

Harmonia and *ṛtá*

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As has been noted by Émile Benveniste (1969: 99–101), ‘order’ is an extremely important concept for Indo-Europeans and is represented by, inter alia, Greek ‘*harmonia*’, Sanskrit *ṛtá*, Avestan *aša*, and Old Persian *arta*, all of which descend from the same PIE root – **H2er-* (to become adjusted, to fit).¹ However, as Franklin has pointed out, the importance of order to Indo-Europeans is often discussed in light of the connection between *arta* and *ṛtá*.² It is surprising that there have been scarcely any accounts of the striking similarities between *harmonia* and *ṛtá*, and my aim in this paper is to shed some light on that affinity.³ *Harmonia* was an important cosmological and ethical concept for Heraclitus, Empedocles and the so-called Pythagoreans; *ṛtá*, on the other hand, is considered by many

¹ I have followed Benveniste’s (1969: 99–101) lead in assuming that *ṛtá* derives from the same root as *harmonia* – *ar2* (to fit or adapt), which is a phonological descendant of the PIE **H2er*. It has also been claimed that it derives from *ar1* (to move); this is the view of Oldenberg (1888) and Apte (1942), for instance. *ar1* and *ar2* are homophonous, but syntactically different. Both these roots are falsifiable and it is beyond my scope here to offer justification, apart from the fact that a considerable majority of scholars – including Bergaigne (1883), Grassman (1875), Renou (1949), Dumézil (1954), Dandekar (1967), Benveniste (1969) and Malamoud (1989) – assume that *ṛtá* derives from *ar2*. In any case, I am in keeping with Gonda’s (1977: 142) view that ‘any etymology is by definition a hypothesis and as such never unchallengeable, always liable to constant revision’, and that ‘prehistoric roots . . . are not real words but abstractions of our making considered to symbolize in a brief formula what some related words have, formally and semantically, in common’. Accordingly, I use etymology merely as a starting point and not in order to make substantive arguments.

² Franklin 2002: 1.

³ John Curtis Franklin’s (2002) paper is one of the very few to discuss this connection in any detail. Even Benveniste who, in his discussion of ‘*themis*’, points out that the Greek *arariskō* comes from the same root as *ṛtá* (1969: 100), does not mention *harmonia* in this context.

to be the quintessence of Vedic philosophy. I argue that both these terms can be understood as abstract concepts of order, and I rely on evidence from the *Rgveda* and from the fragments of Heraclitus, Empedocles and Philolaus in order to do so. (For ῥτά see also Jurewicz in this volume.)

The first pressing problem concerning both terms is that they are not easily translatable. A cursory glance at any lexicon will demonstrate the vast range of meanings that ῥτά has; and *harmonia* isn't nearly as straightforward as most present-day translators have taken it to be – indeed much is lost in unhesitatingly translating it as 'harmony'. Accordingly, I will begin with an overview of the various meanings of each of these terms before turning to the *Rgvedic* hymns and Pre-Socratic fragments in order to offer a conceptual comparison between the two.

Harmonia

I would like to begin with a brief note on the etymology of '*harmonia*' ('*harmonie*' in the Ionic Greek dialect). The abstract suffix 'ia', (-iā) is added to a conjectural theme **ar-mn*, which itself presumably comes from the PIE root **H2er-* (fit).⁴ *Harmonia* does not, of course, mean what contemporary music theorists define as 'harmony'; indeed, as the other words that derive from this root suggest,⁵ the earliest uses of *harmonia* are not even specifically musical. For Homer, in whose works we find the first extant occurrence of the word, the primary meaning is 'physical joining' together of planks of wood.⁶ In the same corpus, though, we already encounter a more abstract meaning in the *Iliad* (22.255–6), where *harmonia* stands for 'covenant' or 'agreement'.

Hesiod (*Theogony* 933) describes the goddess Harmonia as the daughter of Aphrodite and Ares. Lasus of Hermione's fragment 702 contains the first extant use of *harmonia* in reference to the realm of music.⁷ In Pindar's odes, we find mention of the goddess Harmonia⁸ in addition to *harmonia* as a musical mode.⁹ From these early uses, we can see that the notion of *harmonia* entails the

⁴ Ilievski (1993) traces the roots back to Linear B. He claims that the dialectical basis of the noun (*h*)*armo* and the verb *harmozō* can be explained only by phonetic rules according to which the inherited IE vocalic nasal -mn- developed a reflex -mo-; the verb is a technical term and, he claims, there is no doubt that the noun *harmonia* is derived from this verb.

⁵ These include verbs like *harmozō* (fit together) and *arariskō* (join together) and nouns like *harma* (chariot), *arithmos* (number), *artus* (bond) and *arthron* (joint).

⁶ Cf. *Odyssey* 5.247–8; 5.361–2.

⁷ Δάματρα μέλπω Κόραν τε Κλυμένοι' ἄλοχον μελιβόαν ὕμνον ἀναγνέων Αἰολίδ' ἄμ βαρύβρομον ἁρμονίαν.

⁸ *Pythian Ode* 3.87–92; 11.7–12.

⁹ *Nemean Ode* 4.44–9; *Pythian Ode* 8.67–75.

preexistence of two or more disjointed entities, usually in a state of tension – as is exemplified by the mythical figure who is the product of the goddess of love and the god of war. To borrow from Finney, we can understand *harmonia* as a ‘reconciliation of opposites, a fitting together of disparate elements, whether in music, universe, the body politic, or the body of man’.¹⁰ For the later Greeks, *harmonia* comes to stand for order – and, as we will see, a particular kind of order – in the universe as well as many other domains, including mathematics, psychology, ethics, poetics and music.

For Heraclitus, *harmonia* was a central cosmological principle whereby opposites were in the proper relation to one another. Empedocles described it as a principle of balance working alongside love (*philotēs*) and strife (*neikos*). It was of supreme importance to the Pythagoreans as well – they regarded *harmonia* as the orderly fitting together of sound and considered that the good of the human soul consisted in ‘grasping and assimilating to that order’.¹¹ I will offer a more detailed discussion of Pre-Socratic conceptions of *harmonia* in what follows. For now, let us turn to *ṛtá*.

Ṛtá

The substantive *Ṛtá* has been commonly translated in English as ‘truth’, ‘order’ and ‘law’, in French as ‘*vérité*’, ‘*ordre*’ and ‘*loi*’, and in German as ‘*Wahrheit*’, ‘*Weltordnung*’ and ‘*Gesetz*’. Yet none of these – individually or taken together – suffice to properly capture the sense of the word. The *R̥gveda* alone contains over four hundred instances of the noun *ṛtá* as well as its adjectival form, occurring in a variety of contexts, in hymns dedicated to different deities.

In the Böhntlingk *Wörterbuch* (1928), *ṛtá* as an adjective was defined as ‘ordered, right, righteous, brave, efficient, true’; as an adverb, it meant ‘rightly, correctly, properly, strongly’; finally, as a substantive, it could mean: ‘a) fixed order, determination, decision, b) order in sacred matters, sacred custom, statute, pious work, divine law, faith as the epitome of religious truth, c) the right, truth (especially religious truth), and the right path’. Apart from this array of possible meanings, one of the remarkable things about *ṛtá* is the richness of imagery associated with it – a path (*pantham ṛtásya*),¹² a seat (*ṛtásya yonī*,¹³ *ṛtásya sadam*¹⁴), a wheel (*cakram ṛtásya*¹⁵) and a stream (*dhārām ṛtásya*¹⁶), to name but a few.

¹⁰ Finney 1973: 388.

¹¹ Barker 1989: 6.

¹² RV 1.46, 65, 79, 124, 128, 136; 3.12, 31; 5.45, 80; 6.4; 7.44, 65; 10.66, 70

¹³ RV 3.62; 4.1.

¹⁴ RV 1.84, 164; 3.55; 4.21, 42; 5.1; 7.53.

¹⁵ RV 1.164.

¹⁶ RV 1.67; 5.12; 7.43.

As we can see, it is by no means so straightforward a term that a single translation could do it justice.¹⁷ My goal is merely to highlight its various senses before attempting to ascertain whether these can be subsumed under some more general principle. Perhaps one way of arriving at a somewhat coherent understanding of a term with so many different senses is by regarding *ṛtá* as a single principle with manifestations in various domains – indeed, much the same could be said for *harmonia*. Gonda puts it well when he describes *ṛtá* as ‘that untranslatable term which may be approximately described as the supreme and fundamental order-and-reality conditioning the normal and right, natural and true structure of cosmos, ritual and human conduct’.¹⁸ In this passage, Gonda describes the domains of *ṛtá* as the cosmos, ritual and human conduct; we could say, on the other hand, that the domains of *harmonia* include the cosmos, human conduct and the human soul. Both *harmonia* and *ṛtá* could be understood as principles of order and balance that have different manifestations in these different domains. In the remainder of this chapter, I will explore the extent to which this hypothesis is tenable. I hope, in the process, to shed more light on the precise nature of this ‘order’.¹⁹

One of the most striking similarities between *harmonia* and *ṛtá* is the manner in which they serve as regulating principles in the cosmos. The universe, for both the *ṛṣi*-s of the *Ṛgveda* and for the Pre-Socratic philosophers, is made up of opposing principles – night/day, hot/cold, mortal/immortal, etc. – and it is imperative that these opposing principles be kept in the proper relation to one another, for it is this state of balance that constitutes a well-ordered universe. I contend that *harmonia* and *ṛtá* are the keys to the maintenance of this relationship, for the Pre-Socratics and the Vedic *ṛṣi*-s respectively: there is ample evidence for this claim in the fragments of Heraclitus, Empedocles and Philolaus, as well as in several hymns of the *Ṛgveda*. Let us first take a look at the role of opposites and dualities before turning to a discussion of how *harmonia* and *ṛtá* regulate these.

Opposites

Various hymns, including the famous *Nāsādiyasūkta* (RV 10.129), mention primal waters preexisting anything animate.²⁰ They are prior to the One (*tad*

¹⁷ Pace Lüders (1959), who claims that *ṛtá* is identical to ‘*Wahrheit*’. For more on why Lüders’ claim is problematic, see Gonda 1977: 137–8.

¹⁸ Gonda 1972: 109.

¹⁹ I should note, at the outset, that I will not be comparing *harmonia* and *ṛtá* in all their domains of application – there will be no further discussion of the ritualistic role of *ṛtá*, for instance, nor will I talk about the structure of human souls; my focus will be on the natural domain and its connection to the moral one.

²⁰ It is difficult to isolate a unified cosmogonical account in the *Ṛgveda*, and I rely on reconstructions, such as those of Brown (1942), when I discuss *Ṛgvedic* cosmogony.

ekam) in RV 10.129 and to all the Gods (RV 10.121, 10.80), presumably including the cosmic craftsman, Tvaṣṭṛ. In general, the primal state is one in which the basic opposites that define the cosmos as we know it have not yet come into existence – there is no night/day, midspace/heaven, or death/deathlessness (RV 10.129.1–3). Most importantly neither the *sat* (being) nor the *asat* (non-being) existed then (RV 10.129.1). The cosmos could not have existed without opposing principles, and it is these very principles that underlie reality. In the *Rgveda*, as in the fragments of Empedocles, the cosmos as we know it only comes to exist when there is some degree of differentiation.²¹ In an Empedoclean universe dominated entirely by love (*philotēs*), as described in 31 DK B27 for instance, everything is homogeneous; all mortal things have a ‘double passing away’ (B17) – complete separation (the rule of strife) causes things to pass away, but so too does the coming together of all things (the rule of love) because of the absence of recognisable masses like earth, air, fire and water (B38): oppositional forces form the very fabric of the cosmos.

The *Rgveda* abounds with descriptions of opposing principles. I have already mentioned the fundamental pairs present in RV 10.129 – being/non-being, night/day, death/deathlessness and midspace/heaven. To these we can add darkness/light (RV 10.129) and heaven/earth (RV 10.190). Dyaus (Sky) and Prithvi (Earth) are the parents of the gods; the gods themselves are broadly divided into Devas and Asuras and the struggle between them incarnates the struggle between opposing principles. Indeed, the very names of some gods stand for abstract principles of opposition. Consider, for instance, the Ādityas and the Dānavas. As Brown points out, their names are derived from those of their mothers – Aditi and Dānu

²¹ Compare Empedocles 31 DK B27 with RV 10.129.1:

ἐνθ' οὐτ' ἠελίοιο διείδεται ὠκέα γυῖα
 οὐδὲ μὲν οὐδ' αἴης λάσιον μένος οὐδὲ θάλασσα·
 οὕτως Ἀρμονίης πυκινῶι κρύφωι ἐστήρικται
 Σφαῖρος κυκλοτερῆς μονίηι περιηγεί γαίτων.

Here are distinguished neither the swift limbs of the sun nor the shaggy might of the earth, nor the sea; but equal from every side and without end, it stays fast in the close covering of *harmonīē*, a rounded sphere rejoicing in his circular solitude. (31 DK B27)

nāsad āsīn no sād āsīt tadānīd
nāsīd rājo no viomā parō yāt
kīm āvarīvaB kūha kāsya śārmann
āmbhan kīm āsīd gāhanan gabhīrām

The nonexistent did not exist, nor did the existent exist at that time.

There existed neither the airy space nor heaven beyond.

What moved back and forth? From where and in whose protection? Did water exist, a deep depth? (RV 10.129.1, tr. Jamison and Brereton 2014)

respectively, the first standing for ‘boundless, infinite’ and the second for ‘bonded, restrained’.²² The opposition can also be observed in respect to their functions: the Ādityas are associated with creative forces and the Dānavas with destructive ones.

While several Pre-Socratic philosophers describe opposites as fundamental principles in the cosmos, nowhere is this more apparent than in the fragments of Heraclitus, who describes a range of opposites, such as immortal/mortal (22 DK B62), death/life (B62, B48), pure/impure (B61), waking/sleeping (B88), cold/hot (B126), dry/wet (B126), and young/old (B88). Philolaus of Croton, a so-called Pythagorean, describes the limiting (*ta perainonta*) and the unlimited (*ta apeira*) as the two fundamental metaphysical principles in his account of the cosmos (44 DK B1, B6). The basic cosmic principles according to Empedocles are love (*philotēs*) and strife (*neikos*), forces of attraction and repulsion that are engaged in an eternal struggle. We can see opposing principles in his four roots or elements (*rhizōmata*) as well – water/fire and earth/air, the former representing cold/hot and the latter representing dense/rare.²³

This brief survey demonstrates the fundamental role played by opposing principles in both Ṛgvedic and Pre-Socratic cosmologies. Yet, what is common to both is also the *necessity* of these opposing principles and the strife between them. The cosmos cannot exist in the absence of these principles, and the pre-cosmic state is characterised by a lack of differentiation. However, it is not enough for these opposites to merely exist in the absence of some principle of regulation. I suggest that *ṛtá* is an ordering principle for the Ṛgvedic cosmos much as *harmonia* is an ordering principle for the Pre-Socratic one.²⁴

Order in nature

In the *Rgveda*, the *sat*, the sphere of being and life, is regulated by *ṛtá*. The *sat* is opposed to the *asat*, which is ruled by *anṛtá* (lacking in *ṛtá*). We can learn more about the characteristics of the *asat* from RV 7.104. There is material opposition between them, since the *asat* is dark and dry whereas the *sat* is full of moisture and light – the conditions necessary for life. As I mentioned earlier, *ṛtá* is associated with images of paths, waters and light. *Sat/ṛtá* and *asat/anṛtá* also stand in moral opposition – RV 7.104 tells us that an evil person is to be relegated to the

²² Brown 1942: 90. ‘*Aditi*’ is formed from the privative ‘*a*’ and ‘*diti*’ whose root is ‘*da*’ (to bind; to fetter). ‘*Dānu*’ comes from the same root as ‘*Aditi*’ – *da* – and is a primary derivative with the suffix *-nu*. Cf. Brown 1942: 90–1.

²³ Empedocles (31 DK B21) explicitly describes the sun as hot (‘ἥλιον . . . θερμὸν’) and water (rain) as cold (‘ὄμβρον . . . ῥιγαλέον’). Cf. Aristotle *On Generation and Corruption* 314b–15a.

²⁴ I refer only to the Pre-Socratic cosmologies I have discussed above. Anaximander, for instance, described this principle of regulation as justice (*dikē*) rather than *harmonia*.

asat, ruled by *anṛtá* and that the fate of such a person is destruction (*nīṛrti*). The evil person is also described as one who strengthens by the darkness (*tamovṛdh*) associated with *anṛtá* whereas the gods are often described as being strengthened by *ṛtá* (*ṛtávṛdh*) and, what is more, born in it (*ṛtājāta*).

In general, various gods are associated with *ṛtá* and *sat*. Agni, Indra, Mitra-Varuṇa and Soma are the primary deities associated with *ṛtá*. Seventy-eight of the hymns to Agni, thirty-five to Indra, forty-two to Soma, fifteen to the Aṣvins (the twins), and nine to Uṣa (dawn) mention *ṛtá*. Agni is often described as being the ‘first-born of *ṛtá*’ (*prathamajāḥ ṛtásya*; RV 10.5), ‘true to *ṛtá*’ (*ṛtāvana*), and as the ‘guardian of *ṛtá*’ (*ṛtásya gopah*). Lüders conceives of Varuṇa’s primary role as being the master of *ṛtá*:²⁵ he is said to spread out the cosmos, with its three realms, by means of *ṛtá* (RV 4.42)²⁶ and is even said, at one point, to take its form (RV 1.180, *ṛtápsu*). Indra is described as resting on the seat of *ṛtá* along with the Maruts (RV 4.21) and he, too, is a protector of *ṛtá* and born in it (RV 7.20, *ṛtapāḥ ṛtejāḥ*). Indra, Varuṇa, Mitra and Aryaman are all said to grow strong through *ṛtá* (RV 7.82). Indra is also ‘yoked to *ṛtá*’ (*ṛtāyuj*, RV 6.39) when he is destroying Vala. The gods are responsible for maintaining *ṛtá* as the dominant principle – Mitra, Varuṇa and Agni are all guardians of *ṛtá* (*ṛtásya gopah*), and they (the Ādityas) also grow strong through it (RV 2.27, *ṛtenāditya mahi*). At RV 7.66, we are given a slew of descriptions for Mitra-Varuṇa: true to *ṛtá* (*ṛtāvan*), born in *ṛtá* (*ṛtājata*), strengthened by *ṛtá* (*ṛtávṛdh*), and haters of *anṛtá* (*anṛtādvī*). This last epithet serves to heighten the contrast between *ṛtá* and *anṛtá*. Furthermore, we can see from the cosmic roles assigned to the gods that their proper domain is *sat* whereas Paṇis and Dānavas have their domain in *asat*.

Beyond these associations, we also find two myths in the *Rgveda* – that of the Indra-Vṛṣṇa battle and that of the Paṇis (RV 10.108) – which demonstrate the urgency of threats to this *ṛtá*. According to RV 10.108, the Paṇis, demons who live in the sky, steal various treasures from the Angirases – horses, cows, dawn and her rays, ritual fire, the sun, and the path of light and day. Srinivasan highlights that these are all items essential to the performance of the sacrifice and this sacrifice is crucial because it strengthens *ṛtá*.²⁷ Eventually, the priests, in alliance with Soma, Indra, Agni and Bṛhaspati, are able to have these treasures released and to proceed with the *ṛtá*-strengthening sacrifice. The battle between Indra and Vṛṣṇa (whose name aptly means ‘encloser’) has as its consequence the creation of the cosmos as we know it.²⁸ Like the Paṇis, Vṛṣṇa had bound various necessities

²⁵ Lüders 1959: 28–40.

²⁶ *ṛtēna putró ádīter ṛtāvā/utá tridhātu prathayad ví bhūma* (RV 4.42.4).

²⁷ Srinivasan 1973: 44.

²⁸ The Indra-Vṛṣṇa battle is described in various hymns and I rely on Brown’s (1942) synthesis in my discussion.

of the cosmos – waters and the sun, for instance. Indra releases the waters and the waters, in turn, give birth to the sun. Indra's acts of creation after the defeat of Vṛṣṇa involve the separation of the *sat*, which comes to be ruled by *ṛtá*, from the *asat*, ruled by *anṛtá*.

However, as Srinivasan points out, neither of these creation myths can be considered to formulate a literal cosmogonic account.²⁹ Instead, the main issue raised in both is the difficulty entailed in preserving the *ṛtá*-governed *sat*. It is also significant that neither *asat* nor *anṛtá* disappear (RV 2.24). There is still some darkness below the earth (RV 5.32, 8.6), where the *rakṣasas* (demons) are believed to dwell. *Ṛtá* predominates, strengthened and maintained by gods and men, but both these accounts – that of the Paṇis and that of Indra-Vṛṣṇa – emphasise its precarious state. There exists a harmonic balance between *sat* and *asat* as well as between the other opposing principles and realms.

We have already seen how the existence of oppositional principles is necessary for creation. For the universe to be in an ordered rather than chaotic state, there needs to be some kind of arrangement between these oppositional principles. In the *Ṛgveda* (as well as in the Pre-Socratic fragments) such an arrangement entails predominance of one principle over another without the eradication of the other. The goal is not an equilibrium between opposites, but a state wherein they are in the proper proportion to one another. It is *ṛtá* that controls the transformation, the balancing and the adjustment of forces in a state of tension. *Ṛtá* is not 'order' in the sense of a 'cosmic blueprint'; it is, rather, a *dynamic* principle of order, regulating the constant struggle between the oppositional forces that are the very fabric of the cosmos. I now attempt to show how *ṛtá* and *harmonia* regulate the opposites and, in so doing, highlight yet more important aspects of these concepts and points of resemblance between them.

Although oppositional phenomena and principles play an important role in Ṛgvedic cosmology, I am not claiming that the Vedic *ṛṣi*-s believed that there were neat groups of opposite principles in reality, since RV 10.129 claims that everything emanated from a single principle. *There are* apparent opposites, but these are all closely interconnected and interrelated because of *ṛtá*. In this respect, there is a strong resemblance to Heraclitus' cosmology.

Heraclitus believed that nature (*physis*) loves to hide (B123) and that for this reason the knowledge of this nature was not easy to acquire, even if the account (*logos*) is common to all creatures (B2). He also claimed that the hidden *harmonia* was superior to the obvious one (B54). I contend that this hidden *harmonia* refers to the underlying metaphysical organisation of the world, which consists in the balance and interconnection of all apparent opposites, some of which I have mentioned above. Further, we are told that 'it is wise to agree that

²⁹ Srinivasan 1973: 55.

all things are one' (ὁμολογεῖν σοφόν ἐν πάντα εἶναι, B50). Such a claim might seem less enigmatic if we understand it to mean that there is an inherent harmonic connection between opposites. This unity of Heraclitus' opposites can be understood as the *harmonia* of these opposites wherein '*harmonia*' isn't just a synonym for 'unity' but a particular principle of order. For Heraclitus, night/day and winter/summer are regarded as one (B57, B67), and, in light of his views on *harmonia*, we could understand this to mean that such natural phenomena are regulated by the principle of *harmonia*. In the *R̥gveda*, too, the days and the seasons are the clearest example of the way in which *ṛtá* regulates natural phenomena.

Mitra-Varuṇa and Aryaman, the Ādityas, who are described as the chariot-eers, guardians and strengtheners of *ṛtá* (RV 7.66), are the ones who establish the day, the night, the year and month (RV 7.66.11). The *ṛtá*-possessing Mitra-Varuṇa are responsible for bringing the year to completion (RV 7.61). Recall, also, that nights and days and years are said to come about only after *ṛtá* and *satya* were born out of the initial heat (*tapas*) according to the cosmogony in RV 10.190. Uṣa (the dawn) is true and obedient to *ṛtá* (RV 5.80.1; RV 1.123), moves according to it (RV 7.75), resides in the seat of *ṛtá* (*ṛtásya sadan*, RV 4.51), and has her horses yoked to it (RV 4.51). Varuṇa, master of *ṛtá*, is also supposed to have prepared the path of the sun and the stars (RV 1.24). At one point, dawn and night are described as the mothers of *ṛtá* (RV 1.142, 5.5); at another point, sky and earth are described as its parents (RV 6.17, 10.5). The terrestrial rivers, too, are true to *ṛtá* (*ṛtávarī*, RV 3.33, 4.18) and the sun is even described as the wheel of *ṛtá* (RV 1.164.11).³⁰ In general, all the major natural phenomena are related to *ṛtá*, and *harmonia* played a similarly important role in the natural order described by Empedocles and Philolaus.

We know from Diogenes' *Lives* (DL 8.85) that Philolaus of Croton was supposed to have written a work entitled *On Nature* (Περὶ Φύσεως), that this work began with the claim that nature is made up out of limiters and unlimited, and that both entities need a third to come upon (*epigignein*) them in order for the cosmos to exist. This third entity is *harmonia* (44 DK B1, B6). The world-order as a whole as well as all the individuals within it are regulated by *harmonia*.

Empedocles, too, recognised the importance of *harmonia* even though we

³⁰ *duvādasāral nahī táj jārāya*
vārvarti cakrám pári dyām ṛtásya
ā putrā agne mithunāso átra
saptá śatāni vitānāi ca tasthūā

Twelve-spoked, the wheel of *ṛtá* [= the Sun] ever rolls around heaven – yet not to old age. Upon it, o Agni, stand seven hundred twenty sons in pairs [= the nights and days of the year]. (RV 1.164.11, tr. after Jamison and Brereton 2014.)

have limited evidence for this. According to him, the universe consists of four elements being controlled by the cosmic principles of love, which unites the elements, and strife, which forces them apart. In the final stage of cosmic development, love causes all things to come together (31 DK B35) – there is complete unity of the elements in the form of a homogeneous sphere, while strife is left completely outside the sphere (B17, B27). Empedocles describes the current situation as being one where love predominates but strife nonetheless offers enough resistance to prevent all things from becoming homogenised; some elements are mixed and some are not. When strife prevails, however, there is a complete separation of the elements (B35). Love integrates living organisms while strife disintegrates them (B20).

However, *harmonia* holds everything in a fixed proportion. Consider for instance B96:

ἡ δὲ χθὼν ἐπίηρος ἐν εὐτύκτοις χοάνοισι
 τὰς δύο τῶν ὀκτῶ μοιράων λάχε Νήστιδος αἴγλης,
 τέσσαρα δ' Ἡφαίστιο· τὰ δ' ὅστεα λευκὰ γέγοντο
 Ἄρμονιῆς κόλλησιν ἀρηρότα θεσπεσίησιν.

Earth in well-made melting pots got two parts of glittering Nestis, out of its eight parts, and four from Hephaestus; white bones were produced, joined by the divine glue of *harmoniē*.

This fragment is remarkable as one of the earliest instances of *harmonia* being used in a case of explicitly numerical proportion – bones are made out of earth, fire and water in a numerical ratio. Here, *harmonia* stands for mixing in a particular proportion – there is balance and not complete unity or merging and, in this, it is importantly different from love. It entails a proper fitting together of discrete entities that nonetheless retain their original identity and don't simply blend into one another.

Fragment B23 also provides us with an image of how *harmonia* regulates and, indeed, creates all of nature as we know it:

. . . οἷτ' ἐπεὶ οὖν μάρψωσι πολύχροα φάρμακα χερσίν,
 ἄρμονιῆι μείξαντε τὰ μὲν πλέω, ἄλλα δ' ἐλάσσω,
 ἐκ τῶν εἶδεα πᾶσιν ἀλίγκια πορσύνουσι,
 δένδρεά τε κτίζοντε καὶ ἀνέρας ἠδὲ γυναῖκας
 θῆράς τ' οἰωνούς τε καὶ ὕδατοθρέμμονας ἰχθύς
 καὶ τε θεοὺς δολιχαίωνας τιμῆσι φερίστους·

and so when they take pigments of various colours in their hands, mixing them in *harmoniē*, some more, some less, [and] from them prepare forms resembling all things, making trees, men, women, beasts, birds water-nourished fish, and long-lived gods foremost in honours.

When read in conjunction with B21, this fragment likens the work of painters with their pigments to the effects of love and strife on the four elements – Empedocles even uses dual forms to describe the work of the painters (*meizante*, *ktizonte*), which emphasises their analogy to love and strife. However, love and strife alone are not enough – they need to mix pigments in order to bring about creation in accordance with *harmonia*. From what we know, the painters’ task did not involve blending different pigments to create new colours, but rather juxtaposing (four basic) different pigments in order to create realistic depictions – so ‘mixing in *harmonie*’ most likely meant mixing in an ordered and fitting way.³¹ In the cosmos as we know it, love and strife are optimally balanced such that existence comes about by means of *harmonia*, partly mixed and partly unmixed, since the prevalence of either extreme would result in the destruction of our world.

Order in human life

We have seen how *harmonia* and *ṛtá* play an exceedingly important role in the natural world and are responsible for its orderly functioning. Another significant – and closely related – point of comparison lies in the relationship that human beings bear to the principles of cosmic order. It is the case, with both *ṛtá* and *harmonia*, that ordinary human beings are not immediately able to distinguish and recognise them, and both the Ṛgvedic and Pre-Socratic writers assert the value of this ability. Indeed, in the Greek tradition, perfection of the human soul consists in comprehending the cosmic order and living in accordance to it.³² In the *Ṛgveda*, both men and gods live in the realm of *ṛtá*, but only the latter are able to recognise it. Most of the hymns that mention *ṛtá* emphasise its connection to the gods, and some mention that they know and hate *anṛtá*. Mitra-Varuṇa lives in the house of *ṛtá* and fights the hated *anṛtá* (RV 7.60.5, 7.66.13), and Varuṇa is described as the king who is able to discern *ṛtá* from *anṛtá* (RV 10.124.5). On the other hand, the Vedic *ṛṣi*-s have to implore the gods to reveal to them the difference between the two:

³¹ For more on ancient painting, cf. Sections III. 29–44 from *The Natural History* by Pliny the Elder. See also Kranz 1912, Bruno 1977 and Struycken 2003.

³² I have limited myself to a discussion of *harmonia* in Pre-Socratic writings. However, the remarkable account in Plato’s *Timaeus* (90b6–d7) is worth mentioning, especially since it represents ideas that many have taken to be Pythagorean. The universe has a harmonic structure and motions that are proper to this structure; the human soul initially has this same structure and motion, but these are disturbed when the human soul is first embodied. It is only by attending to the *harmonia* in this world that we can bring disordered human souls to their initial harmonic order. This restoration of order to the soul is what happiness and the best life consists in.

*amī yé devā sthāna
triṣú ā rocané diváh
kád va ṛtám kád anṛtam
kúva pratná va áhutir.*

You gods, who are yonder in the three luminous realms of heaven –
What is *ṛtá* for you, what is *anṛtá*? Where is the age-old offering for you?
(RV 1.105.5, tr. after Jamison and Brereton 2014)

This hymn expresses the anxiety of a Vedic *ṛṣi* about the maintenance of the cosmic and the earthly order. He begins by describing both kinds of order and then expresses his fears about them being upheld. The verse above expresses his fears concerning his lack of insight into *ṛtá*. This insight is important because it allows him to act in accordance with *ṛtá* and thereby to strengthen and uphold it.

Two hymns describe the *ṛṣi*-s who have managed to attain this knowledge. RV 10.71 describes the degrees of mastery of sacred speech (*vāc*) attained by the *ṛṣi*-s. This mastery is needed in order for them to perform Soma rites, which in turn strengthen *ṛtá*. Not everyone is able to understand the sacred speech in the same way – some, who supposedly hear, do not truly hear, but hear in vain (RV 10.71.4, 6). All the *ṛṣi*-s have the ability – by sensorial means – to grasp the sacred speech, but not all have the quickness of mind needed for this task (RV 10.71.7). Sensory imperviousness to *ṛtá* is also mentioned in RV 4.23.8, where the hymn to *ṛtá* is said to have the power to open even deaf ears. Being receptive to *ṛtá* and being able to grasp it is the ultimate goal of any mortal, and this is something that some *ṛṣi*-s are indeed able to do. The path for the enlightened *ṛṣi*-s who seek *ṛtá* is thornless and easy (RV 1.41.4). In the hymn to Brhaspati mentioned above (RV 2.24), *ṛṣi*-s are described as possessing *ṛtá* and perceiving *anṛtá* (*ṛtāvānaḥ praticákṣyānṛtā*); they are thus able to aid in the battle against Vala and in the upholding of *ṛtá*. As Mahoney puts it:

Vedic sages . . . understood *Rtá* to be the inherent universal principle of balance and concord, a dynamic rule or order in which all things contribute in their own unique way to the smooth running of the cosmos as a whole. If they were aligned with *Rtá*, therefore, all things would be true to their own given nature and, in so doing, would properly express their particular function in that intricate and delicately aligned system of order.³³

Rtá regulates the cosmos and the divine realm but also regulates the human realm and dictates human conduct, since the highest kind of human life involves understanding *ṛtá* and being aligned to it. Much the same is true of *harmonia* for the Pre-Socratics.

³³ Mahoney 1998: 48.

Heraclitus chastises human beings for being unseeing and unhearing (B1). In echoes of some hymns from the *Rgveda*, humans are described as hearing like the deaf and being ‘absent while present’ (B34). Nonetheless, Heraclitus claims that the true metaphysical structure of the world is available for anyone who searches for it properly even though the search is a difficult one and often yields little.³⁴ According to him, the *logos*, which has strong connections to *harmonia*, is eternal, although men fail to comprehend it (B1).³⁵ Like unskilled *r̥ṣi*-s and laymen, most people are unable to distinguish the hidden structure of the universe.

As I mentioned earlier, Heraclitus’ hidden *harmonia* might refer to the hidden metaphysical structure of the universe. From this, we may infer that only someone who truly listens to the *logos* will be able to progress from a mere perception of the obvious *harmonia* to the knowledge of the true *harmonia* that governs nature. In the words of Kahn: ‘The concept of *harmonie* as a unity composed of conflicting parts is thus the model for an understanding of the world ordering as a unified whole. And it is the comprehension of this pattern in all its applications that constitutes wisdom.’³⁶

***Harmonia* and *ῥτά* as dynamic and ontologically independent principles**

Having examined how *harmonia* and *ῥτά* similarly function as principles of order, governing both nature and human life, I will end with two claims about the nature of these principles. I argue that, in the *R̥gvedic* as well as the Pre-Socratic texts considered in these pages, *harmonia* and *ῥτά* can both be understood as a dynamic principle of order as well as ontologically independent from any divine entity. We can perhaps better understand the first claim by paying attention to the striking imagery in Heraclitus’ fragment about the *harmonia* of bow and lyre:

οὐ ξυνιᾶσιν ὄκως διαφερόμενον ἐωυτῶι ὁμολογέει· παλίντροπος ἄρμονιή ὄκωσπερ τόξου καὶ λύρης.

They do not comprehend how a thing agrees at variance with itself; it is a *harmonie* turning back on itself, like that of the bow and the lyre. (B51)

³⁴ χρυσὸν γὰρ οἱ διζήμενοι γῆν πολλήν ὀρύσσουσι καὶ εὐρίσκουσιν ὀλίγον. Seekers after gold dig up much earth, but find little (22 DK B22).

³⁵ I have argued in an as yet unpublished paper for the relationship between Heraclitus’ concept of *logos* (word, account) and that of *harmonie*, and it is beyond my scope here to offer a complete explanation of this relationship. We can understand the *logos* as the account of the world, and this account would consist in a description of the metaphysical organisation of the world. I contend that, for Heraclitus, *harmonie* is the principle that organises the world.

³⁶ Kahn 1979: 200.

The bow and the lyre are the key to understanding how two or more things that are in a state of tension can nonetheless agree. We can understand this *harmonia* as the sound created when tense strings come together to create consonance – they create ‘harmony’ in the musical sense. But the common translation of ‘attunement’ doesn’t fully capture the meaning of *harmonia*. Both bow and lyre illustrate the unity of entities in tension on account of their shape as well. They are similarly constructed and contain at least one string that is in tension. The tension between string and frame in both the bow as well as the lyre shows how something being stretched apart also comes together in a productive way. Both the duality and the unity of opposites is clearly brought out in this fragment as is the importance of balance. In a remarkable coincidence, the *Rgveda*, in a hymn to Bṛhaspati, also provides us with an image of a *ṛtá*-possessing bow:

*ṛtájyena ktájyen bráhmaena pátir
yátra vátra prá tát aśnoti dhánvanā
tásya sādhvīr iādhv yābhir ásyati
nrcáknāg dṛśáye kárśáyeāg b*

The lord of the sacred formulation, with his swift bow whose string is *ṛtá* – where he wishes, there he reaches. To him belong the straight flying arrows [= the hymns] with which he shoots – [arrows] to be seen, drawing the gaze of men, and whose womb is the ear. (RV 2.24.8, tr. after Jamison and Brereton 2014)

In this hymn, Bṛhaspati is described as slaying Vala with his bow and arrow. The string of this bow is described as ‘*ṛtájyena*’, which can be translated as ‘*ṛtá*-strung’ or ‘one whose string is *ṛtá*’. As with the Heraclitean fragment, we can see how fittingly the image of the bow illustrates the manner in which *ṛtá* balances and orders.

It is also notable that both *harmonia* and *ṛtá* seem to be ontologically independent from any divinity. In the *Rgveda* (10.190), *ṛtá* and *satya* (‘what is; the truth’) are born out of the primordial heat (*tapas*) and prior to the Vedic divinities. I have already cited the various instances of the gods being referred to as ‘born in *ṛtá*’ – they uphold it and reside in it and even strengthen it, but they are not responsible for its creation. The same is true of *harmonia*. Philolaus took it to be an independently existent principle that supervenes upon the existent limiters and unlimited; Heraclitus did not think that either men or gods had anything to do with the established natural order; and within Empedocles’ system, love, strife and *harmonia* are responsible for the creation and destruction of all other entities.³⁷

³⁷ Franklin also notices the parallels between *ṛtá* and *harmonia* in this respect and, in addition, points out that *ṛtá* is ‘remote and impersonal . . . but provides the ordered context in which all personal experience becomes meaningful’ (2002: 7).

Conclusion

Harmonia and *ṛtá* both refer to the regulation of cosmic principles as well as natural phenomena. Furthermore, they play an important role in regulating human conduct, since the best human life consists in living in accordance with these principles. I have also argued that they resemble each other in being dynamic principles of order that occupy a central place in their respective systems while remaining ontologically independent from any divinity. There still remains much to be said about the connection between the two: for instance, a discussion of the relations between *harmonia* and *logos* on the one hand and *ṛtá* and *satya* on the other could prove fruitful. The present investigation has also been limited to the hymns of the *Rgveda* and to the fragments of three Pre-Socratic thinkers, and we could learn yet more about these terms by including other corpora. For the present, though, I would like to conclude that at the most abstract level, *harmonia* and *ṛtá* are principles of order that stand for the dynamic fitting together of disjointed entities. The fitting together takes place in nature, the macrocosm, and in human life, the microcosm; furthermore, it also involves adaptations *between* microcosm and macrocosm.³⁸

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³⁸ Renou describes *ṛtá* as ‘le résultat des correlations, le produit de l’adaptation’, de l’agencement’ entre le microcosme et le macrocosme’ (1949: 266). The same holds true for *harmonia*.