epistemological significance of his theory of knowledge is explained in terms of the well-known allegory of the cave dwellers, as well as in that part where he classifies knowledge and what is knowable (Aristotle 2001, *Politeia* 509 d-511 e). The principle that makes possible knowledge of things also gives reality to them, namely the *idea tou agathou* (the *idea of the good*). Krämer remarks: “The closing section of Book 6 of *Politeia*, to be more precise, the section 508 D-509 B, concerns the acknowledged most important part of his entire dialogical work” (Krämer 1959: 473).

Considering that in the dialogue *Timaeus* Plato introduces the term *demiurg* to designate the role of *form-giver* (Aristotle 2001, *Timaeus* 28 a 6), the sporadic employment of this word in *Politeia* is significant (Aristotle 2001, *Politeia* 507 c 7 and 530 a 6). The transcendental interpretation of Baumgartner, as if the *eidè* were constituted in human thought, cannot be justified. The ideas themselves are not produced by any human *demiurg*. Zeller reminds us that Plato's "idealism" does not "bear the modern subjective character; the forms of things are not products of thought either divine or human; they stand in plastic objectivity, as prototypes of things, over against the spirit which contemplates them" (Zeller 1909: 30).

In spite of the fact that contemporary philosophy does not include scholars who still adhere to Plato's idea of a transcendent realm of static ontic forms (*eidè*), the basic insight underlying his speculative theory did not lose its validity. This insight articulates what Copleston already understood in his above-mentioned characterisation of the Ionian philosophers, namely that there "must be something which is primary, which persists, which takes various forms and undergoes this process of change." Plato brought it to greater clarity by realising that change is only possible on the basis of persistence. Those who advocate the supposed all-pervasive reality of *change* most of the time do not understand that the standard way of formulating this claim does not merely speak about *change* alone. As a rule the term "change" is accompanied by another term which specifies the condition of change. Compare expressions like: "things are *constantly* changing"; "things are *always* changing"; "the *ever*-changing nature of things", and so on. The italicised words make it clear that change can solely be detected on the basis of constancy.⁴

The natural scientific exploration of this insight took shape in the thought of Galileo and Einstein. The former recognised movement as a unique and irreducible mode of explanation, exemplified in uniform, rectilinear motion. The latter postulated a constant

⁴ Collingwood alludes to this basic insight of Plato by pointing out that if everything in the world changes "what is there in such a world for the mind to grasp? They were quite sure that anything which can be an object of genuine knowledge must be permanent ... If it is to be knowable it must be determinate; if it is determinate, it must be so completely and exclusively what it is that no internal change and no external force can ever set about making it into something else. Greek thought achieved its first triumph when it discovered in the objects of mathematical knowledge something that satisfied these conditions. A straight bar of iron may be bent into a curve, a flat surface of water may be broken into waves, but the straight line and the plane surface, as the mathematician thinks of them, are eternal objects that cannot change their characteristics" (Collingwood 1963: 20).

upper speed limit towards which every movement is relative. Therefore Einstein should have depicted his theory as a theory of *constancy* instead as a theory of *relativity*.

The ultimate Greek concern for incorruptibility amidst a world of change acquired an articulation exceeding the mere functional or aspectual meaning of the kinematic and physical aspects of reality. In passing we may also note that in their uniqueness and mutual coherence these aspects provide us with a precise formulation of the first main law of thermodynamics, namely the law of *energy-conservation*, which should rather be designated as the law of *energy-constancy*.

From a comprehensive perspective the kinematic and physical aspects indeed make possible the articulation of changefulness and the urge towards what is supposedly *immutable* in Greek philosophy.

7. Modes of explanation in conceptual and concept-transcending contexts

The awareness of *universality* ultimately depends on the meaning of the spatial aspect, on our intuition of *everywhere*, at *all places*. *Universality* may apply to universal features or properties, such as *being triangular* or *being an atom* - or it may apply to the encompassing (universal) scope of a *law*. Greek philosophy soon realised that universality pertains to *conceptual knowledge*, which is intrinsically related to *order* and *orderliness*.⁵ Guthrie captures this perspective in his statement that “only universals are true objects of knowledge: only generalization can lead to the discovery of causes, by which Aristotle already, like a modern scientist, means general laws” (Guthrie 1962: 40). He continues with the remark that philosophy and science “start with the bold confession of faith that not caprice but an inherent *orderliness* underlies the phenomena” (Guthrie 1962: 44). He alleges that the Milesian philosophers “were the first to make investigations in the faith on which all scientific thought is based, that the bewildering confusion of phenomena conceals a framework which is radically simpler and more orderly, and so capable of being grasped by the human mind” (Guthrie 1962: 44-45).⁶ What is (i) individual is correlated with (ii)

⁵ Orderliness or law-conformity is a feature of *factual reality*. It shows that *factual reality* conforms to the *order* for its existence. Laws are not “lawful,” they delimit and determine what is lawful or orderly.

⁶ In a related context De Vleeschauwer holds: “A science without any ‘presuppositions’ is therefore purely from a rational standpoint impossible. The last reality towards which epistemology drives us, is an act of faith in thinking ...” [“n Volstreckte «voraussetzungslose» wetenskap is derhalwe reeds vanuit

universality - *this* chair [(i)] is a chair [(ii)]. Aristotle remarks that “the being of house is not generated, but only the being of *this* house” (Aristotle 2001, *Metaph.*, 1039 b 24-25).

What is *individual* presupposes our awareness of (quantitative) *discreteness*, embodied in its *uniqueness*, in its *being distinct*. Guthrie quotes Frankfort saying: “We understand phenomena, not by what makes them peculiar, but by what makes them manifestations of general laws. But general law cannot do justice to the individual character of each event. And the individual character of the event is precisely what early man experiences most strongly” (Guthrie 1962: 40-41). Guthrie finds in knowledge of what is individual “the perennial problem of scientific inquiry: how is scientific knowledge of the individual possible at all, since science only explains by subsuming under laws that operate universally?” (Guthrie 1962: 41).

This question implicitly addresses the identification of *knowledge* with *conceptual knowledge*, that is to say, with knowledge in terms of *universality*. One may even define *rationalism* as identifying *knowledge* with *conceptual knowledge*.⁷ Since Aristotle holds that a *concept* (*logos*) does not *come into being* or *pass away* (Aristotle 2001, *Metaph.* 1039 b 22-26), it is clear that he combines the issue of *universality* and *what is individual* with the problem of *constancy* and *change* (*originating* and *disappearing*). For Aristotle genuine knowledge in principle is knowledge of the *general form*: “for definition is of the universal and of the form” (Aristotle 2001, *Metaph.* 1036 a 29) - from which it naturally follows that matter (*hylè*) resists a *conceptual grasp*. Since his *primary substance* is *individual*, Aristotle considers it to be *unknowable*. It is only possible to know the universal form of things, the *secondary substance*, the *to ti èn einai* (Aristotle 2001, *De Anima*, 412 b 16; cf. 414 a 9-11).

In Chapter three of Book Seven of his *Metaphysics* Aristotle elaborates his appreciation of (*formless*) matter by denying all its conditions. The only conclusion for him is that matter is *unknowable*. In fact he denies both positive and negative determinations of matter (Aristotle 2001, *Metaph.*, 1029 a 27-28). Yet he does designate matter as *indeterminate* (*aoriston*) and as *unlimited* (*apeiron*). Since what is indeterminate and unlimited cannot be known “as such,” it is clear that matter “as such” will also be unknowable for Aristotle (Happ 1971: 562). This view is intimately connected to the general

'n suiwer rasonele standpunt beskou, onmoontlik. Die laaste realiteit waartoe die kennisleer ons dryf, is 'n akte van geloof in die denke” (De Vleeschauwer 1952: 244).]

⁷ *Irrationalism*, in turn, could be defined as the restriction of knowledge to *concept-transcending knowledge*, i.e., to *idea-knowledge*.

Greek understanding according to which processes of change are - as Collingwood phrases it - “really not even opinions but sheer illusions” (*a la Plato*), and in addition he remarks that on “such a theory, history ought to be impossible” (Collingwood 1963: 21).

In our experience of the world we are acquainted with the co-conditioning role of the aspects of number (one and the many), space (diverse shapes and positions), movement and the physical changes (causes and effects). Although each one of these conditioning aspects enables instances of conceptual knowledge, already in Greek philosophy they are also explored in concept-transcending ways. Apart from the underlying role of the aspects of number and space the perennial problem of what is individual and universal cannot be phrased. And we have noted that within Greek philosophy these two modes of explanation are also explored in concept-transcending ways. In the space metaphysics of Parmenides the “one,” in the sense of an *indivisible whole*, instantiates an idea-use of a *numerical* term. The fundamental divide in Aristotle's philosophy between *matter* and *form* caused him to struggle with what is *individual* (the *primary substance*) and what is *universal* (the *secondary substance* - see Aristotle 2001, *Categoriae* 1 ff.). The original meaning of the aspects of number and space here obtained a metaphysical, concept-transcending employment. In Aristotle's philosophy it became quite clear that his characterisation of *matter* (*proten hulè*) and *form* (*proten ousian*) equally explored *idea-usages* of the kinematic and physical aspects, first of all manifest in the Milesian search for *persistence* amidst *change*.

8. Theoretical articulation and ultimate commitment

Against the background of recognising alternative concept-transcending ways in which Greek philosophy throughout its development articulated its ultimate convictions concerning the universe, it should be kept in mind that the conflicting poles were standing in a truly radical and central (i.e., supra-theoretical) *dialectical* relation. The two opposing motives at once mutually pre-suppose each other, and capturing this dialectical situation relies on exploring different modes of explanation in concept-transcending ways.

The fact that Aristotle sometimes portrays the philosophical conceptions of his predecessors incorrectly, should not be used as a reason to ignore his designation of the deeper motivation of this philosophical development in terms of the tension between *matter* and *form*. But we have seen that the form-matter designation is not the only gateway to an

understanding of the ultimate, supra-theoretical ground motive of Greek philosophy. The one and the many, the finite and the infinite, the limited and the limitless, as well as constancy and change were used with equal force in order to designate the ultimate motivation of Greek thinking.

The cultural-historical subject-object relation provides even another mode of explanation in support of designating the ultimate dialectical basic motive of Greek philosophy as that of form and matter, because the scheme of form-giving and form receiving - matter either as *mè on* or as *dunamei on* - requires the idea of a (divine) form-giver (*Workmaster, demiourgos* - compare Plato's dialogue *Timaeus*).

Dooyeweerd explores this path by distinguishing between the motive of form, measure and harmony from the matter motive of the ever-flowing stream of life. He explains the latter as follows:

This was the motive of the divine, eternally flowing stream of life. Arising from mother earth, this stream of life periodically, in the cycle of time, brings forth everything that has individual form and shape; but then, inevitably, the latter falls prey to blind, unpredictable fate, to dread *Anankè* (necessity), in order that the eternally flowing and formless stream of life might continue on with its cycle of birth, death, and rebirth. This divine stream of life, coursing through everything that has bodily form, is a psychic fluid, which is not bound to the limits of the bodily form and thus cannot die with the latter, but which is conceived of nevertheless as material and earthly. The deepest mystery of the 'psyche' lies in an ecstatic transcending of one's bodily limits in a mystical absorption into the divine totality of life. In the words of Heraclitus, the obscure thinker of Ephesus, 'You could not in your going find the ends of the soul... so deep is its law (*logos; Λόγος*)' (Dooyeweerd 2003: 5).

Both the matter motive and the form motive are ultimate in the sense of touching the root or self-hood of being human. Since they are mutually exclusive and mutually dependent, the only option is to give *primacy* to one of them, without succeeding in escaping from the opposite pole.⁸ Initially the matter motive of the ever flowing stream of life dominated Greek

⁸ Keep in mind that we do not have to follow Aristotle and Dooyeweerd in their choice to designate the ultimate direction-giving root-motivation of Greek philosophy in terms of the motive of *form* and *matter*. It could be substituted with any of the above-mentioned alternative designations: the one and the many, the finite and the infinite, the limited and the limitless, as well as constancy and change.

philosophy. This flowing stream of life and death passes through all visible forms which are, once they took on a delimited form, doomed to return to their formless origin by necessity. In the first *Fragment* of Anaximander left to us, he states:

The Non-Limited is the original material of existing things; further, the source from which existing things derive is also that to which they return at their destruction, according to necessity; for they give justice and make reparation to one another for their injustice, according to the arrangement of Time (Freeman 1956: 19).

In the beginning of our analysis we mentioned that according to Copleston the Ionian philosophers noted “that, in spite of all the change and transition, there must be something permanent.” They proceeded from elements with a fluid divine nature (water, air, fire). Although Anaximander chose for the infinite-unlimited, the *apeiron*, his second and third Fragments asserted that the *apeiron* “is everlasting and ageless” (*Fragment 2*) and it “is immortal and indestructible” (*Fragment 3* - Freeman 1956: 19). In a naturalistic shape the form motive clearly surfaced in the thought of Parmenides concerning the unity (oneness) of being. It was Empedocles who distinguished four immutable ontic forms. Aristotle mentions that he treats these four as if they were two: *fire* on the one hand and *earth, air and water* together on the other (Aristotle 2001, *Metaph.*, 985 b 1-3). The striking advance in the dialectical development of Greek philosophy noticeable here, is that Empedocles introduced two soul forces, love (*philia*) an animosity (*neikos*), where *philia* is a divine soul force and *neikos* is a non-divine soul force. This entails that the matter motive is therefore only *partially* de-divinised - namely in connection with the *neikos*.

The decisive switch in assigning primacy to the form motive occurs in the thought of Anaxagoras. He elevated the *nous* (reason) to a self-existent state not limited or mixed with material sperms: “Other things all contain a part of everything, but Mind is infinite and self-ruling, and is mixed with no Thing, but is alone by itself ... For it [*nous*] is the finest of all Things, and the purest, and have complete understanding of everything, and has the greatest power (*πάντων νοῦς κρατεῖ*)” (Freeman 1956: 84). The *de-divinisation* of the rigid, motionless and disorderly germs of matter clearly follows from the fact that now only the *nous* is designated as divine.

The atomists, Leucippus and Democritus, broke the indivisible static form of being of Parmenides up into a multiplicity of immutable stereometric forms, while they viewed matter as a void (*kenon*) which is unlimited and formless.⁹

In the thought of Socrates the divine *nous* of Anaxagoras continues as *form-giver* of the cosmos and as the origin of what is good and beautiful in the cosmos. Thus Socrates deepened the primacy of the form motive towards the concentration of all knowledge on the *good* and *beauty*. In the first Platonic dialogues this dynamic tendency plays a dominating role.

The dualism of matter and form in Plato's thought is foremost evident in his dualistic understanding of the intelligible world and the world of becoming. The ideal forms serve as *Urbilder* (archetypical forms) which are copied into transitory forms within which they are present. The split between the two principles of origin, form and (formless) matter, entails that within the world of becoming *copies* of the original ontic forms are found - each *eidos* has multiple *Abbilder* (copies). But Plato did realise that within the world of supra-sensory static forms there is no form for the formless (matter). Subsequent to his dialogue *Parmenides* Plato therefore contemplated an *eidetic matter* (*hulè*), particularly in the *Timaeus*, in order to find an *original form* for matter amongst the other *eidè* (see the extensive discussion in Dooyeweerd 2003: 263 ff.).

Whereas Plato stumbled upon the law side of the cosmos as an *order for*, Aristotle transposed the transcendent ideas of Plato by positioning them on the universal side (orderliness) of individual entities, conceived as the universal secondary substance which was supposed to unite form (actuality) and matter (potentiality). In his extensive work on the term *matter* in the philosophy of Aristotle we have to note how Happ discerns the mutuality and mutual exclusivity of the principles of matter and form. It should be kept in mind that the biblical idea of creation is foreign to Greek philosophy - captured in the slogan *ex nihilo nihil fit* (nothing comes from nothing). Shields summarises this view: "Since nothing pops into existence from nothing, all change involves something underlying, something which persists even while there is alteration" (Shields 2007: 55). Also note that the ultimate issues are here once more phrased in terms of the concept-transcending use of kinematic and physical terms, *persistence amidst change* (i.e., *constancy* and *dynamics*).

⁹ In order to account for their movement, Epicurus attributed natural weight to the atoms. Compare the view of Democritus according to whom both nothing-ness and something-ness exist (Diels & Kranz, B. Fragment 156).

According to Happ the “Matter-Form relation ... is ultimately based in a Primordial Relation (Ur-Relation) ‘matter in itself’ (pure matter): ‘pure form’ ” (Happ 1971: 799); “the ‘pure form’ needs the ‘pure matter’, the *energeia* the *dunamis*” (Happ 1971: 26). In a striking way Happ here also writes that matter is *subjected* to form (owing to the *primacy* of the latter). Matter is “a ‘principle of being’, which means: it is an operating factor *sui generis* that, although in rank subordinate to form, and it cannot be reduced to it in any way (such as a ‘pure relation concept’, that is as the ‘form of the lowest level’), neither directly or indirectly.” His final verdict is that an irreducible original opposition (dualism) is here present: The “highest matter” cannot be reduced to the “highest form”: “As in Plato and the Academy an original opposition [Ur-gegensatz] here continues to exist” (Happ 1971: 805, note 628).¹⁰ Ter Horst (2008) highlights this dualism in the following two statements: “For Aristotle *matter* is an eternal principle of motion and change ... similarly *form* is an eternal principle of persistent being”; “Potency and act, instantiated as matter and form, are eternal, supra-temporal and immutable principles of all beings.”¹¹

From our preceding analysis we can conclude that the theoretical articulation of Greek philosophy explored an idea-use in which diverse modes of explanation were employed in concept-transcending ways, such as the *one and the many* (number), the *limited and unlimited* (*peras* and *apeiron*), and *persistence and change* (the kinematic and physical modes of explanation). If we take Aristotle serious and also employ the mutuality of *form* and *matter* we are still only attempting to capture the ultimate concern of Greek philosophy for immutability in the midst of the changeful world of becoming.

9. The dialectical basic motive of Greek philosophy

If we consider all these modes of formulation, it is clear that the ultimate (supra-theoretical) *basic motive* or *ground motive* of Greek philosophy may be approached from *multiple angles*. However, whichever formulation we may choose to designate or capture the

¹⁰ Aristotle contemplates the un-moved mover as an eternal, living and complete substance involved in pure activity (*Metaph.* 1072 b and *De Anima* 415 b). For Aristotle God is a being totally separated from whatever could be perceived (*Metaph.* 1073 a 4 ff.).

¹¹ “De *materie* is bij Aristoteles een eeuwig beginsel van beweging en verandering ... de *vorm* is een evenzo eeuwig beginsel van blijvend zijn” (Ter Horst 2008: 28). “Potentie an akt,geïnstantieerd als materie en vorm, zijn eeuwige, boventijdelike en ongeworden beginselen van al het zijnde” (Ter Horst 2008: 29).

ultimate root motivation directing the entire dynamics revealed in the development of Greek philosophy, the inherent central dialectic enclosed in it, cannot be denied.

Greek philosophy therefore is united in the sense of sharing the same root-motivation of its basic motive of *constancy* and *change*, of *form* and *matter*. At the same time this deeper unity is broken apart by the inherent dialectics entailed within this ground motive, which merely allows for assigning primacy to one of its two radically opposing poles, without being able to obtain a higher synthesis encompassing both.

For this reason our analysis started by suggesting that there is a unifying perspective underlying Greek philosophy. Our discussion now terminated in confirming this suggestion – from the perspective of its ground motive Greek philosophy indeed displays a *dialectical unity!*¹²

¹² Although Bram Bos challenges the explanation which Dooyeweerd gave for the *genesis* of the Greek dialectic (see his article *Dooyeweerd en de wijsbegeerte van de oudheid*, in Geertsema 1994: 197-227) by introducing the idea of the “titanic meaning-perspective,” he does believe that the value of Dooyeweerd's analysis of the irreconcilable inner dialectic of Greek thought remains intact (page 220).

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