Introduction to Indo-European metaphysics

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A common origin has been ascribed to Indo-European humanity, dating back to its sojourn in the southern parts of the vast land known since medieval times as Russia (or, to be more precise, *Rus*' in Old East Slavic). This location of the *Urheimat* of the prehistoric Indo-Europeans has been demonstrated on the grounds of historical linguistics, archaeology, quantitative analysis and archaeogenetics (Quiles & López-Menchero 2012: 58-66). From their ancestral homeland the Indo-Europeans ventured forth in successive waves, first westwards into Europe from around 3000 B.C. and then southwards into the Near East and the Indian subcontinent from around 2000 B.C. The western branch of the Indo-Europeans developed into the Germanic, Slavic, Baltic, Celtic, Italic and Hellenic peoples (referred to collectively as the Nordic peoples; Campbell 1970: 9), while the eastern branch unfolded as the Indo-Aryans of Iran and India. An offshoot of the western branch migrated south between the Black Sea and the Caspian Sea, eventually settling in Asia Minor where they became known as the Hittites (King 2007: 28-33).

Due to these extensive migrations, the Proto-Indo-European language (abbreviated as PIE) developed into the numerous Indo-European languages spoken or studied today, of which Sanskrit, Greek and Latin are the most venerable ones. Juxtaposing the Kurgan Hypothesis in archaeology with the Three-Stage Theory in linguistics, the Spanish scholars Carlos Quiles and Fernando López-Menchero found that between around 3500 and 3000 B.C. the Late Indo-European language (LIE) became differentiated into at least two dialects, namely southern (or Graeco-Aryan) and northern. Between around 3000 and 2500 B.C. these linguistic communities began to migrate away from their Urheimat, so that the resultant Corded Ware cultures eventually extended from the Volga to the Rhine. Then, between around 2500 and 2000 B.C, when the Bronze Age reached Central Europe, the southern LIE dialect had differentiated into Proto-Greek and Proto-Indo-Iranian. The invention of the chariot enabled the rapid spread of the Indo-Iranians over much of Central Asia, Northern India and Iran during the next stage, dated between around 2000 and 1500 B.C. This stage also saw the break-up of Indo-Iranian into Indo-Aryan and Iranian, the differentiation of European protodialects from each other, and languages such as Hittite, Mitanni and Mycenean Greek being spoken or written down. By between around 1500 and 1000 B.C. the European proto-dialects

had evolved into Germanic, Celtic, Italic, Baltic and Slavic, while Indo-Aryan became expressed in its sacred language Sanskrit, for instance in the composition of the *Rig-Veda*. Finally, with Northern Europe entering the Iron Age between around 1000 and 500 B.C, the Greek and Old Italic alphabets appear, and the Classical civilisation flowers among the Hellenic peoples (Quiles & López-Menchero 2012: 67, 75).

At an early stage, possibly before their migrations into Europe, the western branch of the Indo-Europeans became divided into northern and southern groups, called the Proto-Nordics and Proto-Mediterraneans respectively. The religious beliefs of both groups were apparently based on the worship of a benign Father-god, with whom it was possible to be reunited in the afterlife. This paternal God was evidently conceived in two different though related aspects: while the Proto-Mediterraneans worshipped a Sun-god whose symbol was the Sun, the Proto-Nordics worshipped a Sky-god whose symbol was the thunderbolt (Campbell 1970: 13-14). Regarding the former, it should be noted that in all probability it was not the physical Sun that was worshipped, but rather the Spirit who created the Sun with its heat and light. Among the ancient Accadians and Babylonians this Sun-god was called Bel, the memory of which has been preserved among some of the Celtic peoples in the annual fire-festival known as Beltane. Also among the Celts was found a Druidic prayer in which God was entreated to grant his supplicants the love of the right, the love of all things, and the love of God (Campbell 1970: 8-10) – evidence of high spirituality indeed. This Indo-European notion of a benign Divinity is also encountered in a prayer ascribed to Socrates: 'King Zeus, whether we pray or not, give us what is good for us; what is bad for us, give us not, however hard we pray for it' (Second Alcibiades, 143; Campbell 1970: 12).

The vast spiritual-intellectual tradition (Sanskrit *sanatana dharma*; Greek and Latin *sophia perennis*, 'eternal wisdom') of the Indo-Europeans has been expressed above all in classical Indian and Hellenic philosophy, the combination of which remains unsurpassed in the profundity of its thought and the brilliance of its exposition.¹ Contrary to the prevailing rationalistic paradigm in Western academic circles, it has to be emphasised that Indo-Hellenic thought is primarily rooted in spiritual experience. This metaphysical foundation applies also

¹ Due to the universality of the divine Intellect, the *sophia perennis* is by no means limited to the Indo-Europeans. The wisdom tradition is likewise encountered in Egyptian, Babylonian and Chinese philosophy, but these fall outside the scope of the present essay.

to scientific thought, as Oswald Spengler affirmed: 'There is no Natural science without a precedent Religion' (1991: 190). In other words, the mystical vision (Greek *theōria*) of the Reality that underlies the world of empirical phenomena preceded the philosophising of the Vedantic, Presocratic and Platonic thinkers.² This Indo-European mystical vision of the One and all (Greek *hen kai pan*) found its earliest literary expression in the Upanishads and the works of early Hellenic thinkers such as Heraclitus and Parmenides (Günther 2013: 51). It is therefore not surprising that the Hellenic metaphysical tradition of Orphism, Pythagoras and Plato is similar to the mysticism of the Upanishads. In both traditions one encounters a shift of emphasis from the physical to the spiritual and from the temporal to the eternal. The salient dictum of this Indo-Hellenic mystical vision is the recognition that ultimate reality (Brahman, God, or the One) lies beyond sense perception (Marlow 1954: 39). That is to say, reality is not limited to the physical world, contrary to the claims by those who reject transcendent reality.

Indo-Hellenic parallels

As we noted above, the Greek and Indo-Aryan languages trace their origin to a common Graeco-Aryan dialect. And since thought is expressed pre-eminently in language, it is therefore not surprising that remarkable parallels exist between the Indian and Hellenic metaphysical traditions. In his informative 1954 study a number of these parallels have been pointed out by A.N. Marlow, beginning with the Presocratics:

(i) The earliest known Hellenic philosopher, Thales, viewed water as the fundamental principle ($arch\bar{e}$) out of which everything arise. This notion is echoed in the teaching of the *Rig Veda* (X.168, X.190) that water is the primary principle, which develops into the world. In the *Iliad* (XIV.201, 246) Homer stated a similar view in mytho-poetical language, namely that Ocean is the origin of all the gods (Marlow 1954: 36).

(ii) For Anaximander the first principle is the *apeiron*, which means the indeterminate or unlimited. This term is the equivalent of the Sanskrit *nirvikalpa*, the nameless and formless, which the Rig Veda calls *aditi*, the unlimited. Moreover, the *aditi* is ordered by the immanent *rita* (*Rig Veda* IV.23.9), in the same way as in Anaximander an immanent *dikē* ensures the

² The metaphysical mysticism of the Presocratics and Plato culminated in Aristotle's project to express spiritual-intellectual realities in terms of logical argumentation, with all the limitations this entails. However, it is erroneous to view Aristotle as an anti-Platonist and hence the precursor of modern rationalism and empiricism, as has become commonplace in academic circles, since Aristotle's philosophy of nature, including his biological work, is grounded in Platonic metaphysics (e.g. the priority of being over becoming and of form over matter), although he diverged from certain interpretations of the latter.

eventual return of all things to the *apeiron* from which they arose (Marlow 1954: 37): 'The things that are perish into the things out of which they come to be, according to necessity, for they pay penalty and retribution to each other for their injustice in accordance with the ordering of time' (Fragment 1).³

(iii) Heraclitus shares two fundamental (and related) doctrines with early Buddhist schools: that fire is the primary element, and that all things are transitory and ephemeral (Marlow 1954: 37-38). The notion that fire is the primordial element also appears in the Rig Veda (I.67). For both the Buddha and Heraclitus, fire as the most mutable of the elements represents the metaphysical principle of becoming. Thus in the Mahavagga Sutta the Buddha compares sentient existence with a candle flame which is renewed in every moment (i.121). In his turn Heraclitus wrote, 'No god or man ever created this world which is the same for all, but it was and is and ever will be everlasting fire' (Fragment 30). The Buddha also uses the analogy of a river, which is never the same for two successive moments but is rather sustained by ever-new waters (*Mahavagga* i.123). An identical terminology was employed by Heraclitus: 'Ever different is the water for those who step into the same rivers' (Fragment 91). In this way the teaching of Heraclitus on the transience of things reflects the Buddha's teaching of impermanence (anicca) and non-self (anatta), as Kobus Krüger (2007: 143) has remarked. In addition, for the Buddha the fundamental principle of existence is the immutable law, or *dharma*, which decrees that every action earns its reward. Heraclitus held a similar view regarding the universal, immutable logos that regulates the cosmos: 'So we must follow the common principle, for that is shared by all' (Fragment 2), and 'For wisdom consists in one thing, to know the principle by which all things are steered through all things' (Fragment 41). Moreover, Heraclitus' view that truth is to be found in the interaction between opposites anticipated the dialectic of Nagarjuna, founder of the Madhyamika school in Buddhism (Krüger 2007: 143).

(iv) Empedocles' theory of sense perception ('For by earth we perceive earth, by water water, by air divine air and by fire destructive fire', Fragment 109) resembles the epistemology of the Upanishads and Indian philosophy. For instance, in the *Samkhya* system the world as object of perception has five *tanmatras* (subtle elements), each of which is perceived by something corresponding to it within us (Marlow 1954: 39). A number of Buddhist elements are also reflected in the philosophy of Empedocles, such as the eternal return of all things and

³ References to the Presocratic fragments are drawn from McKirahan 1994.

the distinction between illusion and true, mystical understanding (Krüger 2007: 143).

It should be noted that the modern view of the Presocratic fundamental principles (*archai*) as signifying material elements only is probably erroneous. Frithjof Schuon, for instance, emphasised that Thales had in mind the universal Substance (or *Prakriti* in Indian philosophy) as the *archē*, and not the sensible element of water. The same applies to the 'air' of Anaximenes and the 'fire' of Heraclitus (Schuon 1984: 71). This metaphysical understanding of first principles is indeed reflected in the *Bhagavad Gita*, where we find Krishna expounding the nature of reality to Arjuna as follows: 'Earth, Water, Fire, Air, Ether, Mind, Reason, and Ego – thus eightfold is my *Prakriti* divided. This is my lower aspect; but know thy my other aspect, the higher – which is *Jiva* (the Vital Essence) by which, O Mahabahu, this world is sustained' (Discourse 7, *Jananvijnana Yoga*). Therefore Aristotle erred when he charged the Presocratics with attempting to explain causality only in terms of matter: 'Of the first philosophers, then, most thought the principles which were of the nature of matter were the only principles of things' (*Metaphysics* I.III, 983b).

When one juxtaposes Indian philosophy with that of Plato the parallels are similarly striking (Marlow 1954: 41-45). One of Plato's most important contributions to Western philosophy and theology is his notion that the soul $(psych\bar{e})$ is ontologically prior to the body, thus continuing the Pythagorean doctrine on the immortality of the soul. During its earthly existence the soul is imprisoned in the body (soma), so that the latter is described as a tomb (sēma) in which the soul is kept until the penalty for its transgressions has been paid (Phaedrus 250c; Cratylus 400c; Gorgias 493a). It is interesting to note in this regard that *sēma* also means 'sign', and therefore the body could also be understood as the means whereby the soul indicates (sēmainei) its form and purpose. The body as tomb thus functions as an enclosure (peribolos), keeping the soul within its limits in order that it may be saved (Uzdavinys 2011: 94). Accordingly, for both Plato and the Brahmins philosophy is a meditation on death (Marlow 1954: 42-43), whereby the soul is released. As explained by Socrates, 'those who practice philosophy in the right way are in training for dying and they fear death least of all men' (Phaedo 67e). Moreover, since the souls of such 'philosophergnostics' are purified of the mortal body and thereby achieve a likeness to the Divine, they are encouraged by Plato to examine and mythologise (*diaskopein te kai muthologein*) concerning

the afterlife (*Phaedo* 61e; Uzdavinys 2011: 75-76).

It is relevant to note that Plato's conception of philosophy as a training for death implies a distinction between philosophy as a way of life on the one hand, and its reduction to rationalistic discourse as in the modern, post-Cartesian West on the other (Uzdavinys 2004: xi). In the Hellenic tradition, philosophy serves to cultivate the various virtues (*aretai*), leading to intellectual vision (noēsis) and ultimately apotheosis, when the divine Intellect enlightens the human soul – the final end (*telos*) of human existence. As apply remarked by Christos Evangeliou, 'Neither Aristotle nor any other Platonic, or genuinely Hellenic philosopher, would have approved of what the modern European man, in his greedy desire for profit, and demonic will to power, has made out of Hellenic philosophia' (quoted in Uzdavinys 2004: xi-xii). Related to philosophy as way of life is the Hellenic distinction between intellect and reason. In terms thereof, reason (dianoia) is an individual faculty limited to humans, whereas intellect (*nous*) is universal and found in all beings, albeit in various degrees depending on their ontological level (Schuon 1993: xxix-xxx). The two are vet related, since reason is the power of the soul which derives the principles of its reasoning (logismos) from the intellect (Taylor 2010: 104, 108). However, in most of Western philosophy, at least since the Cartesian revolution, these realms have become conflated.

Furthermore, the metaphor of the charioteer in Plato's dialogue *Phaedrus* resembles in detail that of the *Katha Upanishad*: 'Know the self (*Atman*) as the Lord who sits in the chariot called the body; *buddhi* (intelligence) is the charioteer; mind the reins, the senses are the horses, and the objects are the roads. The self is the controller and enjoyer. But he who has no understanding, but is weak in mind, his senses run riot like the vicious horses of a charioteer. He who has understanding and is strong-minded, his senses are well-controlled like the good horses of a charioteer' (cited in Marlow 1954: 43). In the *Phaedrus* Plato depicts the soul as consisting of three parts, represented by (i) the charioteer, (ii) a good horse with self-control, and (iii) a bad horse that needs to be disciplined by the charioteer (253d-254d). That Plato's metaphor is not an isolated one in Hellenic thought is evident from similar images used by Orpheus and Parmenides (Uzdavinys 2011: 73).

The Indo-Hellenic notion of the soul's primacy over the body implies that pure knowledge

(Sanskrit *jnana*, Greek *gnōsis*) is only attainable after death.⁴ As declared by Socrates, 'It really has been shown to us that, if we are ever to have pure knowledge, we must escape from the body and observe things in themselves with the soul by itself' (*Phaedo* 66e). By dying to the body, the true philosopher (*philosophos*, 'lover of wisdom') acquires knowledge of the noetic (i.e. spiritual-intellectual) realm, and thus becomes akin to the Forms. Consequently, 'The Parmenidean and Platonic lover of knowledge is akin to the divine and immortal Being' (Uzdavinys 2011: 75). As a matter of fact, for Plato 'the Divine' (*to Theion*) signifies being subsisting in conjunction with the One, to which all things are secondary (Taylor 2010: 104).

Regarding this earthly life, Plato wrote in his *Letter VII* that three things are necessary to obtain knowledge (*epistēmē*) of any real being: the name, the definition, and the image. For example, the entity known as a circle is named thus, its definition consists of nouns and verbs ('the figure whose extremities are everywhere equally distant from its centre'), and its image is drawn or erased. However, Plato remarks, 'the circle itself to which they all refer remains unaffected, because it is different from them.' In this way the name, the definition and the image provide knowledge (which thus comes fourth) of the object itself, which is fifth in the sequence. This pertains to geometrical figures, to colours, to artificial and natural bodies, to the elements, to all living beings and their souls, and also to the good, the beautiful, and the just, Plato adds. 'For in each case, whoever does not somehow grasp the four things mentioned will never fully attain knowledge of the fifth' (*Letter VII*).

That both spiritual and physical sight are related to true knowledge (Sanskrit *vidya*) is evident from the fact that the classical Indian religious texts, the Vedas, derive their name from the root *vid*, which contains the two-fold meaning of seeing (Latin *videre*) and knowing (Greek *oida*). Accordingly, 'sight is taken as a symbol of knowledge because it is its chief instrument within the sensible order; and this symbolism is carried even into the purely intellectual realm, where knowledge is likened to "inward vision", as is implied by the use of words such as "intuition" for example' (Guénon 1995: 14). This reasoning implies further that the physical cannot be divorced from the metaphysical, which provides its ontological foundation.

⁴ The Sanskrit *jnana*, the Greek *gnōsis* and also the Latin *co-gnoscere* has been related by Rene Guénon to self-realisation. These cognate terms express 'an idea of "production" or "generation" because the being "becomes" whatever it knows and realizes itself through that knowledge' (1995: 76).

The relativity of human knowledge is recognised in both Indian thought and in Plato's epistemological dialogue Theaetetus (Marlow 1954: 44). Thus in the latter Socrates explains a notion attributed to Protagoras, Heraclitus and Empedocles: 'I mean the theory that there is nothing which in itself is just one thing: nothing which you could rightly call anything or any kind of thing. If you call a thing large, it will reveal itself as small, and if you call it heavy, it is liable to appear as light, and so on with everything, because nothing is one or anything or any kind of thing' (152d). Consequently, Socrates argues, 'In the sphere of vision... what you would naturally call a white colour is not itself a distinct entity, either outside your eyes or in your eyes. You must not assign it any particular place' (153d-e). Furthermore, Plato admits that due to the weakness of language and the unreliability of sense perception it is extremely difficult to arrive at knowledge of real beings. None of the four instruments mentioned earlier (i.e. name, definition, image, and knowledge) can provide the soul with the objects of her search, namely the particular quality and the being of an object (Letter VII). The Hellenic recognition of the relativity of human knowledge is thus attributed to Socrates, who to some extent anticipated the subversion of knowledge by Nagarjuna in India. However, the latter thinker took a more radical approach, by undermining empirical knowledge in order to facilitate the arising of mystical understanding (Krüger 2007: 143).

According to the Vedanta, the various states of consciousness are first the waking state (*Vaishwanara*), then the dream state (*Taijasa*), and finally deep sleep, or *Prajna* (Guénon 1995: 88, 90, 96, 103). Plato makes a similar distinction and relates it to epistemology: 'Indeed we may say that, as our periods of sleeping and waking are of equal length, and as in each period the soul contends that the beliefs of the moment are pre-eminently true, the result is that for half our lives we assert the reality of the one set of objects, and for half that of the other set. And we make our assertions with equal conviction in both cases' (*Theaetetus* 158d). Finally, Plato's theory of the origin of words evokes the *Nyaya* system of logic. Just as the Athenian thinker declares that the true meaning of a word goes back to the individual letters composing it, from which words are formed and ultimately sentences, which are 'something important, beautiful, and whole' (*Cratylus* 424c-425b), the Indian system reduces the meaning of a word to the significance of its letters (Marlow 1954: 44-45).

However, one should not disregard the aspects in which Indian and Hellenic philosophy

diverge from each other. This pertains notably to logic, of which Aristotle laid the foundations for much of subsequent Western thought. For instance, according to the Aristotelian principle of excluded middle every proposition is either true or false, thereby excluding the possibility that a proposition might be partially correct (Blackburn 2008: 124). As remarked by the South African philosopher Kobus Krüger, this approach encourages either/or thinking which views either a significant statement or its negation as being true. In contrast, classical Indian thought developed a more conjunctive type of logic. Thus Jainism taught a seven-fold scheme, allowing for seven statements made from different perspectives to be true in a complementary sense. And in early Buddhist logic a four-fold scheme arose, in terms of which there are four valid types of propositions: A is B; A is not-B; A is B and not-B; and A is neither B nor not-B. Applied to cosmology, the early Buddhist logic developed as follows: (i) this world is finite; (ii) this world is infinite; (iii) this world is both finite and infinite; and (iv) this world is neither finite nor infinite. Such statements could refer to different aspects of the same reality, so that they may be contrary but not necessarily contradictory (Krüger 2007: 19-20).

Concluding his informative juxtaposing of Indian and Hellenic philosophy, Marlow suggests that Indian influence probably reached Greece through Persia as intermediary (1954: 45). Without denying a flow of thought in either direction, we contend that the striking parallels between Hellenic and Indian philosophy should primarily be ascribed to a common spiritual-intellectual tradition among the various Indo-European peoples. For instance, their names for the supreme Deity suggest a common origin. The earliest Indo-European name for God was *Dyaus Pitar* in Sanskrit, meaning 'Heavenly Father', and was used by the Indo-Aryans as early as around 1500 B.C. Similarly, we find *Zeus Pater* (or simply *Zeus*) among the Hellenic peoples, *Ju-piter* (or simply *Deus*) among the Italic peoples, *Teu* among the Teutons and Saxons, *Tir* among the Norse peoples, as well as *Ziues* in old High German. All of these names are linguistically related to *Dyaus* and *Deus* (Campbell 1970: 9-10). We will now consider relevant aspects of the traditional Indo-European metaphysics and cosmology.

Being and Manifestation

Why is there something instead of nothing? Or, stated in ontological terms, why is there being instead of non-being? According to the early Hellenic thinker Parmenides a distinction has to be made between 'the one, that it is and that it is not possible for it not to be', and 'the other,

that it is not and that it is necessary for it not to be' (Fragment 2; quoted in McKirahan 1994: 152). An identical terminology is encountered in the *Bhagavad-Gita*: 'What is non-Being is never known to have been, and what is Being is never known not to have been' (2:16). This differentiation implies that being and non-being are distinct domains, with no possibility of nothing becoming something or vice versa. However, transcending both being and non-being there is the Absolute reality of God/Brahman/the One: 'I will expound to thee that which is to be known and knowing which one enjoys immortality; it is the supreme Brahman which has no beginning, which is called neither Being nor non-Being' (*Bhagavad-Gita* 11.12).

One of the most important metaphysical thinkers of the twentieth century, Martin Heidegger, opens his *Introduction to Metaphysics* (written as supplement to his seminal *Being and Time*) with the following question: 'Why are there beings at all instead of nothing?' This is posited by the German philosopher as the fundamental question of metaphysics – not as the first in chronology but in rank, because it is the broadest, the deepest, and the most originary question. It is the broadest in scope, being limited only by what never is, i.e. non-being; it is the deepest question, aimed at establishing the ground from where beings come and to where beings go; and it is the most originary question, addressing not a particular being but beings as a whole (Heidegger 2000: 1-4). The science of metaphysics thus begins with the question of Being, which in turn is closely related to the notion of 'nature' – on condition that the latter is understood in its original, metaphysical sense and not in a reductionist, material sense.

Among the early Hellenic thinkers, that which is (i.e. the totality of beings), was called *physis*. The term *physis* is usually translated as 'nature', but Heidegger (2000: 15) argued rather persuasively that it harbours a much wider meaning, namely 'what emerges from itself (for example, the emergence, the blossoming, of a rose), the unfolding that opens itself up, the coming-into-appearance in such unfolding, and holding itself and persisting in appearance – in short, the emerging-abiding sway.' Therefore, although *physis* can be experienced in the processes of nature, such as birth and growth, it is not synonymous with these. Instead, *physis* indicates Being-itself, by virtue of which beings appear (Heidegger 2000: 15). It should be noted that the noun *physis* is related to the verb *phuō*, which means 'to bring forth, produce,

or make to grow' (Liddell and Scott 2004: 772).⁵ Accordingly, the early Hellenic thinkers conceived of 'nature' as a creative power rather than a material environment (Coomaraswamy 1989: 83). However, Heidegger contends, by translating *physis* into Latin as *natura*, which means 'birth', the realm of nature became reduced to the world of biological phenomena. This Latin term therefore represents the beginning of the alienation of Western thought on nature from its original essence in Hellenic philosophy (Heidegger 2000:14). Yet Plotinus recognised an etymological connection between the noun *physis* and the verb *ephy*, that is to say between 'nature' and 'was born' (*Enneads* VI, 8, 8; Dillon and Gerson 2004: 169). In the light thereof it could more accurately be stated that *natura* is not limited to *physis*, but that it is embraced by the latter (which also reaches beyond the biological realm).

This ontologically inclusive understanding of 'nature' implies that physics cannot be divorced from metaphysics without a radical loss of meaning. The Greek prefix *meta* means 'after' in the accusative sense (L&S 436), that is to say 'over beyond', Heidegger continues, and therefore philosophising about beings as such is *meta ta physika*, or metaphysics. And since physics in the classical Hellenic sense already deals with the Being of beings, it can justly be stated that the essence of metaphysics has from its inception been determined by physics (Heidegger 2000: 18-19). This wider sense of *physis* was recognised by Aristotle with his declaration that metaphysics is the study of being as being (*Metaphysics* Book IV, 1003a; Heidegger 2000: 17).

We have already suggested that Indo-Hellenic philosophy arose from spiritual experience. Arguing along similar lines, Heidegger wrote that for the classical Greeks ontology preceded bio-philosophy: 'It was not in natural processes that the Greeks first experienced what *physis* is, but the other way around: on the basis of a fundamental experience of Being in poetry and thought, what they had to call *physis* disclosed itself to them. Only on the basis of this disclosure could they then take a look at nature in the narrower sense. Thus *physis* means originally both heaven and earth, both the stone and the plant, both the animal and the human, and human history as the work of humans and gods; and finally and first of all, it means the gods who themselves stand under destiny. *Physis* means the emerging sway, and the enduring over which it thoroughly holds sway. This emerging, abiding sway includes both "becoming"

⁵ The *Liddell and Scott Greek-English Lexicon* (2004) is hereafter referred to as L&S.

as well as "Being" in the narrower sense of fixed continuity. *Physis* is the event of *standing forth*, arising from the concealed and thus enabling the concealed to take its stand for the first time' (Heidegger 2000: 15-16). The German philosopher's argument is relevant to our thesis in several respects: his integration of the metaphysical and the physical into a unified ontological whole; his refusal to dichotomise being and becoming; and his postulation of nature as an unfolding of the concealed, which evokes the correct notion of evolution as the unfolding of inherent potentialities.

The emergence and abiding of Being could equally well be depicted in the terminology employed by the South African philosopher Danie Goosen, building on the notion of theurgy (*theourgia*) developed by the Neoplatonists Iamblichus and Proclus. In terms of Goosen's 'philosophical dramatology', Reality expresses itself in and through the 'actors of being' serving as mediators between the infinity of being and the finitude of the world. These actors assume roles such as being and beings, *esse* and *essentia*, transcendent and immanent, other and self, giver and receiver, subject and object, sublime and beautiful, *eros* and *agapē*, and substantive and accidental (Goosen 2007: 94, 103). Through this dynamic interaction between the One and the many the cosmos obtains the character of a differentiated unity, rather than being monistic or dualistic.

The traditional Indo-European notion of Being has been perceptively sketched by Heidegger through an etymological analysis. The oldest stem word in this regard is *es*, which becomes the noun *asus* in Sanskrit, meaning 'life' or 'the living', and the verb forms *esmi, esi, esti,* and *asmi*. To these terms are related the Greek *eimi* and *einai* (both meaning 'to be'), and the corresponding Latin terms *esum* and *esse*. In this regard the Germanic verb *ist* is related to the Greek *estin* and the Latin *est*, 'it is'. Another root is the Sanskrit *bhu* or *bheu* and related to the Greek *phuō*, which for Heidegger means 'to emerge, to hold sway, to come to a stand from out of itself and to remain standing.' This is in turn related to the Greek terms *physis* ('nature') and *phainesthai* ('to show itself'), so that nature is described by Heidegger as 'that which emerges into the light, *phuein*, to illuminate, to shine forth and therefore to appear.' The German verbs *bin* and *bist* are also derived from this Sanskrit stem. Finally, the stem *wes* appears in the Sanskrit *vasami* and the Germanic *wesan*, meaning 'to dwell, to abide, to sojourn', which in turn becomes the German verbs *wesen* and *sein*, 'to be' and 'being'. From

these three stems, Heidegger concludes, one derives the 'vividly definite' meanings of living, emerging and abiding – none other than the domain of Being (2000: 75, 76).

How and whence does Being arise? According to the metaphysical tradition, all that exists is established by the movement from Principle into Manifestation, which is thus the flow of the One into the many. This Principle, which is transcendent and therefore unknowable in its essence (but not in its immanent energies, as the Greek Patristic theologians emphasised), is variously referred to as Brahman, God, the Good, or the One. It precedes the differentiation between being and non-being: 'There was then neither being nor non-being... Without breath breathed by its own power That One' (*Rig-Veda* X.129; quoted in Perry 1991: 26). The foundation of all that exists in the One, that is to say of the immanent in the transcendent, is affirmed in the *Bhagavad-Gita*: 'By Me [Brahman], unmanifest in form, this whole world is pervaded; all beings are in Me, I am not in them' (9.4). The realm of becoming thus entails a movement from the unmanifested to the manifested. As we read further in the *Bhagavad-Gita*, 'The state of all beings before birth is unmanifest; their middle state manifest; their state after death is again unmanifest' (2.28), and 'But higher than the Unmanifest is another Unmanifest Being, everlasting, which perisheth not when all creatures perish' (8.20).

The supreme Principle is both the Absolute and the Infinite, as distinct from the relative and the finite. This Absolute-Infinite is the Good (*Agathon*) of Plato, and projects the world out of its sovereign Goodness, whereby the Absolute comprises Infinitude and Radiation. The Absolute is thereby reflected in the world in the existence of things (Schuon 1982: 35). And since necessity is related to the Absolute just as freedom is related to the Infinite, 'The universe is a veil woven of necessity and freedom, of mathematical rigour and musical play; every phenomenon participates in these two principles, which amounts to saying that everything is situated in two apparently divergent but at bottom concordant dimensions' (Schuon 2001: 3). Stated in geometrical terms, the point represents the Absolute, the line that extends the point represents Infinity, and the circle represents the projected Good, or Perfection (Schuon 1981: 77). The Absolute Reality that is beyond Being may best be represented by the point, since the void (which would have been a less inadequate representation of It) is not a figure as such. This Reality contains within Itself the principle of polarisation, which is represented by an axis (i.e. a line). From this principial differentiation

all the opposites in the cosmos arise, as explained by Frithjof Schuon: 'It is in this first bipolarity, or in this principial duality, that are prefigured or pre-realized all possible complementarities and oppositions: subject and object, activity and passivity, static and dynamic, oneness and totality, exclusive and inclusive, rigour and gentleness' (1981: 65).

Moving from two to three, we encounter the transcendent ternary of the Absolute, the Good, and the Infinite. This is the equivalent of the Vedantic Sat, Chit, and Ananda: Being, Consciousness, and Beatitude (Schuon 1982: 37, 39). These Sanskrit terms are also rendered as Existence, Consciousness, and Bliss, and are in fact the supreme attributes of the One, or Brahman. They represent the summit of the realm of Manifestation, which flows in inexhaustible infinity and timelessness from Brahman (Van Vrekhem 2012: 264). In this Vedantic trinity is also found the divine archetype of all positive ternaries, and it is geometrically represented by the triangle. The latter can be either upright, indicating the return of the many into the One; or it can be inverted, signifying outward radiation, or the production of the many from the One. Two further ternaries mentioned by Schuon are highly relevant in traditional cosmology. One is the macro-cosmic qualities of *tamas*, *rajas*, and sattva (i.e. the ascending, expansive, and descending tendencies in all manifestation); and another is the micro-cosmic (i.e. human) constituents, namely body (soma/corpus), soul (psychē/animus), and spirit (pneuma/spiritus). The three dimensions of space also provide a natural symbol of the ternary (Schuon 1981: 66-67, 69). According to the Theology of Arithmetic attributed to Iamblichus (the longest extant work on the symbolism of numbers from the Classical world), plurality commences its manifestation with the triad: 'The monad is like a seed containing in itself the unformed and also unarticulated principle of every number; the dyad is a small advance towards number, but is not number outright because it is like a source; but the triad causes the potential of the monad to advance into actuality and extension.' Examples of such triadic actualisation are the phases of the moon (waxing, full moon, and waning); the zodiacal circles (summer, winter, and the ecliptic); and the kinds of living creature, namely on land, in air, and in water ('On the Triad'; Waterfield 1988: 50, 52).

The next numerical hypostasis of metacosmic Reality is the quaternity, represented by the (static) square and the (dynamic) cross. In the words of Schuon: 'Quaternity signifies stability or stabilization; represented by the square, it is a solidly established world, and a space which

encloses; represented by the cross, it is the stabilizing Law that proclaims itself to the four directions, indicating thereby its quality of totality' (1981: 71). According to Iamblichus, there are four elementary numerical properties: sameness in the monad, difference in the dyad, surface in the triad, and solidity in the tetrad. Further examples of the tetrad in manifestation are the four terrestrial elements and their powers of heat, cold, wetness, and dryness; the four seasons of the year; and the four cardinal points, with the primary winds named after them ('On the Tetrad'; Waterfield 1988: 58-59, 63).

Essence and Substance

In order to make Manifestation possible, the Principle polarises itself into the two poles of universal Essence, or *Purusha*, and universal Substance, or *Prakriti*, without diminution of its intrinsic unity (Perry 1991: 23). These two poles of Manifestation thus comprise the first cosmic duality, which is not to be confused with any kind of dualism.⁶ Although producing the cosmos, Essence and Substance are outside time, or eternal, as declared in the *Bhagavad-Gita*: 'Know that *Prakriti* and *Purusha* are both without beginning; know that all the modifications and *gunas* are born of *Prakriti*' (11.19). These *gunas* exist in perfect equilibrium within *Prakriti* in its primordial state, while every manifestation of Substance represents a rupture of that equilibrium. The three *gunas* are the upward tendency of *sattva*, the expansive tendency of *rajas*, and the downward tendency of *tamas* (Guénon 1995: 52). And since manifestation represents a movement away from the Principle, the creation of the world is in a sense a victory of *tamas* over *sattva*, until the cosmic balance is partly restored with the *Fiat Lux*, the creation of light (Lings 1974: 109).

As the essential principle of all things, *Purusha* determines the possibilities of manifestation contained within *Prakriti*. Stated in Aristotelian terms, *Purusha* effects the passage of all things from potency to actuality (Guénon 1995: 55). Furthermore, *Purusha* is related to *Atma*, or Spirit (Greek *pneuma*, Latin *spiritus*), in the sense of the divine Essence. And although *Atma* always remains unmanifest, it produces *Buddhi*, or Intellect (Greek *nous*), as first and

⁶ The difference between duality and dualism has been lucidly explained by René Guénon: 'Dualism (of which the Cartesian conception of "spirit" and "matter" is among the best known examples) properly consists in regarding a duality as irreducible and in taking account of nothing beyond it, thereby denying the common principle from which the two terms of the duality really proceed by "polarisation" (1995: 354). That is to say, the recognition of Essence and Substance as the first cosmic duality does not imply any metaphysical dualism, since both these poles of Manifestation are derived from a single Principle.

highest of the manifested principles (Guénon 1983: 1). Intellect thus represents the level of informal manifestation, which is to say that *Buddhi* is above individual manifestation. Moreover, as first manifestation of Spirit, Intellect 'constitutes the link between all the states of manifestation, but from another angle, envisaging things from a principial viewpoint, *Buddhi* appears as the luminous ray emanating from the spiritual Sun, which is *Atma* itself' (Guénon 1983: 2). Accordingly, from the viewpoint of manifested being there is no real difference between spirit and intellect, so that *Atma* and *Buddhi* appear as interrelated.

The interaction between Essence and Substance produces the realm of Manifestation. This transcendent Essence is eternally radiated into the realm of dimensional existence (i.e. manifestation) through the Word (Logos) of God. Stated in astrophysical terms, 'The echo of this eternal radiation, in the world of space and time, is the Big Bang' (Upton 2008: 193). In the manifested world the Infinite thus appears as modes of extension, as explained by Frithjof Schuon: the conserving mode is space, the transforming mode is time, the qualitative mode is form, the quantitative mode is number, and the substantial mode is matter. Space, time, form, number, and matter are thus the 'pillars of universal existence' (1982: 35-36). Accordingly, the sensible world is manifested through the modes of matter, form, and number: the fundamental matter is ether, the fundamental form is the sphere, and the initial number is one, or unity. Each mode develops in its own particular manner: matter extends from substantiality to accidentality; form evolves from spherical simplicity to indefinite complexity; number develops from unity to totality, space from point to limitless expansion, and time from the instant to eternity. Each of these modes of unfolding presents an image of the Principle realising its potentialities in the direction of relativity or contingency (Schuon 1982: 57-58).

What is the status of individual beings in the traditional Indo-European conception? Each manifested being is a composite of form (Greek *eidos*) and matter (*hylē*), these terms being the equivalent of the Sanskrit *nama* and *rupa*. Such a composite being could therefore be described as 'en-mattered form', or *nama-rupa* (Guénon 1995: 20-21, 337). In his *Notes on the Katha Upanishad*, Ananda Coomaraswamy remarked that all manifestation is expressed in the terms *nama-rupa*, which correspond to the Platonic intelligible and sensible worlds, i.e. the Essence and Substance of things (cited in Guénon 1995: 34). In the case of living beings this composition appears as the two levels of formal manifestation, namely the psychic (Greek

psychikos) and the corporeal (*somatikos*), or soul and body respectively. And since spirit, that is to say intellect, can never be individual or corporeal, it is transcendent in relation to the combination of soul and body. Therefore, a human being cannot speak of 'his' or 'her' spirit, as can indeed be predicated of the soul and body (Guénon 1983: 2-3). In other words, spirit is supra-individual, whereas soul and body pertain to the individual order. Furthermore, each individual being is the result of action exercised by Essence (as active principle) on Substance (as passive principle). This dynamic ontological notion corresponds to the Aristotelian metaphysics of act and potency: act is that by which a being participates in Essence and potency is that by which it participates in Substance. Therefore, pure act and pure potency do not exist in the realm of manifestation, since they are the equivalents of universal Essence and Substance (Guénon 1995: 20-21). Stated in Aristotelian terms, pure act and pure potency are represented by the pre-ontological extremes of the Prime Mover and primary matter.

In Hellenic philosophy the ontological pole of Essence, or *Purusha*, is signified above all by the Platonic Forms, or Ideas. Whereas Plato emphasises the transcendent aspect of the Forms and Aristotle their immanent aspect, these approaches are not at all incompatible, since both consider the archetypes or essential principles of things, which represent the qualitative side of manifestation (Guénon 1995: 23). Moreover, since the Platonic Forms are equivalent to the Pythagorean numbers, the latter are not to be understood in the ordinary, quantitative sense of the word, but as qualitative and essential whereas quantitative numbers are substantial. As explained by René Guénon (1995: 337), 'It may be observed that the name of a being, in so far as it is an expression of its essence, is properly speaking a number understood in this qualitative sense; and this establishes a close link between the conception of the Pythagorean numbers, and consequently that of the Platonic ideas, and the use of the Sanskrit word *nama* to denote the essential side of a being.' In the light of this distinction, the Scholastic translation of the Greek *ousia* (essence) into the Latin *substantia* inevitably leads to the linguistic confusion encountered in the notion of 'substantial form', which confuses the essential side of a being with its substantial side (Guénon 1995: 337).

For the sake of conceptual clarity it has to be emphasised that the Aristotelian notion of matter $(hyl\bar{e})$ and the Scholastic notion of *materia* are not in the least identical to the modern, reductionist view of matter, but both instead signify universal Substance, or *Prakriti*.

Furthermore, as universal principle $hyl\bar{e}$ is pure potency, in which nothing is actualised. It thus constitutes the passive support of all manifestation, whereas Form (*eidos*) constitutes the active element (Guénon 1995: 25). It is also pertinent to note that the primary meaning of the word $hyl\bar{e}$ is related to the vegetative principle, namely 'wood' – in other words, $hyl\bar{e}$ alludes to the 'root' (Sanskrit *mula*, Greek *rhizōma*) which is the starting point of manifestation (Guénon 1995: 337). The relation between matter and its potentiality has been stated as follows by Frithjof Schuon: 'to say matter, or mass, or ether, is to say energy, possibility of action, hence of change and consequently of time' (1982: 64).

In the traditional conception, the world is constituted by successive differentiations out of materia prima. Since the latter is unformed and intangible, it is inaccessible to all distinctive knowing. Conversely, 'The world that is accessible to such knowing therefore extends between two poles that are unmanifested as such, the informing essence and the undifferentiated *materia*, just as the range of colors in the spectrum opens out through the refraction of white light – as such colorless therefore – in a similarly colorless medium' (Burckhardt 1974: 135). Since universal Substance is the pure potency underlying all manifestation, it is 'that which stands beneath', the latter phrase being the precise meaning of the Latin sub stare, from which substantia is derived (Guénon 1995: 26), as is the case with the Greek hypostasis. As universal Substance it gives rise to the world of phenomena through the various elements: 'Earth, Water, Fire, Air, Ether, Mind, Reason, and Ego - thus eightfold is my Prakriti divided' (Bhagavad-Gita 7.4). This underlying Substance, or Prakriti, is undifferentiated and unintelligible, since there is nothing in it that can be known (Guénon 1995: 26). Plato therefore insists that the receptacle of becoming out of which the Demiurge fashions the sensible world is without characteristics and difficult to describe (*Timaeus* 49a, 50b-51b). Moreover, due to the unintelligibility of Substance, the explanation of things should not to be sought on the substantial side but on the essential side. Stated in terms of spatial symbolism, explanation should be directed from above downwards and not from below upwards (Guénon 1995: 26, 27). This notion is also found in the Hermetic writings of the Egyptian wisdom tradition, 'The cosmic forces do not work upward from below, but downward from above' (Perry 1991: 41) – hence the Hermetic maxim, 'As above, so below.'

In Hellenic philosophy this explanatory approach is particularly evident in Neoplatonism, as

Lloyd Gerson explains: 'What is most distinctive about Platonism, especially as it is represented by the Neoplatonists, is that it is resolutely and irreducibly top-down rather than bottom-up. A top-down approach to philosophical problems rejects... the claim that the most important and puzzling phenomena we encounter in this world can be explained by seeking the simplest elements out of which they are composed. The top-down approach appeals to first or higher or irreducible principles to account for these phenomena' (2005: 31-32). It is for this reason, Guénon argues, that modern science (in the Cartesian and Newtonian sense) lacks explanatory value. For instance, modern science leads to contradictions such as speaking of the properties of matter while asserting that matter is inert. It should also be kept in mind that 'body' and 'matter' are not synonymous concepts, since in reality bodies proceed from matter as their substantial principle (Guénon 1995: 27, 31).

Matter, measure, and number

The Latin term *materia* is related to *mater*, 'mother', thus reflecting the Indo-European notion of Substance as the passive principle in manifestation and symbolically feminine (Guénon 1995: 338). In addition, *materia* is related to the notion of measure. It has been suggested by Guénon (1995: 338) that William Blake's drawing of the 'Ancient of days' reflects the statement in the *Rig-Veda* (VIII, 25, 18), 'With his ray he hath measured (or determined) the bounds of Heaven and of Earth.' Coomaraswamy remarked that the Sanskrit *matra*, measure, is the equivalent of *materia*, although that which is measured is not matter as such, but rather the possibilities inherent in spirit, or *Atma* (Guénon 1995: 34). It could therefore be stated that matter is the sensible manifestation of existence itself; form is the manifestation of a divine Idea, or archetype; and number manifests the infinitude of the Possible (Schuon 1982: 57).

Although measure is mainly concerned with the domain of continuous quantity, matter cannot be reduced to extension (as was defined by Descartes), since measure is primarily geometrical on account of bodies occupying a defined part of space (Guénon 1995: 35). Coomaraswamy remarked that the Platonic concept of measure (Greek *metron*) corresponds with the Indian concept thereof, in terms of which the non-measured is the indefinite; the measured is the defined or finite, i.e. the ordered universe; and the non-measurable is the Infinite, which is the source of both the indefinite and the finite (Guénon 1995: 37, 38). The Infinite that encompasses both non-being and Being is none other than God/Brahman/the One. Furthermore, the Indo-European notion of measure is intimately connected with that of 'order' (Sanskrit rita, Greek kosmos), which in turn is related to the production of the cosmos (Guénon 1995: 38). The coming-to-be of the universe is thus a production of order out of chaos, as is reflected in the etymology of the Greek terms kosmos, orderly arrangement, and kosmeo, to order or arrange (L&S 389). Chaos is symbolically identified with darkness, signifying that potentiality which is the substantial side of the world or the tenebrous pole of existence, whereas Essence is the luminous pole which illuminates chaos in order to extract cosmos from it. The notion of the coming-to-be of cosmos out of chaos also agrees with the Sanskrit *srishti*, meaning the production of manifestation, and containing the related ideas of expression, conception, and luminous radiation (Guénon 1995: 38). In addition, the Indian notion of rita signifies the law of nature or the course of things, equivalent in scope to the Greek dikē, meaning order, law, or right (L&S 173). This notion of natural lawfulness is stated by Heraclitus as 'The sun shall not transgress its bounds' (Fragment 94), reflecting similar statements in the Rig Veda (I.24.8 and I.160.1; Marlow 1954: 36). Finally, the Sanskrit rita is closely related to 'rite', which imitates or reproduces the process of manifestation. This correlation explains why in a traditional civilization every human act acquires an essentially ritual character (Guénon 1995: 338). In the anti-traditional modern world, the value of ritual acts has consequently been rejected in the name of a false, individual 'freedom', which manifests as all manner of deviant behaviour masquerading as 'self-expression.'

Since number is the symbol of causal necessity, 'it contains the ultimate meaning of the world-as-nature', Oswald Spengler argued. Number is furthermore the primary element on which all mathematics is based. Accordingly, 'It [mathematics] is a science of the most rigorous kind, like logic but more comprehensive and very much fuller; it is a true art, along with sculpture and music; it is, lastly, a metaphysic of the highest rank, as Plato and above all Leibniz show us' (Spengler 1991: 42-43). A distinction is however made by the German philosopher between the Hellenic and Indian conceptions of number. Since the Hellenic notion of number deals only with 'visibly limitable and tangible units', its mathematics recognises only positive and whole numbers. Thus decimal fractions, negative numbers, and even the number zero are disregarded by the classical Greeks. In contrast, Indian mathematics recognises the number zero as a base for 'positional numeration', thus providing a key to the

meaning of existence (Spengler 1991: 48-49). In Sanskrit the zero is referred to as *Sunya*, meaning void or emptiness. It thus probes the borderline between absence and presence, signifying the pregnant ground of all being, as noted by Miranda Lundy (2010: 56).

In Hellenic philosophy the process of manifesting universal order is depicted above all in the Pythagorean numerology. To the Pythagoreans the sacred number is ten, the *Tetraktys*, being the sum of the first four whole numbers: 1+2+3+4=10. Interestingly, the reverse order thereof is found in the Indian notion of the four *Yugas* that constitute a cosmic cycle, or *Manvantara*. The *Yugas* (of which we live in the fourth and darkest, the *Kali Yuga*) decrease in duration in the proportion 4:3:2:1, which gives a total of ten for the entire cycle (Guénon 1995: 55, 340, 346). The numerical basis of cosmic manifestation is also echoed in the Biblical statement that God ordered all things by measure, number, and weight (*Wisdom of Solomon* 11:20). This verse is read by Thomas Aquinas as meaning, 'by measure the amount or mode or degree of perfection in each thing, by number the diversity and plurality of species that results from these degrees of perfection, and by weight the diverse attractions to specific goals and activities, agents and patients, and properties resulting from the diversity of species.' Thomas also refers to the statement by Boethius (in the *Arithmetic*) that 'everything laid down in the primeval nature of things seems to have been formed by reason of number' (*Summa contra Gentiles*, 3.97-98; McDermott 1993: 273).

The relation between number and form is that 'form is static by its determining contours, but number is dynamic by its augmenting and diminishing function' (Schuon 1982: 58). While number primarily indicates quantity and form quality, number also has a qualitative aspect (as in Pythagorean geometry, for example duality and trinity) and form has a quantitative aspect in as much as it lacks content. In spatial terms, form relates to the centre while number refers to extension. Moreover, form reveals the divine perfection through diverse modes of beauty or functionality, while number entails the numerical principles symbolised above all by geometrical figures (Schuon 1982: 65, 70). And since the world is thus grounded in the divine perfection, the absolute in the relative, the infinite in the finite; every part of the world mirrors the whole' (1995: 99).

In the Indo-European understanding every measurement is essentially geometrical, with geometry understood in its symbolic sense (Guénon 1995: 39). Thus is it declared by the Presocratic cosmologist Pherecydes Syrus in his *Hymn to Jupiter*: God is circle, square and triangle, line and centre, and all things before all (Taylor 2010: 24-25). This sense of sacred geometry has been expressed by Plato as *aei ho theos geometrei*, or God geometrises always. A late echo of this Pythagorean notion in modern philosophy is found in the work of Leibniz, who declared that 'while God calculates and practises His cogitation (that is to say, set out His plans) the world is made' (quoted in Guénon 1995: 41). The divine activity of producing and ordering the world is thus assimilated to geometry and architecture. The inseparability of these subject areas is affirmed by the Arabic word for measure, *hindesah*, which denotes both geometry and architecture, since the latter is the 'practical' application of the former (Guénon 1995: 40, 338). That is to say, in as much as architecture is the extension of plane geometry into three-dimensional space, it also has be viewed as a sacred art.

Time and space

Since Manifestation occurs within the realms of space and time, we will briefly consider the traditional Indo-European conception of its interaction. To begin with, just as the Infinite is the complement of the Absolute, so time is both inherent in space and proceeds from it. Thus time is the complement of space, just as energy is the complement of matter (Schuon 1982: 64). Furthermore, time can only be measured indirectly by means of relating it to space through the intermediary of movement (Guénon 1995: 35). In other words, motion (Greek kinēsis) provides the link between space and time as far as measurement is concerned. In its turn space constitutes the 'field' (Sanskrit kshetra) within which corporeal manifestation occurs (Guénon 1995: 40). On the one hand time 'consumes' or compresses space, but on the other hand time is also subject to progressive contraction during a cycle of manifestation, as appears in the proportionate shortening (4:3:2:1) of the four Yugas (Guénon 1995: 191). At the extreme limit of cyclic manifestation time ceases to exist – when that point has been reached, time has been changed into space, in other words, space in its turn 'consumes' time. This phenomenon is expressed partially in physical and mathematical theories that treat of 'spacetime' as a single and indivisible whole. In reality, time is only comparable to a fourth dimension in equations of movement, where time acts as a fourth co-ordinate added to the three dimensions of space (Guénon 1995: 192, 193). The model of 'space-time' as a fourdimensional continuum as postulated in the Theory of Special Relativity is therefore valid in terms of motion.

As affirmation of this notion that the transmutation of time into space is only realisable at the end of a cosmic cycle, it should be noted that the 'end of the world' is commonly referred to in religious language as the 'end of time' and never as the 'end of space'. Strictly speaking, both the end of a cycle of manifestation and its beginning is timeless, and therefore the end of a cycle entails the restoration of its primordial state (Guénon 1995: 193, 194, 351). Or as stated by Meister Eckhart, referring to the scriptural *In principio*, 'in the beginning': 'It also means the end of all things, since the first beginning is because of the last end' (quoted in Perry 1991: 26). Viewed in spatial terms, the movement from Essence towards Substance is also the movement from centre towards circumference, from interior towards exterior, and from unity towards multiplicity. In symbolic language the 'centre of the world' is the location where time is changed into space (Guénon 1995: 195, 196).

The Indo-European concept of cosmic cycles is associated with the conviction that instead of the world being the unique creation of a Deity and therefore having a beginning in time, the existence of the cosmos entails a beginning-less and endless succession of world origins and world endings. This cyclic cosmogony was taught by early Hellenic thinkers such as Anaximander, Heraclitus and Empedocles, and by the Roman poet Lucretius in his didactic poem *De rerum natura* (On the nature of things). It also found expression in the Germanic world in the first poem of the *Poetic Edda*, titled *Völuspá* (Günther 2013: 12). The cyclical interaction between cosmic creation and destruction is provided with a theistic basis in the Indian concept of *Trimurti* (Sanskrit: 'three forms'), in terms of which Brahma is the creator, Vishnu the preserver, and Shiva the destroyer or transformer.

Sphere and cube

The sphere is the primordial geometrical form, being the least specified of all and similar to itself in all directions. It is therefore the most universal form, containing all the other forms (pyramid, cube, etc.) which will emerge from it through differentiation in particular directions. In addition, the sphere is symbolized by the 'Egg of the World' in various traditions, out of which all the possibilities develop during the course of a cycle of

manifestation (Guénon 1995: 170). It is of particular relevance to the notion of lawful evolution that the sphere is found at the beginning of the embryonic existence of every individual being. Accordingly, the embryo is the microscopic analogy of the 'Egg of the World' in the macroscopic order (Guénon 1995: 344). This notion of a World-egg that gives birth to the cosmos is encountered in both the *Rig Veda* (X.82.5-6) and in Orphism.

According to the *Orphic Fragments*, the first divine couple is Sky, or Heaven (*Ouranos*), and Earth (*Gaia*). United by Love (*Eros*), the Heaven embraces and fertilises the Earth with his rain. This reproductive union is similarly evoked by the sky-god Zeus/Jupiter fertilising Semele, representing the Earth, as well as Zeus fertilising the earthly Danae after he is transformed into golden rain (Theodossiou *et al* 2011: 91). According to Marlow, the Orphic cosmogony differs in this regard from that of Homer and Hesiod, who both saw Ocean as the origin of all things (1954: 40). However, Ocean in its turn was born from the union of Earth (*Gaia*) and Heaven (*Ouranos*), as Hesiod writes in the *Theogony*. The Orphic and Hesiodic cosmogonies could therefore be viewed as complementary.

In three-dimensional geometry the cube is the opposite of the sphere, representing the most specified of all forms. The cube is related to the earth as element (Plato, *Timaeus* 55e) and corresponds to the final stage of a cycle of manifestation. Moreover, in terms of manifestation the sphere is related to the essential pole and the cube to the substantial pole (Guénon 1995: 171). It is therefore not surprising that the instruments used to draw these forms, i.e. the compass and the square, are respectively analogous to the essential (or masculine) pole and the substantial (or feminine) pole of manifestation (Guénon 1995: 173, 345).

Although not directly related to Indo-European thought, it is interesting to note that in classical Chinese philosophy spherical or circular forms are related to Heaven (*Tien*) while cubic or square forms are related to Earth (*Ti*). The Chinese notions of Heaven and Earth are thus equivalent to the Indian notions of *Purusha* and *Prakriti* (Guénon 1995: 172). It is stated in both the *Rig Veda* and Hesiod's *Theogony* (at 126) that Earth and Heaven are the parents of the gods (Marlow 1954: 36), thus affirming in symbolical language that all manifestation arises through the interaction between Essence and Substance.

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