

Post-rational eco-communicological aporias, pre-rational eco-communicological euporias: the “magical worldview” and restoring a meaningful man-nature dialogue

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“Where is the Graal?”

— Parsifal

„Der Einsprung in den anderen Anfang ist der Rückgang in den ersten und umgekehrt.“

— Martin Heidegger

Introduction

Global Society’s Man-Nature Communication Emergency

In the conclusion of his *Religions in Global Society* (2006), Peter Beyer alludes to an “insufficiency” in the work he had just completed. Namely the inability of the theory of communication he spoke of in his book to deal with communication between Global Society and “non-human realities” outside Global Society (BEYER 2006: 301). Why draw attention to this insufficiency? What is noteworthy or problematic about it? Simply the fact that this admission constitutes yet another symptom of an ever more troubling prospect, namely, the likelihood that Global Society’s lines of communication with Nature are presently so tenuous it is in danger of being incapable of assuring the ecological conditions necessary for its existence. At least this is so if it is true that one cannot assure one’s ecological conditions of possibility unless one is able to communicate with those conditions.

This is of course a controversial thing to say, for in recent years it has become fashionable in many quarters to doubt that an inability to “dialogue” with Nature is a problem. This attitude has been fostered in part by those who suggest that the climate change “scare” is merely a “dark green, deep ecology conspiracy” and in part by those who see the absence of total certainty about where current climate change trends are heading as an opportunity to deny a problem exists. These observers are abetted in their “Nature scepticism” by academics and theorists who

not only deny that Nature possesses an autonomous dynamics or the semiological means to communicate data about it, but even deny the ontological possibility of the environment (EDWARDS, ASHMORE & POTTER 1995: 25-49; MACNAGHTEN & URRY 1998: 22, 32 and BECK 1999: 21).

Mercifully, there is some opposition to the apostles of Nature negationism. These opponents tell us that the concept of Global Society as nothing more than a “speciesist”, “humankind-only” club is ecologically untenable and that apathy about the importance for it to start dialoguing meaningfully with Nature has created a dangerous communication emergency (SERRES, HARVEY, HAMILTON).¹ Wisely, they add that the opportunity for coming up with viable solutions for this communication challenge is dwindling daily.

What is impacted first and most by the criticism implicit in the forgoing remarks is of course the main source of Beyer’s ideas on global communication, to wit, Luhmannian “systems theory”. But that is not all. So also are almost all other “Post-modernist” or “Post-rationalist” models for negotiating across the frontier separating Man and Nature. We think in particular of the theorists who are identified as “social constructivists”, “neo-pragmatists”, “post-structuralists” and the proponents of “Actor-network theory”.

This accusation could of course cause consternation among those in the ranks of the theorists so condemned. Not just because they would contest the idea that ascribing the epithet “post-modernist” to their respective discourses justifies overlooking all the things which distinguish and singularise the schools of thought each of them belong to; but also because they would not accept that they fail to recognise the need to devise viable means of communication across the Man-Nature divide and have failed to propose ways to meet this need. And of course, this objection is far from groundless. For, sure enough, just like Luhmannian systems theory, many of them do indeed address the issue and do so head on. What is more, in doing so there is a tendency to rely less and less on “strong program social constructivism” which denies there is anything *sui generis* about Nature either ontologically, epistemologically, semiologically or in any other way². Indeed the tendency to compromise with the tenets of “realism” has got to the

¹ For all references see the Bibliography. Dates are included in text only when there is more than one reference per author.

² BENTON 2001b: 10; LIDSKOG 1998: 19ff. and MURPHY 2004: 251.

point that the constructivists who flirt with it have begun to be accused by other constructivists of defending “thinly disguised neo-realism”³.

So why do we say that “post-modernist” ways of dealing with the Man-Nature communication challenge do not work? Certainly not because we think communication strategies premised by the tenets of “realism” or “scientific naturalism” hold the key to improved communication with Global Society’s more-than-human Other. And not just because there is something embarrassingly naïve in the view that “the world is as it is, no matter what any person happens to believe about it, and there is one correct ‘God’s-Eye-View’ about what the world really is like”⁴; but also because the sort of “communication” with Nature that seems to matter most to scientific naturalism is the one that helps us frack her more savagely than ever. Indeed, far from seeking a solution for our communication emergency by picking sides in the “science wars” which pit realism against constructivism, we see their sterile and circular *gigantomachia* as central to the problem. Just consider the *dialectics* and the *rationality* governing this *gigantomachia*—and how no one benefits from it except its protagonists.

Worrying signs of a costly intellectual decay: “*Tweedledum and Tweedledee agree to have a battle*”

The rationality of the *gigantomachia* consists of privileging one side or another of the basic “dualisms” which define the discursive space where constructivism and realism confront one another and which “legitimizes” the rationality of the views expressed in that confrontation. In other words, one chooses *either* “Culture” *or* “Nature”, “subjectivism” *or* “objectivism”, “Idealism” *or* “Realism”, “*nomos*” *or* “*physis*”, “sociocentric constructivism” *or* “hylocentric realism”⁵. However, scarcely is that choice made than one realises that it is not an option to be too reductive or “autological” about one’s choice. For if we have learned anything from the earlier “*Methodenstreit*” or “two cultures” debates on similar issues, it is that any attempt to elaborate a purely realist or a purely constructivist “system” results in all sorts of semiological, epistemological and ontological impasses: that is, impasses which cannot be addressed or

3. See COLLINS & YEARLEY 1992; BLOOR 1999 and DEMERITT 2001: 782, 787 on Bruno LATOUR.

4. JOHNSON 1987: x.

5. BATESON 2002: 203; BENTON 2001a: 133-34 and PICKERING 2008: 25.

overcome except by borrowing resources belonging to the side of the bi-polarity one *does not* want to privilege.

So to get around this difficulty, one integrates *both* poles of the operative dualisms into a “consilient”, second order meta-discourse which allows one to continue privileging only one pole without in so doing being deprived of what one needs from the pole one does not privilege in order to develop and defend a viable system. Hence Bruno Latour’s “Compositionist Cosmopolitics” continues to be a variant of constructivism but differs from its “strong program” variants because it occupies the “middle ground” between constructivism and realism. Likewise, “critical realism”, “liberal naturalism”, “environmental sociology”, “new materialism” and “object-oriented ontology” remain variants of realism but differ from “unqualified naturalism” because they constitute a “consilience” between this pole and the constructivist pole.

The problem with this sort of dialectics is not just that those who use it are liable to the suspicion that their second order meta-discourses simply replicate *in themselves* the first order dualisms they are undertaken to transcend and “sublate” (*aufheben*)⁶. Nor is it that for this very reason they are vulnerable to deconstructive sniping from *both* sides in this “science war”. Graver still is the way this dialectic perpetuates and – albeit unwittingly – compounds a *triple aporia* at the heart of Global Society’s communication emergency and, accessorially, its failure to engage in fruitful dialogue with its non-human Other.

The “triple aporia” at the heart of European Rationalism’s current ontological, epistemological and semiological impasses

What is this “triple aporia”? It is the fact that we have no subject-centred determination of Being, Meaning and Knowledge which suffices to account for the Being, Meaning and Knowledge of what is not subject-centred. Nor do we have an object-centred determination of Being, Meaning and Knowledge which suffices to account for the Being, Knowledge and Meaning of what is not object-centred. And, finally, “dialectically” combining these two

6. A single quote from E.O. WILSON (2010: 297) suffices to illustrate the point: “The central idea of the consilience world view is that all tangible phenomena, from the birth of stars *to the workings of social institutions*, are based on material processes that are *ultimately reducible*, however long and tortuous the sequences, *to the laws of nature*” (italics mine, FB). See also PROCTOR 2009.

determinations fails to result in a synthesis which provides each with what each lacks to constitute a viable “system” unto itself.⁷ Why? Because such an aspiration is feasible only if they are accompanied or, rather, *joined* by something that post-rational orthodoxy steadfastly rejects. Namely a third, higher, external or extramundane “principle” or “ground” which would be irreducible to either a subject-centred or an object-centred determination of Being and Meaning but would nonetheless be an inexpugnable part of both because its existence and operations are postulated to explain that wherein, whereby and even wherefore subjects and objects interface, interpoetise and interpredicate one another existentially, phenomenologically, ontologically, epistemologically and semiologically.

Why does post-rational orthodoxy forswear such a resource? Why in other words is it happier to deal with the aporias which result from the refusal to admit the existence and operations of such an “uncontrollable externality” (DENNETT 2007: 132, RORTY 1997: 31) than it is to make life easier for itself by embracing it? Because doing that entails compromising with metaphysical, onto-theological, transcendental, mythopoeic or supernatural “fictions”. And who can blame them for not wanting that? Since Nietzsche most accept that the totalising, all-unifying “higher principles” which structure and modulate Platonic, Kantian and Hegelian thought amount to “higher swindles”. And few today would argue with Foucault, Deleuze, Popper and others who emphasise that these “fictions” have been cynically manipulated for centuries by “state machines” to constitute “hegemonic signifying regimes” or totalising “epistemic systems” ever ready to justify injustice, oppression and the intolerable (NIEMAN 2002: 182).

But if this is legitimate as a concern, so also is it legitimate to believe that Global Society should be refused *no* resource that could be useful for negotiating an *entente cordiale* with Nature and in that way assure its ecological conditions of possibility. Indeed, it is legitimate to suspect that the line separating the post-rational and the irrational has been crossed when intellectuals believe it is more important for them to turn out ever more strident denunciations of Hegel’s “*absolutes Wissen*” than it is to undertake the speculative work that needs to be done to deal with Global Society’s communication emergency.

7. In any case, it is impossible to see how this results from the models that have been put forward in recent years, for ex., E.O. WILSON’s ideas on “consilience”, John McDowell’s “second nature” reasoning (MCDOWELL 1994) and LUHMANN’s “transjuctional logic” (LUHMANN 1998: 82).

How then *do* we deal with this dilemma? How do we steer clear of outmoded paradigms without transforming our legitimate reservations about them into misplaced reasons for neglecting speculative resources that could be useful for Global Society? They could even be vital in dealing with its greatest communication challenge, namely that of fostering and facilitating communication with Nature. On the face of it one might assume that something needs to be done to relieve European Rationalism and Post-Rationalism of their qualms about “Religion” and indeed even “Philosophy” in as much as speculation about “*transcendentalia*”, “metaphysical grounds” and “ultimate causes” remain a part of their job description. For at bottom the hostility directed at “extramundane subjects”, “totalising *métarécits*” and “metaphysical hoaxes” and the insistence on replacing them with “emptiness” or “unmarked space” (LUHMANN 1998: 27 & *passim*) reflects a fear that Religion could again become an arbiter in matters of concern to Global Society and lead the way in making progress on them.

Can “Religion” help with Global Society’s Man-Nature Communication Crisis and if so in what role and at what cost?

Obviously our own reasons for suggesting that a “function system” *like* “Religion” should be given some sort of *droit de cité* in the matters presently under consideration have nothing to do with the idea that “men of the cloth” ought to assume a “leadership” role in Global Society. We have already recognised the legitimacy of the reserves expressed by the defenders of Post-rationalism about hegemonic theologico-religious *métarécits* and we have no intention of going back on those reservations. Besides, contesting *any* acceptance of Rationalism in the name of *any* acceptance of Religion would be tantamount to engaging in the dualistic mode of reasoning we have already denounced as sterile and circular. Finally, it has been known for some time that a religious “search for supernatural being can easily become an endeavour hostile to man and environment” (NAESS 1989: 190; FOLTZ 2014: 203-14). So, *in fine*, claims on behalf of theistic supernaturalism as trivial as those that Richard Dawkins, Daniel Dennett, Richard Rorty or Christopher Hitchens make against it have nothing to do with our reasons for suggesting Religion could be useful as a resource for addressing Global Society’s communication emergency. In fact, all that justifies giving Religion a *droit de cité* in the matters presently under consideration are two arguments we think any reasonable Post-rationalist would recognise as legitimate. *First* we need to recognise that among the many consequences of man-made degradation of the natural environment is the need to reassess what it means to be “rational”

and “irrational” by accepting that some of the things we had hitherto deemed to be “extra-rational” or “less than rational” may now no longer deserve such an assessment. *Second*, we need to recognise that Religion—or some “function system” analogous to it—may not merely belong to the category of things meriting such a reassessment but may even be a *prerequisite* for dealing *intelligently* with the problems entailed by our poor relations with Nature and, more generally, with our non-human Other. At least this would be the case if we accept (i) that it is “rational” to favour any initiative which facilitates communication and dialogue between Man and Nature, (ii) that such an aspiration is facilitated by postulating some sort of “transcendental agency” or “platform” to mediate between Man and Nature and, finally, (iii) that no “function system” is as suited as Religion for theorising about the *modus operandi* of the transcendental mediating resource that Global Society needs.

However, simply getting “Religion” to help Global Society by offering the latter this sort of speculative handiwork cannot be an end in itself if it is to secure *all* the results it is enrolled to assure. For far more is at stake than merely helping European Rationality or Post-rationality out of the speculative impasses they are powerless to deal with themselves. Nor is it enough simply to convince humankind that its *Lebenswelt* is more and other than a “speciesist”, inter-subjectively grounded, semiosphere and that it fails to accept this at its peril. Ultimately what is required is *a transformation of perceptions, cognition, attitudes, aspirations and behaviour on the scale of a species*. So if we want *that*, the role “Religion” plays as a resource for helping us to interface and communicate more “sustainably” with Nature cannot be disjoined from more mundane, “average everyday” concerns and pursuits. More to the point, Religion has to be useful for transforming the intelligence we gain from improved communication with Nature into applications whose net result would be to end habits and attitudes which are destructive by making us see that a “sustainable” *entente cordiale* between Global Society and Nature is something *valuable, desirable and rewarding*. To be sure this happens, ethical arguments, consequentialist casuistry, soteriological enticements and other specifically “religious” ways of exercising influence can play a useful role. But by themselves they are not enough. Humankind’s *appetites, volition and egoism too must be harnessed to the goal of “doing the right thing”* because doing the right thing gratifies the doers’ “pleasure principle”.

So how can we do this? How can we make Global Society see Religion as valuable because it constitutes a speculative, ethical, aesthetic and *practical* resource Global humanity can use in effectively addressing its communication emergency? Faced with similar questions others have

invoked the theories of earlier thinkers who involved religious or quasi-religious speculation in the attempt to create an *entente cordiale* with Nature. Particularly inspiring are recent studies by Akeel Bilgrami on John Toland's "rational hermeticism" in *Pantheisticon* and by Elaine Miller on Schelling's *Ideas for a Philosophy of Nature*⁸. Numerous works on a variety of other "romantic" thinkers and artists, notably Friedrich Hölderlin, would also merit mention here. But while we admire these efforts, and will attempt something similar ourselves, we will nonetheless try to avoid a pitfall that none of the foregoing quite escape. This pitfall lies in articulating the mediating rôle they give Religion in terms of an opposition – avowed or tacit – to Reason and, more commonly, Science. For the reasons we developed above, we are convinced that this sort of antagonism leads nowhere.

But, in the end, can such a dispute be avoided? Can Religion be involved, either as a "function system" or in any other guise, in the attempt to make progress on *any* issue of concern to contemporary Global Society and not *ipso facto* be in conflict with Reason or Science?

"De-bifurcating" Religion and Reason ... and doing it *viably*

It certainly cannot if we rely exclusively on conceptual, discursive and speculative resources that *foredoom* us to see them as opposed because those resources are congenial to an acceptance of rationality defined by and *founded* upon the requirement that Religion and Science be opposed. And in saying this it is important not to overlook what is implicit in the reference to what "founds" Modern and Post-modern rationality. For the opposition between Religion and Science that all "rational" – and therefore "post-rational" – commentators take for granted is not written in the stars. It is the result of a decision made in the course of the history of Philosophy to split them apart from one another and from the *unitas multiplex* of which they are *membra disjecta*. And the "splitting apart" I refer to here considerably predates the fateful seventeenth century. In fact it coincides with the very birth of philosophy.⁹ This implies that if we want to see them collaborating harmoniously and productively in tandem in making progress on issues of concern to Global Society —be it in regards to communicating with Nature or anything else—we have no choice but to do something "radical". That is to say, we need to

8. Cf., respectively, BILGRAMI 2010: 23-54 and MILLER 2005: 295-316. Cf. also KLINK 1992: 208-9 on the need to pass from an "I – It" to an "I – Thou" mode of communication with Nature.

9. Cf. JAEGER 1980: 204f.; GRAF 1994: 41ff.; DICKIE 2001: 20-21 and GREGORY 2013: 45f. See also MAUSS 1972: 92; ELIADE 1991: 15, 39; SIMONDON 1989; KINGSLEY 1995: 229-32; WHITEHEAD 1920: 16-17, 24.

appeal to the earlier, “pre-philosophical” or “pre-rational” rationality against which *both* the Modernist *and* the Post-modernist rationalities define themselves by rejecting the erstwhile *non-opposition* of Religion and Reason or Religion and Science and preferring instead to see them as permanently at war with one another. But to which “rationality” am I referring? Thinking very much along the lines of Mircea Eliade, Gilbert Simondon, Roy Rappaport and Peter Kingsley I shall refer to this “benchmark” rationality as the “magical worldview”.

The Rationality of the “Magical Worldview” as a model

If there is anything *sui generis* about this wretchedly polythetic notion,¹⁰ it is the way it *federates* Religion and Science by subsuming both in an overarching “cosmonomy” or “cosmodicy” (cf. *infra*) which makes the functions and operations of each dependent on those of the other thereby obliging them to work harmoniously in tandem or fail to be of any use or value to anyone. And the interest of invoking the “magical worldview” in the context of the modern era’s “communication emergency” is not confined only to its utility as a model to emulate in the attempt to reconcile Religion and Science and in so doing make them collaborate in improving Global Society’s relations with the Nature. There is also the fact that “magic” is far less out of place in the contemporary debates than one might suspect. In any event, others see “re-enchantment” or “Neo-Animism” as an antidote for the fact that “the symbols of rational progress that guided the activities of the last few centuries seem to have outlived their utility”.¹¹ Moreover, one cannot but be struck by the propinquity of ancient methods and models for dealing with communication across the Man-Nature divide and the ideas of those who go furthest in trying to advance beyond the sterile “dualistic” or “bi-polar” thinking we analysed above. One thinks in particular of the ideas of Tim Ingold, Andrew Pickering, John Deely, Jesper Hoffmeyer and, considerably earlier, Gregory Bateson.

10. For discussion on the difficulties of imputing to the term “magic” anything approaching a univocal definition, cf. *inter alia* CUNNINGHAM 1999; OTTO & STAUSBERG 2013; HANEGRAAFF 2016: 393f. and DICKIE 2001: 18-19. While we accept the arguments made against Edward Tylor and James Frazer for viewing “magic” as one category in a tripartite taxonomy made complete with the addition of “Religion” and “Science”, we nonetheless maintain that, *at the time and in the culture we will look at*, it is not inappropriate to qualify as “the magical worldview” the rationality from which both Religion and Science evolved and moreover to see it as conforming to three of Hanegraaff’s seven “concepts of magic”, namely: “ancient wisdom”, “natural philosophy and science” and “an enchanted worldview” (cf. HANEGRAAFF 2016: 399).

11. LEE & ACKERMAN 2002: 123 & *passim*. Cf. also MERCHANT 2003: 274, n. 3; HARVEY 2005; INGOLD 2000; INGOLD 2006; HORNBERG 2006; HANEGRAAFF 2012 and ASPREM 2014.

A further reason for seeing a fresh assessment of the “magical worldview” as relevant and useful is to address the view that it cannot serve as a model because it is symptomatic of a “backward”, “barbaric” or “primitive” mentality. One is justified in holding that view if it is based on a *reasoned* assessment of the supposed limits of the “encyclopaedia” whence it issues. One is *not* justified in so doing if such a view reflects deeply entrenched cultural prejudices or ideologically motivated tendentiousness. We raise this point here because there is too little evidence that such a standard of critical rigour is respected by the pundits who express scepticism towards the idea that valuable lessons can be learned from these “primitive encyclopaedias”. That in any event will be central to the case we will make about the use of the latter as models not merely to discuss or assess, but even to emulate in coming to terms with Global Society’s real communication emergency.

To develop all this in the space of one article I will impose certain limitations on my commentary. First I will consider only *one* praxis of magic, namely *incantatory magic*. Second, rather than looking at and inventorizing the multitude of ways incantatory magic was practised across very different cultural contexts, I will refer only to *Hellenic sources and supporting evidence* on incantatory magic (ἐπωδία). Third, I will focus strictly on the “rationality” which “grounded” belief in the efficacy and utility of ἐπωδία and lent a certain unity to the various expressions of its practice. Finally, I will concentrate only on those aspects of incantatory magic which are useful for making the case that the “worldview” in which it played a key “normatising” role is a model we should emulate if we want to address the communication “insufficiency” referred to in our introduction. Specifically, I will look at the following five points:

- (i) why magical rationalism thought Nature had a “voice” and a “language”,
- (ii) the intelligibility peculiar to this language and the way some people engaged in dialogue with the “actants” who spoke it,
- (iii) how those hermeneutists converted the information they gained in this dialogue into a foundation and an operational component of norms and values, tastes and aspirations, ways and means, art and science, etc.,
- (iv) the paradox that the encyclopedia peculiar to this “primitive” rationality was anything but “anthropocratic” but for all that did not entail a debasement of *anthropos*, and, finally,

- (v) why there is nothing farfetched about asking Religion and Science to embrace this rationalism, factor it into their respective acceptations of “progress” and, in tandem, negotiate an *entente cordiale* between Nature and Global Society.

To get our analysis underway, let us consider what specialised studies have to say, first, about the “professionals” the Hellenes of yore depended on to “dialogue” with Nature’s actants and, second, the medium or “communication tools” they used to do this.

Nature’s Oracle: Mapping the *Lebenswelt* in Music and Song

For clarity’s sake, it should be pointed out that the age with which this study is concerned is now commonly referred to as “Song culture”, a way of life that came to an end in archaic Hellas with the adoption of writing¹². In these “preliterate” times the person Hellenic communities relied upon to communicate with Nature was a professional who combined the functions of the priest, the scientist and the artist. Revealingly, this professional was called an *ᾠοδός* or “inspired poet-singer”.¹³ He was given this title because when he dialogued with Nature it was in “music” or “μουσική” that he did so¹⁴. As we shall see repeatedly in the pages to follow, the communication functions assured by this “μουσική” were multiple and their importance incommensurable. It was *as* music that the “inspired” “singing poet” apprehended his environment, *in* music that he encoded or “scored” the intelligence he synthesised from listening to it, *through* this music that he apprised his listeners of this intelligence and *thanks to* this music that his audience received an education (*παιδεία*) and found meaning, purpose and joy in being “ethologically attuned” or “synchronised” to their greater-than-human universe.

12. HERINGTON: 3ff.; KURKE 2000 and FORD 2003, esp. his extremely perceptive remarks on Eric Havelock’s key contribution to the notion.

13. Cf. MASLOV 2009: 17-21 on what separates the “mantic poetics” or “θέσπις ᾠοδὴ” of the “inspired” singer-poet in Song culture both from the non-sacred “lays of mortals” (*κλέα ἀνδρῶν*) and from latter performers of “kitharodic and epic poetry” marked by the use of the dactylic hexameter. This paper is unconcerned with the time when and the reasons why “ᾠοδός” became synonymous with “liar”.

14. On the Indo-European “Poet” cf. HAVELOCK 1963; TOPOROV 1981: 199-200; DETIENNE 1990: 98ff.; CAMPANILE 1987: 26; WATKINS 1995: 69ff. and WEST 2007: 26-45. On the connection between μουσική and the Sacred in archaic Hellenic poetics, cf. KOLLER 1954; GEORGIADIS 1958; SNELL 1960: 87f.; BARMAYER 1968: 55ff.; ROUGET 1990; SEGAL 1998: 10ff.; BENNETT 2016: 6-7 and MASLOV 2016: 427-28. To avoid a long disquisition on when, why and how chanted, musically accompanied verse performances (*ᾠοδὴ*) turned into “recited” poetry (on which GEORGIADIS 1958: 58; JENSEN 1980: 121-22; NAGY 1990: 46), I restrict my remarks to archaic “melic” verse.

To see how “music” or “song” (μολπή, ἀοιδή, μελοποιία) could do all this, let us start by considering how the inspired *aoidós* interfaced with his *Umwelt* in such a way as to “hear” it as a sort of “music” he alone could discern. Here I refer to all the accounts we have of the *aoidós* as someone who was wont to sequester himself under an oak tree in a Dodonian glade or on the barren slopes of mountain Helicon, enter a “theoleptic trance” and whilst “out of his wits” (ἔξω ἑαυτοῦ) hear the otherworldly voices of Muses, Sirens, Nymphs and Pans singing to him through and *as* his natural surroundings¹⁵. What is likely to impress most first-time readers of the relevant passages in Hesiod, Parmenides, Pindar, Plato and the fragments of Sophocles is their unmistakably mystical or “religious” character. Which is understandable given that “divine pilgrimage” (θείων θεωριῶν) is a common way of describing what is happening to inspired *aoidoí* when they are hearing murmuring Muses¹⁶. Similarly, “sacred song” (θεσπιῳδία) was the name of the chanted verse through which the poet informed his public of what he learned from Muses, Sirens and Charites about world-creation.

Still the fact that all this is presented in “religious” terms should not lead us to believe there was nothing “scientific” about it and that engaging in this sort of Science did not entail tangible and decidedly utilitarian applications for the way of life of the communities the Singing-Poet belonged to. One indication that this “θείων θεωριῶν” was an essentially scientific pursuit can be found in the fact that its practitioners were sometimes called “meteorologists” (μετεωρολογικοί)¹⁷. Indeed a form of “Natural Science” (ζήτησις περὶ τοῦ παντὸς φύσεως) consisting of enquiring into “events going on in the celestial vault and in the earth’s vasty deeps” was an integral part of the inspired *aoidós*’s job description¹⁸. And the fact that by the

15. For examples of these “amazing sounds” (θαύματ’ ἀκοῦσαι), cf. Hesiod, *Theogony*, 829-35; Homer, *Od.*, 12.181-200; Pindar, *Pyth.* 1.14-19, *Ol.* 6.62-67; Euripides, *Bacchae*, 1078-79. For commentary, analysis and numerous other references, see DODDS 1951: 117; CLAY 1972; FORD 1992: 180-95; SEGAL 1998: 124-25; COLLINS 1999; HARDIE 2004: 17; STODDARD 2005; GOSLIN. It would lead too far afield to discuss here the distinction that can – and from the “classical” age on should – be made between the inspired “oracle” (μάντις) and the singer (ἀοιδός) who gave musical form to the “theopneustic glossolalia” or “intimations” (σημεῖα) the oracle uttered. Suffice it to say that what we know of “mythical” figures like Orpheus, Musaeus and Tiresias suggests that in “Song culture” the distinction was inessential (cf. JENSEN: 121-22).

16. Here I refer to the “*vorphilosophische Bedeutung des griechischen Wortes theoria*” as a “*Sehen der Prinzipien*” which was inherited and then rationalistically disfigured by Plato and Aristotle into what is now referred to as “βίος θεωρητικός”. For a discussion of the genealogy of the term “θεωρία” and what it was variously interpreted to mean, see CORNFORD 1912: 196-200; JAEGER 1948: 430-432; DODDS 1951: 64ff.; VERNANT 1996: 407-08; BURKERT 1985: 306ff.; RUTHERFORD 2001: 33, 409 and esp. RAUSCH 1982: 47ff. whom I quoted above.

17. “Μετεωρολόγος” was not the only expression used for the practitioners of μετεωρολογία. It is however less negatively connoted than the alternatives, e.g., τερατοσκόπος or χρησμολόγος.

18. “τὰ περὶ τῶν οὐρανίων παθημάτων καὶ περὶ τῶν ἐν Ἄιδου”, PLATO, *Ion*, 531c. See also *Theatetus*, 173e, *Republic*, 596c; HESIOD, *Theogony*, 119, 669; PINDAR, *Nem.*, 10.87sq. SOPHOCLES, *Oedipus Tyrannus*, 300-301 as well as; CORNFORD 1952: 130ff.; JAEGER 1965: 154ff. and VERNANT 1996: 385ff.

fifth century BCE the epithet “μετεωρολόγος” had become a way of showing contempt to anyone who claimed that θεῶν θεωριῶν was a viable way to conduct “Nature study”¹⁹ is no reflection of what was believed in “Song culture”. This becomes evident as soon as we take the risk of taking seriously the earliest attempts we know of to account for “inspiration” in purely “rational” terms.

Prior to considering why the *meteōrologós* needed to be “inspired” or “possessed” to practice “Nature study”, let us remind ourselves – as summarily as we dare – of what counted as “Nature” and “the cosmos” in archaic Song culture.

Poetic “Inspiration” (*enthousiasmos*) and “Nature Study” (*meterorologia*)

This is of course a highly risky undertaking given all the scholarly fire-power marshalled behind the idea that, “there is no such thing as *the* cosmological model or *the* cosmological theory of the Greeks” (LLOYD 1975: 205). Still all the “reasoned account renderings” (λόγον διδόναι) pertaining to cosmopoiesis we know of share an unmistakable family resemblance and few are so fragmentary, elliptic or ambiguous that we cannot discern in them the same basic explanatory model. The point of departure of this cosmopoietic model is what was called “αἰθήρ” or “τὸ αὐτοφυές”, *i.e.*, a self-subsisting, pre-cosmic protoplasm which *qua* pre-cosmic is only potentially any of the qualities, quantities or entities it can be made into²⁰. This picture changes when this basic cosmological model is made complete with the addition of cosmopoietic principles referred to in earlier times as divinities like Zeus and Hestia or Ouranos and Gaia but that I shall call the Sky and the Earth. Their contribution to cosmos creation consists of performing a “sacred marriage” (ἱερὸς γάμος). This consisted of projecting energies at one another from opposite poles of the universe in such a way as to “temper” (πληγή) or “concoct” (πέσσεισθαι) the pre-cosmic *aither* between them into the “complexions” (συμπεπλεγμένα) that adorn the perceptible aspect of the world around us²¹. In the final analysis, this is all anything

19. This comes across forcefully in Aristophanes, *Clouds*, 225f.; Isocrates, *Antidosis*, 261-266 and Plato, *Republic*, 488d-489a. However, compare with *Cratylus*, 401b; *Phaedrus*, 269e-270a and *Laws*, 967d. For commentary, CORNFORD 1952: 23, 131f.; BRISSON 1989: 227-8, n.392 and BRISSON 2000: 141-47.

20. Cf. HEINRICHS 2010: 22 and FERRARI 2008: 5-6 on the use of “αὐτοφυές” as a “conventional” way of referring to an initial, pre-cosmic “πρώτη φύσις πρὸ τῆς οὐρανοῦ γενέσεως”. To this epithet, and to others like it (*e.g.*, χάος, νύξ, τι μεταξύ, χώρα), applies the predicate Theophrastus used to describe Anaximander’s “Boundless”, namely “something whose nature is definable neither qualitatively nor quantitatively” (φύσις ἀόριστος καὶ κατ’ εἶδος καὶ κατὰ μέγεθος).

21. Cf. GILBERT 1907: 28ff.; CORNFORD 1912: 63; FRÄNKEL 1975: 256-7, 389ff. and BETEGH 2014: 165. Knowledgeable readers will know that the use of variants of “σύμπλεξις” to translate “complexity” and the

really is, some sort of substance which is less than physical matter but more than pure void which gets tempered by the *polemos* of the Sky above and the Earth below until it “blisters” and as such a blister yields perceptible complexity²². All this is relevant to the “rumours” or “θαύματ’ ἀκοῦσαι” Oracles and inspired *aoidoi* claimed they heard whilst “out of their wits” (ἔξω ἑαυτοῦ) for what they were “hearing” was the “acoustic signature” of sky and earth energies working in tandem to “temper” an undifferentiated, pre-cosmified “ἀντοφνής” into perceptible “complexity”.

So, what was supposed to credit the idea that an “acoustic signature” can be given to cosmos-creating sky and earth energies? Why did people in Song culture take seriously the idea that “inspired” *meteōrologoi* were able to interface with the natural environment in such a way as to hear creation itself “singing” at them as the voices of Muses and Graces? A convenient way to answer that question is to advert to what specialised studies tell us about the profound difference between the way the average, “abled” percipient interfaces with their sensoria and the way the inspired, “sky-walking” *meteōrologós* does so.

The Psychoacoustics of Inspiration: A Form of Applied “Clairaudience”?

A simple way to describe this key difference would be to say that, in the case of the former, no form of stimulus afforded by the natural environment can cross the threshold of awareness unless at a minimum that stimulus is “co-natured” (συμφύεται) to one or another of its five normal senses. More precisely, the sense generating energies emitted by a potential perceptible have to “fit into” (ἐναρμόττειν) one or another of the percipient’s organs of sense by assuming forms which are commensurate with the “channels” (πόροι) covering their surfaces²³. Only then

“complexions” of various “μετ’ αἰσθήσεως ὄντα” is an Aristotelian choice of word. This is legitimate given that what Aristotle expresses with this sort of terminology is essentially identical to what his predecessors say using other words. A case in point is Columns 14-15 of *The Derveni Papyrus*. Here we find a reference to the birth of Chronos as a by-product of the way Sky and Earth “smite against each other” (κρούεσθαι πρὸς ἄλληλα). But in the same columns it is perfectly clear that *everything* is “born from the sun to the earth because of the way they smite each other”. Similar imagery can be found in numerous other sources, for ex., the “*anakalypsis*” of Gaia that Pherecydes describes in DK7B2, the “impregnation” of “Chthona” in Aeschylus Fr. 25 (Loeb) and Alcman’s cosmogony as per WEST 1967; DETIENNE & VERNANT 1974: 134-35 and FERRARI 2008: 5ff. Hence we do not betray the ideas of earlier cosmologists simply by privileging an Aristotelian choice of words.

22. It is tempting to assume that what Plato says in *Cratylus* 412d-413c about a “τι διεξίόν” which functions as a “δι’ οὗ πάντα τὰ γινόμενα γίνεσθαι” is a more or less fair representation of the activity that *meteōrologoi* claimed they could ‘hear’ while “ἔξω ἑαυτοῦ”.

23. Particularly eloquent on this point is Empedocles DK31B100 & DK31A86. Cf. also Alcmaeon of Croton DK24A5 (= Theophrastus, *De sensu*, 25f.) on the “πόροι δι’ ὧν αἱ αἰσθήσεις”.

and only in this way does the percipient's *Umwelt* yield the complexions and complexity adorning its perceptible exterior.

This contrasts starkly with the way the “inspired” *meteōrologós* or *chrēsmologós* interfaces with his environment whilst in the throes of a theoleptic fit. Indeed, while “ἐξω ἑαυτοῦ” he specifically filters out of his apprehension of his surroundings everything that can be sensed via the channels the rest of us rely on to sense it. However, this does not mean that he thereby stops interfacing with his *Umwelt* or that while doing so he is not perceiving anything. All it means is that he is using another sort of perceptual channel to do so. Channels which allow the inspired *meteōrologós* to, as it were, “sense past” the complexity adorning the perceptible side of his *phaneron* so that he can “auscultate” the way sky and earth energies blend with one another to give perceptible complexions, complexity and cosmos their perceptibility²⁴.

How should we describe this other-than-normal way of interfacing with the natural world and apprehending it in this unusual way? Though the details are vague, the bulk of the extant evidence would suggest that it involved the mastery of certain breath control techniques in which the practitioner tenses his “diaphragm” (*prapides*) in such a way as to transform his lungs into a sort of “resonance chamber” that functioned as a “transducer” for converting normally unsensed circumambient energies into a stimulus the *meteōrologós* actually felt (εἰσκρίνεσθαι) as vibrations in his chest or viscea (σπλάγχνα)²⁵. By focusing his attention *only* on the vibrations in his thorax directly imputable to the blends of sky and earth energies responsible for the “disclosure” (ἀνακάλυψις) of his *Umwelt*, the inspired *meteōrologós* was, in effect, witnessing the drama of “cosmoparturience” at first hand.

But supposing the *meteōrologós* really was able to, so to speak, “tune in to” the *Grundstimmung* of creation and catch *hieros gamos* “in the act”, why did this matter to anyone but the *meteōrologós* himself? The question needs to be asked because the kind of intelligence the inspired *meteōrologós* sourced in this way made them an extremely important asset for his community. So important indeed that he was considered to be a “*maître de la vérité*” and the

24. The ability to do this makes it a perfect example of the “μανία” Plato refers to at *Phaedrus* 265a as “madness arising from a divine release from customary habits”.

25. This, I believe, is what Empedocles refers to in Fr. B5 (“γνῶθι διασηθέντος ἐνὶ σπλάγχνοισι λόγιοι”) while enjoining his listeners to use their “viscera” when attempting to “discriminate” the wisdom of the Muses. See also VERNANT 1996: 124-25, 143; FRANCOIS 1985: 26-31; FRONTISI-DUCROUX 2002: 475-82; KINGSLEY 1999: 109, 130; USTINOVA 2018: 331 and BENNETT *forthcoming*.

entire worldview (ἐγκυκλοπαίδεια) and way of life of his community was organized on the basis of this truth. We see why it made sense to people in Song culture to view things this way when we consider the operative assumption at work in their ideas about the nature of the world they dwelt in.

The Importance of *meteōrología* for the needs of the community

Basically, people then assumed that the world with which they were familiar was contained in a higher order reality whose governing laws they could not discern and which frequently and sometimes decisively interfered in and even controlled the things going on around them in the natural environment as well as through their own bodies and minds²⁶. Understandably, this impression was, in a very real sense, the source of considerable anxiety²⁷. Also understandable is the logic behind the idea that the inspired, *meteōrología*-practicing oracle (ἐνθεος μάντις) was a resource one could use to deal with this manner of apprehension. After all, if the latter's greater-than-normal powers of perception gave them insight (εἰδώς) into the *modus operandi* of these mysterious forces, presumably they had foreknowledge of what the future may hold. Hence anything they could relate about what was presaged by this higher order causation was obviously extremely valuable given that things like health, wealth, security and power were dependent on or controlled by these agencies whose *modus operandi* were inaccessible to them.

All of which raises a key question: how was the inspired *meteōrologós* able to communicate this all-important intelligence to his client community? More than that, how was he able to do so in such a way as to be sure that, as a result, his public ended up being synchronised to the “laws of Nature” or the “χορεία τοῦ ὅλου” and thereby equipped to attain “a life of happiness” (εὐαίωνα διαζῆν) and avoid misfortune (δυστυχία)? Was it via the “prophesies” pronounced by oracles at the local temple? Undoubtedly, just as it was via gnomic “precepts to live one's life by” (ὑποθήκας ὡς χρὴ ζῆν) encoded *sensu allegorico* in so-called “didactic” poetry. So also was the practice of eulogising or stigmatising the exemplars of good or bad behaviour in mythology or history. But only as the “tip of the iceberg” (κορυφή) of a deeper, more pregnant

26. Cf. Hesiod, *Work and Days*, 42; Homer, *Il.* 2.484-487, *Od.*, 18.130-137; *Homeric Hymns to Demeter*, 216-217; Solon, 13.65-66; Aeschylus, *Agamemnon*, 1486-7; Pindar, *Nem.*, 11.44; Sermonides Fr. 1; Simonides, 527; Archilochus Fr. 130; Theognis, 133-36, 1075; Plato, *Statesman*, 274c-d. For commentary and analysis, cf. OTTO 2014; DODDS 1951: 30; WINNINGTON-INGRAM 1980: Ch. 7; VERSNEL 2011: 152-153.

27. VERSNEL: *ibid.*; JOUAN: 11-28; TEDLOCK: 189; EIDINOW: ch. 1.

“ulterior meaning” (σημεία, αἶνος, ὑπόνοια)²⁸. A meaning encoded in music. For as indicated above it was primarily as music that the singer’s public was informed about the “truth” of the world it lived in and to which it needed to be synchronised not merely to deal with “everyday problems” (τὰ περὶ τὸν βίον ἀπορία) but also to attain “the greatest blessing a mortal can hope for”²⁹.

But how? How was music able to mime the dynamics of Nature to which the singer wished to “magically” synchronise his public in their perceptions, desires, doings and being?

Making Cosmopoiesis audible ... and Nature Apocalyptic and Eucharistic

On this matter the challenge is double. It is first to demonstrate that there was a “mimetic”, one-to-one correspondence between (1) particular arrangements of “musically” organised sound on one hand and on the other (2) particular arrangements of cosmic activity. Otherwise, why believe that *mousiké* was a medium one could depend on for communicating meaningfully with the *Umwelt*? The second challenge is to explain how hearing the music that could do this was amenable to engineering an *entente cordiale* between communities of humans and the natural world in whose midst they dwelt.

Clarity on the first point depends on understanding why musical instruments and above all the voices of “inspired” singers were believed to quite literally contain the voices of the Gods. What lent this idea the credence it evidently enjoyed is the “conceit” that the *meteōrologós* – or a *mousopoios* following his instructions – was able to confect “sound statues” (ἀγάλματα φωνήεντα) which were “alive” (ἔμψυχος) with the power of various “spirits” (δαίμονες) and singularly those of the Olympian “θεοὶ οὐράνιοι”. Though the details are sparse and open to various interpretations, it seems certain that the belief in the feasibility of such an enterprise rested upon the notion that there is a mimetic parallel between (1) the way inert air can be agitated by different kinds of friction to generate different kinds of sound and (2) the way pre-cosmic *aithér* gets tempered by different blends of sky and earth energies to synthesise the ever-

28. NAGY 1990: 234-38 on why the surface meaning of words in poetry are only the “culmination” (κορυφή) of deeper, not explicitly expressed meanings (σημεία).

29. “βροτῶν ὄλβον ὑπέρτατον οἱ σχεῖν” (Pindar, *Pythian*, 3.89).

varying complexions and complexity adorning the perceived aspect of our respective sensoria³⁰. On the basis of this parallel – and on the presumption that the *mousopoios* who composed the song had had an actual “epiphanic” encounter with the cosmocratic δαίμων whose spirit his song was supposed to capture – the sounds one was hearing in his performance were the “musical signature” of the forces that power (ἀναπέμπει) the world into its outward appearance.

Needless to say, the modern reader will have difficulty imagining how anyone ever took seriously the idea that a *par analogiam* equivalence between melodically moulded air and mytho-poietic ideas on cosmos as the product of tempered *aithér* justifies the assumption that “sacred song” (θεσπιῳδία) perforce contains the actual presence of the divine. Some may even question the propriety of so much as mentioning this crude fetishism in a scholarly endeavour of any kind. But the limitations imposed upon thinking and judgment by modern standards of analytical and critical rigour is beside the point. For all that matters here is what the archaic Hellenes thought about “sacred song”, and on this matter one thing is clear: For them, the way the inspired, *meteōrología*-practicing singer “fretted” inert air to make it yield the music in his *carmina sacra* was in this very way miming the friction that sky and earth energies exerted on pre-cosmic *aither* to make it into the complexions adorning the world we perceive when we notice what’s going on around us. About this there can be no doubt. Everyone then knew what melody and meter were doing in the sacred song they modulated. They were there to “over-signify” the subject matter sung about in the performance by “epi-phon-ising” what was “God-given” (διδόδοτος, θέοθεν, θεομόριος) about it. Hence, while listening to these instrumentally or vocally vehiculated sounds one was hearing what Ouranos and Gaia *themselves* would say if they had voices and could use those voices to tell their listeners *who* they are, *what* they do, *how* they do it and *that* it is important for the listeners to know what they do given that their “*hieros gamos*” yields not just the world the listeners dwell in but also the latter’s cosmonomically ordained “lot” (μοῖρα) in that world³¹.

Consider this observation which illuminates the oft noted “rapt awe”, “wonder” and “ecstasy” that overcame audiences at performances of *thespiodé*. Mystery cult initiates referred to this experience as an “ὄργια μουσῶν”. What this means is that, thanks to the music accompanying

30. This comes across as well as not in Plato’s *Cratylus*, 426b-427d and in the sources analyzed by KOLLER 1954 and GEORGIADIS 1958.

31. More on which, cf. KOLLER 1954: 119 & *passim*; BARMAYER: 55ff.; WEST 1967: 13; BORGEAUD: 135; FRANKLIN: *passim*; SEGAL 1998: 10ff.; LONSDALE: 52-56; GADAMER: 47; HARDIE: 22-25.

the performance of sacred song, the listeners apprehended the object of the song as though it was effervescing with the “God-given glory” (αἴγλα διόσδοτος) of the cosmos-synthesising dynamic that deposits it into its normal, average everyday familiarity. More than that, the whole world is experienced as a “gift from the Gods” (παρὰ θεῶν δῶρα) peopled entirely by creatures not alone radiating “sacral lustre” (ἐνάργεια) as though on fire with the power of the Gods that fuel their Being-there but also singing to the audience with the voice of the Muses and Graces about who they *truly* are³². Little wonder therefore that commentators see sense in speaking of the “delight” (τέρψις) induced by music as a “drug” (φάρμακον) whose euphoriant properties were, it seems, highly addictive³³.

So much, then, for what made “music” a means for giving the *Umwelt* a voice and a language and therefore a way to communicate intelligence about itself to the community the inspired singer performed to. What it was composed and performed to “mime” was the existence-creating, existence-sustaining forces at work in, through and *as* the natural environment and *as* each of its multitudinous “creatures of a day” (ἐπάμεροι).

But if this semiotic “conceit” confers some sort of credibility upon the claim that melody and rhythm gave inspired *aoidoi* the means to “epi-phon-ise” complexity and its constituent complexions “to the power of their cosmopoietic significance” (κατὰ τὴν τοῦ θεοῦ ἐνέργειαν), how does this give the performer the ability to practice “incantatory magic”? The question is important because by all accounts his sacred, musically accompanied song (ἐνθεοὶ ἐπῳδαί) was “psychagogic”. In other words, it had the power to “charm” or “hypnotise” its audience into an inability to resist doing and being what the song was composed and performed to *make* them do and be, namely “passions” or “replicants” of the cosmic order (“ζυνακολουθοῦντα τῷ τοῦ παντὸς παθήματι”). So, again, what makes this singing “psychagogic”?

To answer this question, let us start by determining what in Song culture counted as *authorised* praxes of magic and do so by comparing it with the “Goetic theurgy” (γοητεία, ἀγύρτεια) that replaced it during the fifth century.

32. NIETZSCHE: 127f.; HAVELOCK 1963: 155f; SNELL 1960: 86f.; SEGAL: *ibid.*; FERRARI 2008: 108-118 and PEPONI 2012: 89ff.

33. Homer, *Od.* 12.36-54; Plato, *Phaedrus*, 259b-d; Gorgias, *Encomium of Helen*, §14 and DICKIE 2001: 16.

What characterised archaic “Incantatory Magic” (ἐπωδή) and what did Music have to do with its efficacy?

By all accounts Goetic theurgy involved fraud and manipulating the gullible out of pure pecuniary self-gain. It also rested on the conceit that the theurgist could alter the laws of Nature just to suit the caprices of his clients³⁴. The incantations administered by the singers of sacred song were entirely different. The object of their magical “ἐνθεοὶ ἐπωδαί” was not the laws of Nature. It could not be. The physics of such an aspiration were self-evidently impossible and the intention immoral and blasphemous. Hence *the object of enchantment and its magical powers was the singer’s audience*. In other words, and more to the point, the authorised singer’s goal was to acoustically massage his listeners into a susceptibility to accept and collaborate *willingly* and even *joyfully* in realising the “fate” (μοῖρα, αἶσα, ἧθος) that was destined to be theirs because “Necessity” (Ἀνάγκη), Themis and her daughters the “Fates” (Μοῖραι) would have it no other way³⁵. That in any event is clear in numerous passages of the Platonic dialogues devoted to “the nature of incantatory magic” (περὶ τῆς ἐπωδῆς τὴν δύναμιν)³⁶.

The “rationality” governing the belief in the efficacy, utility and value of incantatory magic is compelling. The key assumption at work in it was that everything in the universe was subject to a *cosmodicy*. This means that, everything had a cosm(odict)ically ordained time, place, nature and destiny which was “appropriate” (εὐήθης, ἐναΐσιμος, θέσμιος, σὺν δίκῃ, εὖ κατὰ κόσμον) for it to occupy because doing so was compatible with the cosm(odict)ically ordained time, place, nature and destiny it was “appropriate” for the people and things around it to occupy³⁷. From this assumption the conclusion was drawn that it was in humankind’s interest to

34. Hippocrates, *The Sacred Disease*, I, 2-6. Comp. Plato *Republic*, 364b-e & *Laws*, 933a-d. For commentary on the corruption of magical practices during the fifth century BCE and the growing disrepute of their officiants, OTTO 2014: 23; BURKERT 1985: 188; GRAF 1994: 41-45 and DICKIE 2001: 38-39, 61-63.

35. Cf. Pindar, *Pyth.*, 8.77-78 and Plato, *Laws*, 905a. For commentary cf. KOLLER 1954: 183ff.; OTTO 2014; RAUSCH: 21; HAVELOCK 1963: 150-159; WINNINGTON-INGRAM 1980: 154ff.; GENTILI 1988: 55; WALSH 1984: 46-47, 57 and ROUGET: 372-386.

36. *Charmides*, 156b-157b. Comp. *Symposium*, 187a-e; *Republic*, 401d and *Laws*, 903bc.

37. HARRISON 1912: 517, 521ff. Cf. also JAEGER 1965: 323 (on Solon Fr. 13); VERNANT 1996: 235; GENTILI 1988: 44 (on Anaximander DK12B1); WINNINGTON-INGRAM 1980: 169 (on Sophocles, *Antigone*, 456f.); FRÄNKEL 1975: 131, n.32 (on Hesiod, *WD* 225-47 and *Theogony*, 901-3), 256-7, 389ff. (on Heraclitus DK22B114) and VERSNEL 2011: 155-56 (on Homer, Hesiod, Archilochus and Theognis). On the expression “εὐήθεια” as we are using it here, *i.e.*, in its original, “etymological” sense and as a near synonym of “δικαιοσύνη” or “μετριοπάθεια”, cf. *Republic*, 343c, 348c, 400e and *Laws*, 679c.

understand and accept this basic fact and to act accordingly³⁸. So, to the extent that “inspired” *aoidoi* knew how to do this *and* were able to “enchant” or “bewitch” (ἐθελξε, ἔτερψε, ἐφαρμάκευσαν) their audiences into making the cosmically prescribed adjustment, those artists were practicing magic or, to be precise, “sympathetic magic”.

But, once again, what property of the inspired singer’s sacred song gave him the power to “enchant” or “hypnotise” his listeners into doing and being what he told them it was “good” or “right” for them to do and be? To answer that question, we need to take a closer look at the capacity of the music in melic verse to be not merely “wonder-inspiring” but also “euphoriant”.

The Role of Delight (τέρψις) and Elation (εὐφροσύνη) in Musically administered Incantatory Magic

The point of departure for any treatment of this matter is the pleasure (τέρψις, ἡδονή, χάρις) and desire (ἵμερος) that music aroused in its public³⁹. Not because “enchantment” (θελκτήρια) could not be induced without pleasure. Indeed sometimes it was the product of unbearably distressing sensations and emotions⁴⁰. Moreover, not all forms of musically administered pleasure were conducive to restoring a “synchronicity” between listeners and their *Umwelt* that was so important in the praxis of sacred “ἔνθεοι ἐπωδαί”. In fact, it seems that there was only one kind of pleasure that could do that, the one called “*euphrosyne*” after the Charites epithetically referred to as “music-loving Euphrosyna” (φιλησίμολπέ Εὐφροσύνα). In any event this is something that comes across unmistakably in those passages of Plato dialogues where their author explains its etymology. There we are informed that *euphrosyne* derives from “εὐ-φερο-σύνη” which initially meant “the pleasure one feels by moving along harmoniously with things”⁴¹. What kind of “things” (πράγματα) had to be “harmoniously moved along with” for

38. Cf. for example, Heraclitus DK22B112. It is interesting that in Hippocrates’s *On Airs, Waters, Places* §24 it is not merely assumed that mortal inhabitants will become what the character of their natural environment requires they become, there is even a suggestion that it is *good* for them that they turn out this way.

39. For the main references on this point, cf. WALSH 1984: 24-5; HALLIWELL 2011: 46ff. and PEPONI 2012: 76. For their utility as a means of persuasion and constraint, cf. *Homeric Hymn to Aphrodite*, 2-5; *Od.* 10.212ff., 12.36-54, 181-200; Pindar, *Olympian*, 14.8-10; Gorgias, *Encomium of Helen*, §9; Plato, *Cratylus*, 403c, *Symposium*, 186a and *Phaedrus*, 259b-d.

40. Cf. Homer *Il.* 24.719-776; Gorgias, *Encomium of Helen*, §9 and Plato, *Ion* 535c-e. For commentary, cf. WALSH 1984: 4-5 on *Od.* 8.523-30; FORD 1992: 184-88; HALLIWELL 2011: 64-67 on *Od.* 24.58-62 and PEPONI 2012: 30-32 on *Od.* 1.325-44.

41. “τοῦ εὖ τοῖς πράγμασι τὴν ψυχὴν ξυμφέρεισθαι”, *Cratylus*, 419d. Comp. *Timaeus*, 47c-e, 80b, *Laws*, 790d-791b and *Statesman*, 274a-d. The epithets used by Pindar in *Olympian*, 14.8-15 while referring the

the mover to experience permitted εὐφ(ε)ροσύνη? The answer Plato supplies in the *Timaeus* is “αἱ τοῦ πάντος κινήσεις”. What this means is that licit εὐφροσύνη results when our minds and bodies “kinaesthetically” mime the “movement which governs the whole universe” and moreover does so to the fullest extent possible.⁴² Why this is an adjuvant of a harmonious Man-Nature relationship speaks for itself. For when and because this sort of “moving” happens, the mover is *necessitated* to a mode of Being and behaving that is “meet” (θέσμιος) because he or she is participating actively, voluntarily and joyously in a “lot” (μοῖρα) that has the blessing of Ouranos and Gaia, of their daughter Themis, of her daughters the Fates and ultimately of creation itself.

Obviously it would be unwise to overlook everything that separates what Plato took these κινήσεις to mean from what they were taken to mean by ἐπωδοί in Song culture for they are significant. For example Plato – like the fifth century Pythagorean *mathematikoi* to whom he was deeply indebted – associated the κινήσεις τοῦ πάντος very narrowly with “τὰ κατ’ οὐρανὸν φερόμενα”⁴³. In other words, music was conducive to “well-being” and “noble pleasure” when it mimed the movements of purely astral agencies interacting with other purely astral agencies⁴⁴. For the archaic practitioners of incantatory magic on the other hand, the κινήσεις τοῦ πάντος that needed to be mimed to induce εὐφρ(ε)οσύνη were energies descending from “above” (ἄνω) blending with energies rising from “below” (κάτω) to yield the “disclosure” (ἀνακάλυψις) of what we face and are faced by when we notice “in-der-Welt-sein”. In addition, for Plato εὐφροσύνη was the product of purely “intellectual” pursuits involving no contact or fusion with the sacred whereas prior to that there is little evidence of *frilosité* about the idea of communing “orgiastically” with the Immortal⁴⁵.

Still this manner of difference does not alter the fact that for Plato, for the Pythagoreans and for archaic ἐπωδοί alike, musically vehiculated τέρψις, εὐφροσύνη and θελκτήρια were

cosmopoietic functions of “φιλησίμολπέ Εὐφροσύνα” substantially corroborate Plato’s interpretation in these passages.

42. *Timaeus*, 90cd, comp. *Statesman*, 274d and *Laws*, 904c-d. Cf. also SEGAL 1998: 17 as well as FERRARI 2008: 115ff. on the way εὐφροσύνη was orchestrated, enacted and assimilated and HALLIWELL 2011: 259 on how musically induced εὐφροσύνη foregrounds the latter notion of “catharsis”.

43. Cf. *Laws*, 967c, *Timaeus*, 47c ff. *Rep.*, 508d, 518c, 526e, 532cd and *Epinomis*, 977ab, 991b-e. For the controversy over how to interpret Aristotle’s reading of ‘Pythagorean’ cosmology and astronomy in *De Caelo* 293b2–30, cf. BURKERT 1972: 336–48; KINGSLEY 1995: 175–80 and HUFFMAN 2016: §§4.1–4.2.

44. Cf. *Timaeus*, 90a, *Laws*, 967de, *Rep.*, 616c–617d, Aristotle, *Metaphysics*, XII, viii and *Physics*, VIII, vi.

45. BOYANCÉ 1936: 45ff.; CORNFORD 1974: 141; BURKERT 1985: 336–37; VERNANT 1996: 157, 341f.; HARDIE 2004: 19–21 and PEPONI: 70ff.

administered to produce the same result. This would “hypnotise” the listener into a restorative “ethological attunement” (ἡθῶν ἐπανόρθωσις, νόον μεταστρέφειν, ἀποκατάστασις) by making the intoxicating, quasi-erotic pleasure of moving “kinaesthetically” to the “sweet sounds” of melic verse a means to synchronise them to the agency or “κοσμοποιητική δύναμις” of which both their world and their being in it are bye-products. About this there can be doubt. For to the extent that the melodies and meter used in melic verse were audible *mimemata* of a κοσμοποιητική δύναμις at work in, through and *as* the *Umwelt*, one could not want to “move to the tune” of the “sweet sounds” modulated by them without *ipso facto* wanting to move to the tune of creation itself.

But melopoeically administered incantatory magic was not just about making the audience move “kinaesthetically” and therefore “unconsciously” to the tune of cosmopoiesis simply because doing so was too pleasant to resist. It was also about “ἔννοιαν ἐμποιεῖν”, *i.e.*, getting listeners to *know that* this was happening, to *know why* it was important to be harmonised this way and to *know how* to participate in cultivating, diversifying and perpetuating the kinds of felicity one was promised by being harmonised to the all-orchestrating “blessed ballet of the Muses” (εὐδαίμονι χορεία Μουσῶν). Attaining felicity like this required that the audience receive an “upbringing” (παιδεία) whose impact was to “bewitch” their affective, conative and cognitive faculties just as much as their “pleasure principle”⁴⁶. More than that, the ethos that music “kinaesthetically” instilled in them had to be engineered into way and means, norms and values, finalities and modalities compliance with which *necessitated* them to behaving and being in a way that was “fitting” (θέσμιος, σὺν δίκῃ, εὔ κατὰ κόσμον).

This is what we see when we look at the way the archaic Hellenes conducted their day-to-day existence. In effect, the “enchanted” worldview instilled in them via their “musical upbringing” was mobilised and “operationalised” in virtually everything they did. Not because it was the inspired singer’s goal to “micro-manage” their private affairs. That was not possible. And yet it cannot be denied that the melopoeically vehiculated “meta-message” (ὑπόνοια, αἶνος) propagated enchantingly via “sacred song” nonetheless profoundly influenced the practice of every occupation, vocation and calling for the entire *paideia*. This is so because its influence

46. This is why “being educated” and “being musical” were then considered to be synonymous (cf. PLATO, *Protagoras*, 326ab, *Timaeus*, 80b, *Republic*, 376e, 401d and *Laws*, 654a-d, 672e, 666d). For discussion and commentary, see MARROU 1948: 43, 76, KOLLER 1963: 86-95 & MURRAY & WILSON 2004: 15, 22, 184, 365ff.

was not “instructional”. It was “epideictic” or “parainetic”. In other words, both through words and “music” it set forth broad normatising guidelines or paradigms that had to be respected in the way one pursued one’s *pragmateia* to be sure that it was “done the right way” (σὺν κόσμῳ, ἐναίσιμος, ἐν τῷ δεόντι παραγιγνέται)⁴⁷.

To form an idea of how this worked in practice, let us restrict ourselves to the one pursuit which is the most relevant to the subject of this paper which is, let us recall, an attempt to see how the incantatory magic propagated through “Song” fostered an *entente cordiale* with Nature and why for this reason it should be considered an “eco-communicological” resource contemporary Global society ought to consider emulating and operationalizing. The area of activity which best helps us see how ἐπιδή is relevant and useful for that is “χειροτέχνη” or “κατὰ τέχνην ποίησις”, i.e., “applied science” and “technology”.

The “Technological” and “Industrial” Impacts of ἔνθεος ἐπιδής

Because of an essentially “animist” or “panzoist” mentality which maintains that everything that exists is alive and therefore “besouled”, technology could not be licit except where its “raw material” was “sourced” and interacted with on an “I-Thou” basis⁴⁸. To respect this limitation and yet withal interact with the *Umwelt* for productivistic and consumeristic purposes the Hellenes of Song culture resorted to a canny expedient: *they replicated the ingenuity (εὐμηχανική) that produced the cosmos in the technologies they utilised to interact productively with the Umwelt in order to satisfy mortal needs and desires*⁴⁹. As a result, the mortal artificer (δημιουργός) was in a relationship with the immortal “Thou” he sourced that Jacques Ellul called an “*éthique technicienne de la non-puissance*” and Martin Heidegger a productive “Co-letting-Be-together” (*Zusammengehörenlassen*)⁵⁰. In other words, in plying his trade the “cunning artificer” (ἔντεχνος δημιουργός) did not “do” anything to the “Thou” he sourced that

47. On “epideictic discourse”, cf. WALKER 2000: 10ff. and on “parainetics”, FORD 1992: 30f. and WALKER 2011: 94-106. For the way Song mediated parainetic paradigms that were replicable in various ways to deal with everyday affairs, cf. BURCKHARDT 2002: 162; WALSH 1984: 43-48, 55 (on Pindar); SEGAL 1998: 54-55; GENTILI 1988: 73, 86-87 (on Alcman, Sappho and the *Homeric Hymns*); NAGY 1996: 57-58 and FOLEY 1991: 7ff.

48. Though contemporary discussion about this feature of early Hellenic *paideia* tends to get lost under all the ways it is interpreted by experts (cf. HEINRICH 2010: 22ff. on Thales’ emblematic “θεῶν πλήρη πάντα”), it seems fair to say that few would question the appropriateness of the qualifier “animistic” in referring to the “archaic” Hellenic Worldview (cf. COLLINS 2008: 31-33).

49. SOLMSEN 1963; HEIDEGGER 1989: 97 and VERNANT 1996: 305; BENNETT 2015: 59f.

50. HEIDEGGER 1959: 58-59 and ELLUL 1983: 14ff.

this latter had to be coerced or bullied into being or doing to be useful to mortals. Instead the artisan allowed the “living”, “besouled” raw material he sourced be what it is, the way *it* chose to be and merely assisted it to be (a) what it is the way it wanted to be and at the same time (b) useful for human purposes. Moreover, he did this without his “assistance” in any way amounting to an obfuscation of what was “God-given” about his raw material. To the contrary, the goal was to *highlight* the divinity (ἀγλαία) of the artefact (χειροτέχνημα) he crafted by showing how it was “alive” with the “sacred giving” that gave it the “raw material” the artisan had “artefactualised”⁵¹. Hence, whatever product of early Hellenic technology and industry one may choose to speak of, be it a shoe or a ship, a temple or a stool, we can be certain that, in so far as they had any right to be considered cosmodictically consecrated, we have to do with instances of the way the Mortal and the Immortal were co-orchestrated in such a way as to produce a “gift from the Gods” (παρὰ θεῶν δῶρα)⁵². Not because anyone thought the artisan who *appeared* to be doing all the work in fact was not “doing” anything. Only because no one believed he was doing his job “the right way” unless what he produced was “sourced” in such a way as to make the result seem to be a “living” gift from the sacred⁵³. All of which is relevant to this paper because it testifies to a technological and industrial *modus operandi* which was so environmentally responsible that it quite literally revered the raw materials it sourced.

Were one to inquire into why observance of this “I-Thou” relationship had the binding effect upon artisans that it evidently enjoyed, one would quickly and easily identify pressures which look prescriptive and injunctive. For every craft had its appointed tutelary divinity (χειρῶναξ) and the role played by the latter in the craftsmen’s guilds over whom they presided was not merely ceremonial or honorary. It was to ensure the observance of tradition consecrated, cosmodictically mandatory norms and rules. And unquestionably part of the reason

51. VERNANT 1996 : 302ff. illustrates this aspect of ancient craftsmanship by comparing the social status of the artisan in the archaic age with what it became when “*la technè s’est libérée du magique et du religieux*”. The most important consequence of the “*laïcisation des métiers*” that followed was a “*dépréciation du statut artisanal*” (p. 318). According to Vernant this is because the value the craftsman added to his workmanship by his ability to infuse it with a sacral essence (cf. GERNET 1995: 170ff.) was definitively lost. From then on the only worth his productivity could have was its utilitarian and commercial value (p. 318-19).

52. FRONTISI-DUCROUX 2002: 469-72. Cf. also Plato, *Statesman* 274cd, *Symposium*, 197ab and *Ion*, 537c on the origin of the *technai* as “παρὰ θεῶν δῶρα” and *Laws*, 771ab on the importance of making the sacred the organising principle of *all* norms and laws.

53. S.F. Jims’s study of “first-fruits” (*aparchai*) sacrifices to various Gods illustrates how important it was for the Hellenes of earlier times to express gratitude to the living forces of Nature even when the benefits for which one made the sacrifice were entirely the result of human effort and ingenuity (JIM 2014: 133-149). The only meaning that can be attributed to this practice is that mortal artisans recognised that, *because of the way they sourced the artefacts ‘they’ produced*, the result is always ultimately a gift from the sacred and that it was indecent not to acknowledge this gift by sharing with the Gods some of the bounty the latter bestowed.

practitioners took these norms seriously was a fear that not doing so entailed the wrath and retribution of the Erinyes ever ready to punish anyone who transgressed the cosmic “χορεία” presided over by Themis, the Moirae, the Heures, the Charites and a host of other “*Augenblicksgötter*” (VERNANT 1996: 318; DETIENNE & VERNANT: 1974: 105-6, 186n.49).

However, as great an error as it would be to overlook or underestimate the injunctive pressures this placed upon conscientious craftsmen, a far greater error would be to ignore the efficacy of “enchanting” incantatory magic as a catalyst in getting Hellenic *homo faber* in Song culture to interact on an “I-Thou” basis with the living environment in whose midst he dwelt. Not just because the “music” used to practice ἐπωδή was quite literally the very voice of the Immortal “Thou” that craftsmen, and indeed all of Hellenic humanity, were expected to heed and venerate. Nor because this “music” encoded and epi-phonised a “σημεία” that functioned as a “keynote meaning” or “*Grundstimmung*” for all the supplementary meanings that had to be grafted onto it to make it pertinent and useful for a host of average everyday pursuits (πραγματεία). Also, and above all, because the hypnosis it was practiced to administer subserved a single goal: representing world-disclosive, world-forming cosmopoeitic activity in melodised tones and metered rhythms and making listeners *want* to move in harmony to their tune because the delight (τέρψις) and enchantment (θελκτήρια) they felt – or were promised to feel – by doing so was too enjoyable to resist.

This, as we saw above, was essential for attaining that “ethological attunement” (ἡθῶν ἐπανόρθωσις, νόον μεταστρέφειν, “ἀποκατάστασις”) that constituted the root for all the virtues the Hellenes of Song culture were supposed to aspire to and exemplify. It was a question of coaxing folks away from one *habitus* and towards another. Away from a natural penchant for excess or deficiency *with respect to what it is salutary for the kosmos for men and societies to be* and towards a mode of Being which was ethologically “appropriate” (εὐήθης) for men and societies to observe because the *habitus* they were enchanted into occupying was the one *it was good for the kosmos for them to occupy*⁵⁴. That is why ἐπωδή was no more about pandering to seekers of “pleasure for pleasure’s sake” than it was about attempting to coerce listeners into doing or behaving in any particular way. For in the final analysis all it aimed at was to harness mortal appetite and volition to the goal of finding *delight* in occupying a cosmically ordained time, place, nature and destiny which was “ethologically appropriate” to occupy because doing

54. Plato, *Charmides*, 156b-157b; *Laws*, 903bc and *Statesman*, 274a-d.

so was compatible with the cosmically ordained time, place, nature and destiny it was “appropriate” for the people and things around one to occupy and enjoy occupying. The ability of the singers of “sacred song” to bring about this sort of attunement is what made their art “magical”.

But does this mean withal that it is or could be a normatising “communicological” resource contemporary Global society ought to consider adopting to negotiate an *entente cordiale* with the living *Umwelt* we dwell in? The answer I offer to that question follows a reminder of the main argument of this paper.

Recapitulation and Concluding Remarks

Troubled by the consequences of Global Society’s inability to engineer a sustainable *modus vivendi* with the planet it inhabits, we asked if part of the solution might not lie in the conception and operationalisation of a “function system” specifically designed to negotiate an *entente cordiale* with our more-than-human *Lebenswelt*. We considered the communication strategies premised by the tenets of “constructivism” and “realism” and saw that they lead nowhere, as do those wrought of “consilient” syntheses of these two approaches. We therefore proposed something “radical”. We suggested that a model to follow to deal with the communication challenge at issue might be found in the “magical worldview” which we defined as a “pre-rational rationality” against which both the “Modernist” and the “Post-modernist” rationalities define themselves in the way they forswear any mediating role for a “transcendental agency” acting as a go-between the human and non-human worlds. To keep our considerations within manageable limits we confined ourselves only to “incantatory magic” in archaic Greece, focusing in particular on those aspects which illustrated how it facilitated dialogue between humankind and its non-human Other. We saw that the “music” composed and performed by “inspired poet-singers” (ἐνθεοὶ ἀοιδοί, μουσοποιοί) played a key role in this dialogue. This was achieved first by giving a voice and a language to the astro-meteoro-hydro-geological realities of the place where the client community dwelt, second making the intelligence related through this language a source code out of which the community synthesised its “encyclopaedia” and organised the totality of the ways it interfaced with the world and, finally, by using the enchantment of hearing it a means to instil in the listener a desire to observe modes of perceiving, desiring, thinking and behaving whose net effect was to foster an “ethological attunement” between the community and the natural environment. So is this communicational

model amenable to applications that are relevant to contemporary Global society's communication needs?

At first sight the idea might strike some as something of a joke and even a provocation. After all, doesn't the *modus vivendi* of the "magical worldview" boil down to an infringement of the "dignity" of humankind? Indeed, is it not a way of reducing it to servitude by hypnotically dispossessing human beings of their "critical" faculties and their "free will"? And what about the concerns raised by those who warn us about the "socially reactionary" nature of "traditional" worldviews?⁵⁵ Is it not to be feared that the *paideia* we just looked at was in some sense an elaborate hoax stage-managed by the intolerably cynical to deceive and despoil the pathetically gullible?

Admittedly, it could well seem that way. But besides being anachronistic, these objections are countered by at least two substantial arguments. First, at the time and in the culture we are concerned with, the goal of this way of co-existing with the more-than-human universe had nothing to do with disserving or impugning anyone, and those who best know the history of the period insist on it.⁵⁶ Instead the goal was to submit *both* Man *and* his non-human Other to a "cosmodicy" whose existence and operations were postulated to *make facilitating the felicity of Man a function of facilitating the felicity of Other-than-Man*. Hence as this felicity was reciprocal or "*do ut des*", the belittling or servitude of Man by Non-Man or Non-Man by Man was in no wise implied. And this is pertinent to the second argument which is that there was nothing anti- or less-than-"anthropological" about this *modus vivendi*. In fact, in a sense, it was a way of being "anthropocentric" *as efficaciously as possible*. For that is all one does when one makes sure that humanity's dependence on Nature operates *in favour* of humanity's felicity by making that felicity a by-product of a relationship to Nature which respects rather than exploits it. This remark brings us to the final point I want to make in this paper. This is that there is nothing farfetched about expecting Religion and Science to embrace this "rationalism" and factor it into their respective acceptations of "progress" so that they can, in tandem, negotiate an *entente cordiale* between Nature and Global Society. And in support of this claim I will not adduce the proof provided by the success of "primitive" societies from time immemorial in

55. See, *inter alia*, BLOCH 1975.

56. Against those who complain about the socially conservative and repressive nature of the traditional lore transmitted in mythology, see JAEGER 1965: 58; FINNEGAN 1977: 212-13, 242-43; GENTILI 1988: 109; WALKER 2000: 12-13 and GARCIA 2002: 49-50.

utilizing it and making it the basis of their values and norms, their principles and practices, their Science and Technology, their morality and spirituality and their Being and Doing. Instead of arguing that this manner of co-existing with Humankind's Other is altogether rational and tenable, I will suggest that all that is irrational and untenable for Global Society today is the choice of *not* emulating it.

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