

# Does Asymmetric Signification Rely on Conventional Rules? Two Answers from Ancient Indian and Greek Sources\*

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*The topic of asymmetry between the semantic and the phono-morphological levels of language emerges very early in Indian technical and speculative reflections as it also does in pre-socratic Greek thought. A well established relation between words and the objects they denote (the so-called one-to-one principle of correspondence) seems to have been presupposed for each analysis of the signification long before its earliest statement.*

*The present paper aims at shedding light on two different patterns of tackling the mentioned problem. The first approach sees asymmetry as an exception to the regular correspondence between language and reality, whereas the second approach considers language in itself as a conceptualisation which does not faithfully represent reality. In the latter case, asymmetry is no longer an exception, but the rule.*

**Keywords:** ancient Greek speculation on language; ancient Indian linguistics; language as a means of knowledge; linguistic asymmetry; paronymologies; polysemy; synonymy; substitution

## 1 Introduction: the Alleged Symmetry between Words and Objects

The present joint paper focuses on the topic of asymmetry between the semantic and the phono-morphological levels of language which emerges very early on in Indian technical and speculative reflections, as it also does in pre-socratic Greek thought. Our shared research aims at shedding light on two different patterns of explaining such a linguistic phenomenon. The first approach sees asymmetry as an exception to the regular correspondence between language and reality, whereas the second approach considers language itself as a conceptualization that does not faithfully represent reality, and hence, asymmetry is no longer an exception, but the rule.

Before dealing with asymmetry, we need to take a short step back and depict a remote and common background where the symmetry between words and the objects they denote constitutes a given datum. In fact, these two opposed historical interpretations, in which linguistic asymmetry was either a natural or a conventional exception, at a certain point in time, actually derived from the reflections on this alleged symmetry between words and objects.

The first problematic way of considering asymmetry as an exception depends, in our opinion, on a presupposed basic symmetry of language, namely, on a sort of one-to-one principle of correspondence between words and the objects they denote<sup>1</sup>—which we assume was presupposed both in ancient India and in ancient Greece. This principle is clearly expressed in the Pāṇinian grammatical tradition only from the 3<sup>rd</sup> century BCE onwards.<sup>2</sup> According to Kātyāyana, words as a rule apply per object: one and only one word-form matches with one and only one object.<sup>3</sup>

*Mahābhāṣya* [M] 1.233 1.16 *Vārtika* [Vt]<sup>4</sup> 1 *ad Aṣṭādhyāyī* [A]<sup>5</sup> 1.2.64:<sup>6</sup> *pratyartham śabdaniveśān naikenānekasyābbhidhānam*,

“Because words apply per object,<sup>7</sup> there is no denotation of many objects by one word.”

M 1.233 1.20 Vt 2 *ad A* 1.2.64: *tatrānekārthābbhidhāne 'nekaśabdatvam*,

“Where more than one object is denoted, more than one word [has to be used].”

More generally, each word is supposed (probably by Kātyāyana once again)<sup>8</sup> to be permanently endowed with a precise meaning, so that each grammar rule merely aims to justify this usage or to establish some specific restriction in some way:<sup>9</sup>

M 1.6.16: *siddhe śabdārthasambandhe lokato 'rthaprayukte śabdaprayoge śāstreṇa dharmaniyamaḥ*,<sup>10</sup>

“When [it is assumed that] there is a well-established relation between *śabda* and *artha* (between word-forms and their objects),<sup>11</sup> which relies on everyday linguistic usage; [and] when [it is assumed that] the use of words is prompted by the object meant,<sup>12</sup> the science [of grammar] [provides] a restriction [on the use of words] for the sake of merit.”

As a consequence, the general background of the speculative context we are considering is constituted by a close relationship between reality and language, or better, between the objects of knowledge and the linguistic forms which are able to denote them. The use of words is prompted by the thing-meant, and, in the end, it depends on the intention of making something known, ultimately of conveying some meaning (through a verbal expression).

Moreover, a final and essential premiss might have been the way that verbal communication was supposed to work, which is clearly explained even later on in the following description by Patañjali (second century BCE):

M 1.18 ll. 19–20 *ad Śivasūtra* 1 Vt 12: *śrotropalabdhir buddhinirgrāhyaḥ prayogeṇābbhijvalita ākāśadeśaḥ śabdaḥ*,

“Becoming perceptible through the ear, to be grasped by the intellect, enlightened by usage and residing in the ether: this is the word (*śabda*).”<sup>13</sup>

To sum up, word-forms (*śabda*) definitely play the role of causes in the Pāṇinian framework and give rise to the cognition of objects (*artha*) in the mind of the participants in the communicative event. The addresser actually needs to employ words, for instance, to utter them, in order to arouse the relevant mental image in the mind of the addressee. Thus, the physical perception of words can really give rise to the relevant concepts.

Of course, we are keen to discover more about the previous speculative *scenario* in both India and Greece, which has brought us to preliminarily concentrate on some evidence that, in our opinion, proves that both Indians and Greeks were also convinced of this correspondence before the third century BCE.

The ancient popular etymologies included in Vedic sources—or better, the etymologizing stylistic figures entailing an undeniable magico-linguistic intention on the part of the poets, as they are presented by Deeg<sup>14</sup>—seem to rely on this belief. Already in the *Rgveda* [RV]<sup>15</sup> and in the *Atharvaveda*, whose earliest hymns may date back to the twelfth century BCE, the paronymological connection between theonyms and the specific role played by the matching Gods is rooted in this principle of denotative integrality.

For instance, the ancient Vedic Samhitās regularly explain the etymological connection between the noun which denotes fire—Agni—and the nominal base which means “the first, that which is in front.”

*Atharvaveda* (Śaunakīya Recension) [AVŚ]<sup>16</sup> 4.14.1:

*ājó hy àgnér ájaniṣṭa śokāt só apaśyāj janitāram āgre* |<sup>17</sup>

*téna devā devātām āgrā āyan téna rōhān rurubur médhyāsah* | |

“Since the goat was born from the heat of Agni, it saw [its] generator at the beginning; by means of this the gods as the first ones attained divine status; by means of this the [victims], fit for the sacrifice, ascended the ascending ones (the heights).”<sup>18</sup>

*Nirukta* [Nir],<sup>19</sup> a treatise on semantic analysis which belongs to the earliest technical literature in Sanskrit and likely dates back to the sixth-fifth century BCE, proposes the same linguistic connections between the name Agni and the nominal stem *agra-*, but in a less poetic and quite specialized manner:<sup>20</sup>

Nir 7.14: [...] *agniḥ kasmāt. agraṇīr bhavati. agram yajñeṣu praṇīyate.*

“From what does [the noun] *agni* derive? It is the foremost. It is brought in the sacrifices at the beginning [...].”

Analogously, *prthivī* (the earth/the Goddess Pṛthivī) is technically explained as “the wide [earth]” merely because of the link with the verb *prath-* “to spread” in Nir 1.14: *prathanāt prthivī ābuh*, “They call it *prthivī* on the basis of the verb ‘to spread.’ Of course, a more interpretative translation could be: “They call it *prthivī* because it has been spread out,”<sup>21</sup> since this name is the object of comparable etymological figures of speech in both the RV and in the AVŚ, where a specific agent, such as Indra, is often even singled out for the action (denoted by the verb *prath-* ‘to spread out’) which is linked to the analysed noun/name (*prthivī*).<sup>22</sup> Nevertheless, *Nirukta* explicitly refuses excessive speculation on the motivation of the single relations between words. Instead, preference is given to a regular frame of correspondences among words, within which the single meanings can generally be smoothly detected.

Nir. 1.14: *ka enām aprathayiṣat kim ādhāraś ceti. atha vai darśanena prthubh. aprathitā ced apy anyaiḥ. athāpy evaṃ sarva eva dṛṣṭaprawādā upālabyante*

““But who spread it, and what was the base?” (We reply that) it is indeed broad to look at, even if it is not spread by others. Otherwise, in this way, all known words can actually be found fault with.”

It is therefore a perceptible fact that the earth is wide and this in itself must suffice. Little does it matter if we do not know the diachronic story of this linguistic usage or the aetiological myth. A markedly technical and scientific stance in highlighting this kind of linguistic connection is thus intentionally inaugurated. Somehow, mere perception (*pratyakṣa*),<sup>23</sup> warrants the enunciated relation between the object of language and its denotation—in this case between the quality of being wide and the substance earth that possesses it, in other words between the qualifying word and the qualified object. The Earth is wide by nature, and by nature it has to be called “the wide one” per *antonomasia*. It cannot just be a convention.

Thus, a scientific method slowly originates from a poetic and stylistic pre-scientific way of focusing on the principles of signification. Visible items are linked with audible items, because two audible items that denote two comparable objects are, in turn, also comparable. Thus, language seems to be a reliable means of knowledge and its reliability can be proven on the basis of perception. We shall see that this principle of correspondence is not explicitly expressed in archaic Greek sources, but rather, it seems to be presupposed, precisely because it is questioned by the authors. On the other hand, there is actually less distance between the aforementioned

ancient Indian paretymologies (such as *agni* - *agrāṇi*) and the cases of polyonymy which we shall quote below as examples of asymmetry.

## 2 Asymmetries as Exceptions

### *In Old Indian Sources*

The several passages devoted to paretymological reflections on polyonyms found in the Brāhmaṇa literature (ninth-sixth century BCE) already included the embryo of the opposite thesis. They involve an interesting terminology emphasizing the existence of words “beyond perception” (*paró'kṣam* “out of sight”), which are classified as sorts of synonyms of other immediately comprehensible words (*pratyakṣam* “before one’s eyes”).<sup>24</sup>

See, for instance, ŚBM 7.4.1.10 (seventh century BCE): *átha rukmam úpadadbāti. asau vā' ādityá eṣá rukmāḥ. eṣa hīmāḥ sárvaḥ prajā atirócate rocó ha vai táṃ rukma ity ācakṣate paró 'kṣam paró'kṣakāmā hí devā amúṃ evaitád ādityam úpadadbāti*

“He [the Sacrificer] puts the gold plate thereon [on the lotus-leaf]. Now this gold plate is the sun, because he shines over all the creatures here on earth; and *rocas* (‘sunshine’) they cryptically call *rukman* (‘gold plate’), because the gods love what is ‘beyond the perception’:<sup>25</sup> he thus lays down that sun [on the altar].”<sup>26</sup>

Some lines later, we find a comparison between other features of the plate and the sun, such as their circular shape (*parimaṇḍala*) and golden colour (*hiranmaya*). This means that although, on the one hand, the same or almost the same, shining, round, and gold-coloured object asymmetrically matches the two different nouns which can denote it, on the other, language and reality continue to be intrinsically/naturally linked. A diaphasic option seems to be depicted in these kinds of paretymologies: a human word, which is suitable in a ritual context, has to be replaced in a mythological context, so as to be a part of a divine language:

*Tāṇḍyamahābrāhmaṇa*<sup>27</sup> 22.10.3: *yad vai manusyāṇāṃ pratyakṣam tad devānāṃ parokṣam atha yan manusyāṇāṃ parokṣam tad devānāṃ pratyakṣam,*

“That which is *pratyakṣa* for men, is *parokṣa* for Gods, and vice versa, that which is *parokṣa* for men, is *pratyakṣa* for Gods.”

This kind of asymmetry—which is in fact a motivated polyonymy<sup>28</sup>—is however presented as a natural feature of the linguistic denotation. It does not matter if the *pratyakṣa*-word is almost a *hapax*, namely a word which is not ungrammatical but which is not used and has probably been invented merely to explain the *paró'kṣa* word, such as *índha-* to explain the theonym *índra-* in ŚBM 6.1.1.1–2:

*yad aínddha. tásmād índhaḥ. [...] | [...] índras [...] ity ācakṣate paró'kṣam paró'kṣakāmā hí devās [...],*

“Since he lights up (*índh-*), therefore he is *índha*. [...] Indeed the gods, who love that which is cryptic, cryptically call him *índra* [...].”<sup>29</sup>

Synonymic usages are only systematically prescribed. They are governed by rules, in some specific ritual Soma performances, such as the *upaharya*, against the background of an almost technical and esoteric setting,<sup>30</sup> but once again this is a case of a mere opposition between

a *paro'kṣa* and a *pratyakṣa* signification, and often between a non-explicitly vs. explicitly mentioned summoning of the god to whom the prayers are addressed.<sup>31</sup>

See, for instance, *Baudhāyanaśrautasūtra*<sup>32</sup> 18.28: [...] *sa yatrāha prātar yāvabhyo devebhya iti marudbhyaḥ prātar yāvabhyo devebhya iti tatrāha. atha yatrāha somah pavata iti induḥ pavata iti tatrāha. atha yatrāhendrūya puroḍāśānām iti śakrūya puroḍāśānām iti tatrāha* [...],

“When [it is to be said] ‘[do you recite verses] to the gods coming in the morning,’ he says ‘to the Maruts coming in the morning.’ When [it is to be said] ‘Soma is flowing (it becomes pure),’ he says ‘Indu is flowing.’ When [it is to be said] ‘of the cakes to Indra,’ he says ‘of the cakes to Śakra’ [...].”

See, for instance, *Lāṭyāyanaśrautasūtra*<sup>33</sup> 8.9.1–4: *upaharye devatānāmadheyāni paroḥkṣam brūyuh svasthānāsu. pratyakṣam asvasthānāsu. devaśabdam sarvatra varjayeyuh. hotā devo mahīmītrasyeti hotā yajñai mahīyajñasyeti brūyur iti somam,*

“During the *upaharya*, they should pronounce the names of the divinities cryptically in their respective places. In places other than their original one, they should pronounce them perceptibly. They should avoid the word *deva* in all circumstances. In place of the two words *deva* and *mitra* in the *hotā devo mahīmītrasya* text, they should say *hotā yajñai mahīyajñasya*; instead of *soma* they should say *indu*.”

Nevertheless, no doubts seem to arise regarding the reliability of both the (perceptible and cryptic) denotations as a valid means of knowledge, since the noun *indu* somehow depicts a real facet of *soma*, in the same way as Śakra is a truthful epithet for the god Indra. This particular example of asymmetry is not unmotivated at this step of the reflection on language.

Mylius considers the origin of this tradition as Sāmavedic, based on a sort of foundation myth of this rite, recounted in another Sāmavedic work (*Jaiminīyabrāhmaṇa* [JB] 2.150).<sup>34</sup> In fact, JB section 2.148–150 is entirely devoted to the explanation of the cryptic *upaharya* given by Prajāpati to the gods as a sort of weapon against their adversaries. The involvement of original epithets, synonyms, *Kenningar*, and other stylistic devices tuned to make the comprehension of poetry indirect has been recognized in the earliest sources of several Indo-European languages. Thus, the afore-mentioned Kalpasūtra and Brāhmaṇa explanations of this kind of cryptic usage of language might be the rationalizing (prescriptive or mythic) re-interpretation of the main aim of the ritual-poetic contest.<sup>35</sup> This might have also consisted in inventing new metaphorical or metonymic designations of the subjects in question, in order to defeat their adversaries and receive the deserved reward from the patron of competitions.<sup>36</sup> Therefore, such a type of exception to the one-to-one relation between word-forms and their denotations seems to be classified as an option available in the very nature of language itself, even though sometimes it is the mere ephemeral fruit of individual creation.

The most ancient actual discussion on asymmetry is proposed later and ends in favour of its natural encompassment. The relevant section (Nir 1.12–14) is devoted to the specific derivational relation between an action and the matching *nomen agentis*. The starting point consists in maintaining that *nouns* are derived from verbs.

Nir 1.12 *nāmāny ākhyātājānīti śākaṭāyano nairuktasamayaś ca,*

“Nouns are derived from verbs according to Śākaṭāyana and according to the *communis opinio* of etymologists.”

Against this thesis, *Nirukta*’s author (Yāska) quotes Gārgya’s restrictive position (Nir 1.12), which excludes primary nouns that cannot invoke a verbal etymon. It limits the extension

of this rule to the mere lexical repertory of derived nouns governed by grammatical rules, such as *go* “cow,” *aśva* “horse,” *puruṣa* “person” and *baṣṭin* “elephant.”<sup>37</sup>

There are several reasons to argue that Śākaṭāyana’s thesis has to be refuted. Yāska lists six of Gārgya’s objections,<sup>38</sup> among which three actually pertain to the problem discussed here:

(Nir 1.12) *atha cet sarvāny ākhyātājāni nāmāni syur yaḥ kaśca tat karma kuryāt sarvam tat sattvaṃ tathācakṣīran. yaḥ kaścādbhvānam āśnuvītāśvaḥ sa vacanīyaḥ syāt. yat kiñcit tṛdyāt tṛṇam tat,*  
 “If all nouns are derived from verbs, each individual who performs a certain action should be called by the same name. Whosoever runs on the road should be called ‘runner’ (*aśva*). Whatever pricks [should be called] ‘pricker.’”

(Nir 1.12) *athāpi cet sarvāny ākhyātājāni nāmāni syur, yāvadbhir bhāvaiḥ saṃprayujyeta, tāvadbhyo nāmadheyapratilambhaḥ pratilambhaḥ syāt. tatraivaṃ sthūṇā daraśayā vāṃ saṃjanī ca syāt,*  
 “Moreover, if all nouns are derived from verbs, [each individual] should obtain as many names as the actions with which it is connected. Thus a column should also be ‘that which has been fixed in a hole’ and ‘that on which one hangs’ (*sañji-*) [something].”

(Nir 1.13) *athāpi ya eṣāṃ nyāyavān kārmanāmikaḥ saṃskāro yathā cāpi pratitārthāni syus tathaināny ācakṣīran. puruṣam purīśaya ity ācakṣīran. aṣṭety aśvam. tardanam iti tṛṇam,*  
 “Furthermore, each grammatical form should be regularly named after the relevant [denoted] action, and these [objects] should be called in such a way that their denotation has to be clearly understood: *puruṣa* ‘person’ should be called *puri-śaya*, lit. ‘he who lives in the city,’ *aśva* ‘horse’ should be called *aṣṭ* ‘he who covers (distances)’ and *tṛṇa* ‘grass’ should be called *tard-ana* ‘that which pricks.’”

Yāska’s answers are all inspired by the same principle: only linguistic usage has to be taken into account, and no attention should be paid to other sophistries. For instance, the first answer is as follows (Nir 1.14):

*paśyāmaḥ samānakarmaṇām nāmadheyapratilambham ekeṣām naikeṣām [...],*  
 “We see that the [performers] of the same actions obtain a single name or not a single name [...].”

Therefore, we can be sure that in *Nirukta*’s age, asymmetry, especially between *nomina agentis* and the actions which they imply, was a well-known and accepted fact. It was probably considered as a natural part of language, which better emerged when its functioning was analyzed from the synchronic point of view. On the contrary, the actual correspondence between deverbal nouns and the paronymologically linked verbal bases, when it was strictly grammatically governed,<sup>39</sup> was considered quite obvious and uninteresting, so that the basically supposed one-to-one relation between word-forms and their objects was used as a purely ideal schema.

Therefore, according to the sixth-fifth century BCE testimony supplied by *Nirukta*, the link between word-forms and their objects can, by nature, also be an asymmetric relation, but it does not depend on artificial rules. In fact, since each object to be denoted is indeed multi-featured, it can consequently be denoted by more than one noun. Thus, the natural meaning-form relations are strenuously defended. Three centuries later, Pāṇini’s commentators seem to be consistent with this perspective. In Kāṭyāyana’s opinion, the linguistic form has to be taken as a whole, rather than by inspecting its single parts. As a consequence each word is *svābhāvika* “autonomous” (“grounded on its intrinsic conditions”), rather than “conditioned by recognizable factors or causes” (be they external or internal).

Vt 33 *ad* A 1.2.64: *abhidhānaṃ punaḥ svābhāvikaṃ*

Vt 15 *ad* A 2.2.29: *abhidhānaṃ ca punaḥ svābhāvikaṃ*<sup>40</sup>

Both *vārtikas* occur in discussions arising from some difficulty in reconstructing the denotation of a synthetic form by the analytical denotation of its constituents, thus in facing some specific exceptions to the aforementioned linguistic one-to-one relation. For instance, these *vārtikas* explain phenomena such as the occurrence of several objects of the same polysemic word *akṣa* which conveys the sense of “1. axle 2. rosary seed 3. die” or even the denotation of both mother and father, by means of the unique dual form of the noun commonly conveying the single sense “father” (*pitarau*), or the asymmetry between a root noun and a suffixal noun which share the same role of *nomen agentis* - cf. *baladā*- “one who gives strength” vs. *kanyā-dātr*- “one who gives (a ‘giver’ of) a daughter in marriage.”<sup>41</sup>

The unpredictable signification mechanism is explicitly labelled as a natural fact, *svābhāvika*, autonomous from grammatical rules and ultimately from human efforts. This is similar to Yāska’s conclusion when he says: language includes this form and this alone must suffice. More technically, Kātyāyana concludes that the denotation of an inflected word (*pada*) has to be defined as *svābhāvika* (independent from its morphs).<sup>42</sup> Moreover, Patañjali went deeper into the consequences of this detected linguistic mechanism, which, in his opinion, could indeed result in a risky association, if it were purely a conventional matching between objects and the word-forms which can denote them. In other words, the mutual comprehension between speaker and their interlocutor could not indeed be guaranteed.<sup>43</sup>

Thus, Patañjali maintained that a mere grammatical device taken apart from its actual linguistic usage could not ensure a sufficient shared and understandable denotation. Likewise, a rule stating that a cow has to be called a horse and *vice versa* should be in manifest contradiction with ordinary usage which is consequently so important. Therefore, the symmetric schema of signification might have been evaluated as a sort of basic grammatical convention. This was used in order to easily arrange linguistic knowledge, although grammarians themselves were well aware that the patterns of signification were actually asymmetric by nature. The descriptive pattern of linguistic reality was thus assumed to be basically symmetric, so that a permanent (*nitya*) relation between the words of the Sacred Texts and their meanings could be taken as granted. Nonetheless, self-evident exceptions had to be admitted and merely registered (on the basis of common usage), though not explained by means of grammar.<sup>44</sup>

### *In Ancient Greek Sources*

Even if the cultural context as a whole is very different, the development of Greek thought about the word-object relation and about asymmetry—such as polysemy and synonymy—is surprisingly similar to that of Indian culture: both start by considering the word-object relation as biunique and well-established,<sup>45</sup> but it is subsequently conceived as a human undertaking and as a convention of which the asymmetry is part. As far as the Greek sources are concerned, the aim of the present contribution is to show how these two opposite conceptions developed in pre-socratic thought. In addition, we would like to demonstrate that they are bound to the problem of language as a means of knowledge, from the first occasional reflections on language in the early literature,<sup>46</sup> to the more systematic ones of the philosophers and sophists.<sup>47</sup>

The archaic Greek thought on language conceives the word-object relation as responding to a sort of one-to-one principle of correspondence, which presupposes an ontological link between a name and denoted object: names, if well intended, are thus capable of revealing the very nature of things. In fact, archaic sources show that the oldest popular etymologies are the means by which the essence of an object can be revealed through the analysis

of its name. Although paretymologies find origin in mythological thought, seeing that they were applied from an early age to the names of heroes and gods, they are also the first evidence of a pre-scientific way of thinking about language. The paretymology of the name of Ἀστυάναξ (Hom. *Il.* 6.478, Ἰλίου Ἰφι ἀνάσσειν) or of Ἀφροδίτη (Hes. *Th.* 195–198, ἐν ἀφρῶ | θρέφθη) are striking evidence of this.<sup>48</sup>

In the Homeric poems there are some occurrences of double denominations, which can be divided into three types:<sup>49</sup>

1. Double denominations in general (patronymics, double names of animals, objects, deities). See, for instance *Il.* 24.315–316, αὐτίκα δ' αἰετὸν ἦκε [...] ὃν καὶ περκνὸν καλέουσιν ([sc. Zeus] immediately sent an *aieton* (= eagle), [...] which is also called *perknos*).
2. Different names assigned by deities and by humans. See, for instance *Il.* 14.290–291, ὄρνιθι λιγυρῇ ἐναλίγκιος, ἦν τ' ἐν ὄρεσσι | χαλκίδα κιχλήσκουσι θεοί, ἄνδρες δὲ κύμινδιν (similar to the singing bird which is in the mountains and called *chalkida* by the deities and *kumindin* by humans).<sup>50</sup>
3. Double human names. See, for instance *Il.* 6.402–403, τὸν δ' Ἑκτωρ καλέεσκε Σκαμάνδριον, αὐτὰρ οἱ ἄλλοι | Ἀστυάνακτ' · οἷος γὰρ ἐρύετο Ἴλιον Ἑκτωρ (Hector used to call him *Scamandrión*, the others *Astuanax*, because only Hector defended Ilion).<sup>51</sup>

The last example shows that etymology is used in the Homeric poems to explain one of the two proper names of a human character.<sup>52</sup> Hesiod uses it to exclusively explain the names of deities and never opposes the names given by gods with those given by humans.<sup>53</sup> In line with the aim of the *Theogony*, which tries to put the traditional divine universe in order, Hesiod associates only one name to each deity, as in the case of Briareus and Ino, who, instead, are characterized by two names in the Homeric poems.<sup>54</sup>

The examples quoted above show that the Greeks had already begun to observe the existence of asymmetry in language in the archaic age. If the double denomination involves common nouns, this fact is merely recorded. However, if it involves proper names, it is perceived as particularly anomalous and in need of an explication. This is well exemplified in *fr.* 7 B 1 DK of Pherecydes of Syros, considered by the ancient sources as the author of the first Greek literary text written in prose:

Ζᾷς μὲν καὶ Χρόνος ἦσαν αἰὶ καὶ Χθονίη· Χθονίη δὲ ὄνομα ἐγένετο Γῆ, ἐπειδὴ αὐτῇ Ζᾷς γῆν γέρας διδοί.

“Zeus, Chronos and Chthonie were eternal; but the name of Chthonie became Ge, because Zeus gave her the earth as an honorific gift.”

Pherecydes' aim is to counteract the contradictory idea of the deities who are said to be “forever,” but at the same time, “born” (as happens, for instance, in Hesiod) by demonstrating that it is only their name that changes.<sup>55</sup> He explains Chthonie's new name by means of a paretymology<sup>56</sup> which connects it with her being attributed the domain of the earth. We can also find this kind of justification in the “one deity—two different names—two religious domains” scheme, well exemplified by *fr.* 116 Kahn<sup>57</sup> of Heraclitus:

Εἰ μὴ Διονύσω πομπὴν ἐποιῶντο καὶ ὕμνον ᾄσμα αἰδοίοισιν, ἀναιδέστατα εἴργασται· ὡτὸς δὲ Αἰδῆς καὶ Διόνυσος ὅτεφ μαίνονται καὶ ληναῖζουσιν.

“If it were not Dionysus for whom they march in procession and chant the hymn to



the phallus, their action would be most shameless. But Hades and Dionysus are the same, him for whom they rave and celebrate Lenaia.”<sup>58</sup>

The key to this fragment is in its word play.<sup>59</sup> Αἰδοῖα is connected with αἰδώς, which means “shame” but also “reverence.” Thus, in this case, the word αἰδοῖα denotes the sacred phallic symbols, even if this word also occurs with the denotation of *pudenda*. Ἀναιδέστατα is to be intended as the “most shameless actions,” but at the same time as ἀν- (‘)Αἰδησ-τατα. Their actions would be “without Hades” if they were not performed for Dionysus. However, Dionysus and Hades are the same. The verbal connections between αἰδοῖα - αἰδώς - ἀναιδέστατα aim to underline the intimate equivalence of Dionysus—the god of vitality through madness—with Ἄιδης, the god of the underworld, we thus find the equivalence of the two opposites, life and death, in line with the Heraclitean concept of the structure of reality, which consists in the unity of opposites.<sup>60</sup>

In the quoted fragments of Pherecydes and Heraclitus, the polyonymy is recorded, if not as an exception, at least as a particularity: the concept of the adherence of the names to reality is so strong, that it can be assumed that a plurality of names may correspond to a plurality of functions/attributes/domains, but the object is actually only one. Asymmetry is thus justified *de facto* as only seeming.

Heraclitus introduces us to the field of speculative thought. The ontological bond between names and objects is well attested by some other fragments, such as *fr.* 123 Kahn:<sup>61</sup>

Ὁ θεὸς ἡμέρῃ εὐφρόνῃ, χειμῶν θέρος, πόλεμος εἰρήνῃ, κόρος λιμός. Ἄλλοιοῦται δὲ ὅκωσπερ ὁκόταν συμμιγῇ θύωμασιν ὀνομάζεται καθ’ ἡδονὴν ἐκάστου.<sup>62</sup>

“The god: day night, winter summer, war peace, satiety hunger. It alters, as when mingled with perfumes, it gets named according to the fragrance of each one.”

The fragment is the subject of much discussion amongst scholars.<sup>63</sup> Some of them, such as Kahn and Bollack, and Wismann, maintain the text as attested by Hippolytus (*Refut.* 9.10.8). However, the majority prefer to follow the correction made by Diels who adds the word πῦρ between ὅκωσπερ and ὁκόταν.<sup>64</sup> Marcovich has added an ulterior correction: πῦρ ὁ. If this integration is to be accepted, the subject of ὀνομάζεται is fire (πῦρ), if not, the subject is god (θεός). The meaning of καθ’ ἡδονὴν ἐκάστου is also under discussion, either as “according to the pleasure of each one” or as “according to the fragrance of each θύωμα,” which is the one we prefer. As has been pointed out by Diano and Serra,<sup>65</sup> following Kirk, and Marcovich,<sup>66</sup> Heraclitus affirms a real and substantial communion between names and the objects they denote: just as night and day coincide, god **is** night and day, not as a subject is its predicates, but as different substances are the same and only substance. The one-to-one relationship seems to be confirmed—and the asymmetry relegated to the realm of appearance—in the second part of the fragment, in which the god or the fire changes when mingled with a specific θύωμα, and its name consequently changes in order to designate each single mixture.

Name and function, conceived as essential and inseparable components of each object,<sup>67</sup> are equivalent in the well-known fragment 22 B 48 DK,<sup>68</sup> which registers a particularly complex example of *polyonymia*:

Τῷ οὖν τόξῳ ὄνομα βίος, ἔργον δὲ θάνατος.

“Then, the name of the bow is life; its work is death.”

The single substance bow has two names, τόξος and βίος. Βίος is metonymic, because it originally designates the bow string and subsequently the bow itself. In fact, Heraclitus is playing

here with the polysemic value of this word. Considered in its two possible pronunciations, it means ‘bow’ (βιός) and ‘life’ (βίος), and therefore is a contrast in itself: the result of the bow’s action is in fact death. Moreover, at Heraclitus’ time, the accents of words were not written, and consequently the difference between βιός and βίος would not have been immediately perceivable to the reader.<sup>69</sup>

Therefore, this fragment records the synonymy/polysemy of τόξον/βιός and the polysemy/homonymy of βιός/βίος. The object has a double name, but only one effect on reality, which is death. As Robinson has pointed out “the fragment serves also as a striking instance of how names can indicate the reality (or an aspect of the reality) of a thing” (see fragments 23, 32, 67).<sup>70</sup>

For Heraclitus all things are opposite to each other, creating continuous changes which find their composition in the harmony of the λόγος. Ordinary people can only see the opposites, while the sage is the one able to understand the superior harmony and unity which is beyond them: θεός and βιός are in fact names representing the harmony beyond the opposites. For this reason, even if Heraclitus conceives the word-object relation as one-to-one, he also remarks that (*fr.* 1 Kahn):

Τοῦ δὲ λόγου τοῦδ’ ἐόντος αἰεὶ ἀξύνετοι γίνονται ἄνθρωποι καὶ πρόσθεν ἢ ἀκοῦσαι καὶ ἀκούσαντες τὸ πρῶτον· γινομένων γὰρ πάντων κατὰ τὸν λόγον τόνδε ἀπειροισιν εἰκασί, πειρώμενοι καὶ ἐπέων καὶ ἔργων τοιούτων ὁκοίων ἐγὼ διηγέσθαι κατὰ φύσιν διαιρέων ἕκαστον καὶ φράζων ὅπως ἔχει [...].

“Human beings are (always) unable to understand this λόγος which (always) is, both before they have heard about it and while they are hearing about it for the first time. They seem inexperienced in all the things happening according to this λόγος, even if they have experience of the words and the actions such as those I describe according to nature, distinguishing each one and showing how it is [...].”

In this earlier phase of the pre-socratic age, asymmetry was clearly considered a deviation from the intuitively perceived as natural, one-to-one word-object relation, and this led several authors and thinkers to try and justify it, especially by means of etymology. In this age, etymology consists *de facto* in the search for the thing in the name, and cases of asymmetry, such as the existence of two names for a single deity, must be explained and justified. Thus, we can reasonably conclude that the first answer regarding the nature of this phenomenon is that asymmetry is only seeming. In this frame, Heraclitus can be considered as both archaic and as a starting point. Archaic, because he only conceives the word/underlying ἔργον (the thing) relation and not the one between the linguistic sign and the concept or idea.<sup>71</sup> However, his work is also an important starting point, since the problem as to whether the word-object relation is naturally

correct or a mere convention actually has its origin in the afore-mentioned search for the “thing” in names, and mostly from the observation of the ceaseless changes of perceivable phenomena.<sup>72</sup>

### 3 Asymmetric Signification as a Rule

#### *In Old Indian Sources*

By contrast, an explicit disbelief in language, considered as an unreliable means of knowledge, also emerges in several Greek and Indian sources where a clear preference for the conventionality of language prevails. Patañjali’s *Mahābhāṣya* (second century BCE) documents this latter

approach, even though the same work also provides a lengthy commentary on the two glosses, quoted as our starting point on the naturally established one-to-one relationship of signification. The impermanent nature of the objects which are temporarily considered as wholes seems to be emphasized, for instance in M 1.1 ll. 6–7:

*atha gaur ity atra kaḥ śabdaḥ. kiṃ yat tat sāsṇālāṅgūlakakudakuburaviṣāṇy artharūpam sa śabdaḥ,*  
 “Now, in *gaur* what is [to be considered] the word? Is it the visible appearance, that which consists in the object possessing dewlap, tail, hump, hoofs and horns? Is this the word?”

Thus, the actually existing objects of language could merely be the constituent parts of the cow and not the whole cow. This interpretation is suggested by the partial coincidence of this perspective on words with a very famous (possibly Sarvastivādin Buddhist) passage, included in a contemporary text, that is the *Milindapañha* [Mil]<sup>73</sup> (second century BCE). The latter is a work which claims to record a discussion between the king Milinda (supposedly representing the historical Indo-Greek King Menander) and the Buddhist monk Nāgasena. The matching passage questions the real entity of the object denoted by common words such as “chariot”:

(Mil 27) *nāhaṃ bhante nāgasena musā bhaṇāmi, iṣaṇ ca paṭicca akkhaṇ ca paṭicca cakkaṇi ca paṭicca rathapañjaraṇ ca paṭicca rathadāḍḍakaṇ ca paṭicca ratho 'ti saṅkhā samaññā paññatti vohāro nāmamattaṃ pavattatī 'ti,*  
 “Revered Nāgasena, I am not telling a lie: it depends on the pole, on the axle, on the wheels, on the body of a chariot, on the flag-staff of a chariot, on the yoke, on the reins, and on the goad, if ‘chariot’ exists as a denotation, appellation, designation, as a current usage, as a name.”

In fact, as Buddhists unanimously agree, from the ontological point of view, there is no whole independent of its parts, nor indeed do wholes exist at all. Nonetheless, elsewhere (M 1.220 ll. 22–4 *ad* Vt 10 *ad* A 1.2.45 Vt 10) Patañjali reflects on the whole-part relationship and even employs the chariot example but in a different way. Indeed, he maintains that it is the whole and undivided word that guarantees the denotation and function of the parts, precisely because, only a whole chariot is fit for movement, while its constituents, if they are taken apart one by one (*rathāṅgāni vibhīṭāni pratyekaṇi*), are not suitable for this purpose (*vrajikriyāṃ praty asamarthāni bhavanti*). The linguistic aim is to explain that the combinations (*samudāya*) of sounds have meaning, whereas the parts do not.

Indeed, this is another way of underlining the intrinsic asymmetry of language, since the autonomous identity of the whole is underlined as a reality which surpasses the sum of its parts. In our example, the chariot is something more than the sum of its parts, which by contrast would be useless if they were separated from each other. Moreover, if we try to proceed by subtraction by starting from the whole, we notice that something which has undergone a change with regard to one of its parts is by no means something else—as a consequence of this change.<sup>74</sup>

Patañjali’s mundane example is the case of the classification of animals:

M I.136 ll. 9–10 *ad* A 1.1.56 Vt 10: *tad yathā | śvā kaṇṇe vā pucche vā chinne śvaiva bhavati nāśvo na gardabha iti,*  
 “When a dog has an ear or tail cut off, it remains a dog indeed. It does not become a horse or a donkey.”

Finally, the ontological solidarity between the whole and its parts seems to be insisted upon in the M, with regard to the connection between the linguistic unit and its segments or sub-

units. One may recognize parts in the *dravyas*, yet these parts are still intrinsically integrated into the whole, as stated by means of the formula *vrkṣaḥ pracalan saḥāvayavaiḥ pracalati*, “A tree when it shakes, shakes with its parts,” which occurs thrice in this work.<sup>75</sup>

Wholes are the permanent frames upon which symmetry is re-established. On the other hand, this pattern opens the way to the well-known difficulty relating to the permanence of words. If words were to lose or modify some of their parts, like a dog losing its ear or tail, they would not be considered as permanent. In fact, grammarians elsewhere tend to resort to the substitution of full words (*sarvapaḍādeśa*), in order to avoid what could otherwise appear as “a change, a modification of words.”<sup>76</sup> A word denoting a whole depends on a convention and warrants the mutual comprehension between speakers in everyday usage, but this kind of word prevents man from grasping the right knowledge.

It seems indisputable that the same question found in the *Mil* was in the background of Patañjali’s reflections on this matter. The relevant examples are closely similar, but the answers are neatly different. For the Buddhist sources, whose pivotal doctrine is the denial of the ontological existence of individual existence, phenomenological individuality is merely admitted as being perceived illusorily, because of temporary combinations (aggregates) of physical and psychic, ultimate and indivisible constituents (*dharmas*) which are metaphysically a given datum. As a consequence, the impermanent aggregates which illude the human mind are only assumed to exist as names (*nāmadheyamātra*). The objects of denotation and the relevant words which denote them are not symmetric, and this asymmetry is tolerated in order to grant conventional communication, i.e. the common mutual comprehension of everyday life.

This conventional use of language is therefore often defended even though it is a recognized obstacle for the true knowledge. For instance, Buddha forbids any transgression of the limits of convention, based on some dialectical usage, as shown in *Majjhima Nikāya* [MN]<sup>77</sup> 3.230 (*janapadaniruttim nābhiniveseyya, samaññam nātidhāveyyātī*): he is afraid that this can determine verbal incomprehensions or useless disputes, when for example the same object is denoted by different nouns.<sup>78</sup> The relevant example in MN 3.234–235 is the almost synonymous series of pāli words *pāti*, *patta*, *vittha*, *sarāva*, *dhāroṇa*, *poṇa*, *pisīla*, used in different parts of the country to denote a “bowl,” but more properly matching with a number of different shapes, such as a vessel, a bowl, a cup, a goblet, etc.<sup>79</sup>

Buddha is thoroughly persuaded that there are even words to which no object actually corresponds, such as pāli *attan* “self” or *aham* “I,” as might be expected, but linguistic convention warrants a mutual comprehension. The example of milk, which changes into curd, butter, and clarified butter and is denoted with a different noun at each stage, shows how the continued use of the same noun *khīra* “milk” instead of the conventional noun denoting the specific states (*dadhi*, *navanīta*, *sappi*) is of no help (see *Dīgha Nikāya*<sup>80</sup> 1.201). However, none of these nouns—the first one included—actually matches a given existing entity which can be known as such.

In the same perspective of the signification, another point which is shared by the *Mahābhāṣya* and by the Pāli canon has been highlighted by Bronkhorst in 1987. Throughout the long history of the Buddhist dharma theory, only a limited number of dharmas came to be accepted as truly self-existing entities<sup>81</sup> and, as is well known, according to the majority of Buddhist schools, their existence is merely momentary. Precisely in order to avoid the judgement of momentariness for sounds, words, and sentences, the Sarvāstivādin School postulated—probably for the first time—self-existence for two linguistic dharmas, namely the *vyañjanakāya* and the *nāmakāya/padakāya* (sound and word). Patañjali also considers word and sound as the only two self-existing autonomous linguistic entities.<sup>82</sup> The sole morphological unit which Patañjali consistently considered self-existent is the inflected *pada*, whose autonomy is never questioned. The different treatment of morphological entities, described in the grammar as somehow originating dependently, reveals the illusory autonomy of sub-units of words—with the

regular highlighting of the dependence—relationship between morpheme and morpheme in an inflected word or between an inflected word and another one in a compound.

Therefore, the specific linguistic and speculative reflections on the conventional relation between word-forms and their objects, briefly exemplified here, were certainly broadly circulating in India in about the second century BCE. As a result, an explicit adhesion or confutation in the majority of the subsequent technical and speculative traditions could have been requested. Nonetheless, we wonder whether a comparable conventional explanation of the asymmetry of language was also advanced earlier, because the relevant Buddhist sources date back to at least the second century BCE, although it is possible that they constituted some portions of Buddha's preaching (thus dating back to sixth-fifth century BCE).

Indeed, in the *Chāndogya-Upaniṣad* [ChUp],<sup>83</sup> which possibly dates back to the sixth century BCE, language is in fact presented as a human undertaking that creates specific distinguished objects and fashions reality into its illusory discrete entities:

ChUp 6.1.3–4: [...] *katham nu bhagavaḥ sa ādeśo bhavātīti. yathā somyaikena mṛtipiṇḍena sarvaṃ mṛṇmayam vijñātam syāt. vācārambhaṇam vikāro nāmadheyam mṛttikety eva satyam*,  
 “[...] How indeed does this specific teaching<sup>84</sup> work, sir? Dear, as everything made of clay, could be discerned by means of just one lump of clay, the specific modified form is a verbal undertaking,<sup>85</sup> a name: the perceptible reality is just this: ‘It’s clay.’”

ChUp 6.4.1–2: *yad agne rohitam rūpam tejasaḥ tad rūpam. yac chuklam tad apām. yat kṛṣṇam tad annasya. apāgād agner agnītvam. vācārambhaṇam vikāro nāmadheyam trīṇi rūpāṇīty eva satyam. yad ādityasya rohitam rūpam tejasaḥ tad rūpam. yac chuklam tad apām. yat kṛṣṇam tad annasya. apāgād ādityād ādityatvam. vācārambhaṇam vikāro nāmadheyam trīṇi rūpāṇīty eva satyam*,  
 “The red visible appearance of fire is indeed the visible appearance of energy; the white, that of water; the black, that of food. The individuality of fire disappears. The specific modified form is a verbal undertaking, or better a name.<sup>86</sup> The perceptible reality is just this: the three visible appearances. The red visible appearance of the sun is indeed the visible appearance of energy; the white, that of water; the black, that of food. The individuality of the sun disappears. The specific modified form is a verbal undertaking, or better a name. The perceptible reality is just this: ‘They are just the three visible shapes.’”

The sapiential and substantially gnostic context of these passages aims at going beyond the discriminatory knowledge (*viveka-jñāna*) which is a condemned fruit of ignorance. In fact, it illusorily generates the plurality of perceptible appearances, which all prevent the common people from catching the ultimate oneness of truth (more precisely of that which is permanent, namely that which is ontologically/metaphysically really existent). Therefore, differently from the Mīl passage quoted above, the aim here is to show that the shapes and names (*rūpa* and *nāman*) of things cannot be real, because the imperceptible one is the only substance that exists. The three basic evolutes mentioned—termed here as energy, water, and food—especially because they explicitly match the colours of red, white, and black respectively, might be considered as a sort of antecedent of the well-known three properties (*guṇas*) of the Sāṃkhya tradition—the three qualities of primeval, irreducible, and immanifest matter (nature). The temporary individualities which language provides with labels/names depend on the different mingling of these three properties, but the only ones that actually (ontologically) exist are these three basic properties of nature.

The shared point is that if language did not provide these temporary combinations with proper designations, they would not be perceived at all. The multiplicity of commonly used

nouns is thus massively asymmetric with respect to reality which is one (or threefold at the most). As a consequence, this perspective does not have so much confidence in language as a valid means of knowledge, which is reasonably judged responsible (guilty) for the deception of the ignorant and prevents them from perceiving that which really exists beyond the phenomena. By contrast, this asymmetric conventional relationship between language and reality is a crucial medium of communication, the awareness of which—and consequently the highlighted second approach to linguistic asymmetry—seems to be supposed as having circulated for a long time and contemporaneously with the previously described approach (asymmetry as a mere natural exception to the broadly extended symmetry), perhaps at least between the sixth and the second BCE.

### *In Old Greek Sources*

In the Greek culture, Parmenides is the first to explicitly declare that names have been imposed by humans (*fr.* 28 B 8 DK, ll. 38–40). Thus, we suppose that he does not believe that language merely arises by nature.

Τῷ πάντ' ὄνομ(α) ἔσται,  
 ὅσσα βροτοὶ κατέθεντο πεποιθότες εἶναι ἀληθῆ,  
 γίγνεσθαι τε καὶ ὀλλυσθαι, εἶναι τε καὶ οὐχί.  
 “The being will have as many names,  
 as those which have been imposed by the mortals, who are convinced  
 that they are true: ‘to be born,’ ‘to die,’ ‘to be’ and ‘not to be.’

According to Parmenides, the being is immobile, eternal, one and whole. However, human beings are deceived by opinion (δόξα), which makes reality appear as divided into different components, so that humans have imposed names in order to identify each of them (*fr.* 28 B 19 DK):

Ὅττω τοι κατὰ δόξαν ἔφυ τάδε καὶ νυν ἔασι  
 καὶ μετέπειτ' ἀπὸ τοῦδε τελευτήσουσι τραφέντα·  
 τοῖς δ' ὄνομ' ἄνθρωποι κατέθεντ' ἐπίσημον ἑκάστω.  
 “In this way, according to opinion, these things are born and now are,  
 then, once they have grown, they will die:  
 humans imposed names as distinctive signs of each one.”

Unlike Heraclitus, for whom the ὀνόματα are only nouns, Parmenides evidently thinks that they are also verbs and locutions. Both philosophers think that humans are deceived by the seeming multiplicity of reality, but only Parmenides explicitly states that they have imposed names on each part of it, so that it is clear that he conceives these names as a mere convention. According to this conception, asymmetry, which is once again identified with *polyonymia*, seems to be a consequence of the deceitful knowledge of reality.

As far as Empedocles is concerned, the structure of the world is made up of four simple, eternal, and unalterable elements—earth, fire, air, and water—which are brought into union by Love and into separation by Strife (*fr.* 31 B 8 DK):

[...] Φύσις οὐδενὸς ἔστιν ἀπάντων  
 θνητῶν, οὐδὲ τις οὐλομένου θανάτοιο τελευτῆ,  
 ἀλλὰ μόνον μίξις τε διάλλαξις τε μίγντων

ἔστι, φύσις δ' ἐπὶ τοῖς ὀνομάζεται ἀνθρώποισιν.  
 "[...] There is neither birth for anyone of the mortals,  
 nor death destroying them,  
 but what exists is only the blending and the separation of the mixed elements,  
 even if it is called 'birth' by humans."

This fragment clearly shows that nominating is a human prerogative.<sup>87</sup> *Fr.* 31 B 9 DK, ll. 3–5 (= *fr.* 56 Bollack) is even clearer about the matter. When the elements are mixed in the form of man, animals, plants or birds

[...] τότε μὲν τὸ <λέγουσι> (ῥ)<sup>88</sup> γενέσθαι,  
 εὔτε δ' ἀποκριθῶσι, τὸ δ' αὖ δυσδαίμονα πότμον·  
 ἦ <γε> θέμις,<sup>89</sup> καλέουσι, νόμῳ δ' ἐπιφημι καὶ αὐτός.  
 "[...] then they call it 'to be born,'  
 but when they separate, they call it 'unfortunate fate';  
 surely, they call it with good reason, and I myself agree with this custom."

While Parmenides condemns names as manifesting the lack of understanding of reality, Empedocles accepts them as a useful convention for communication between humans, provided that they recognize the true structure of the world lying beyond them. In his opinion, even if reality is made up of momentary aggregations, humans can communicate with each other by giving names to each group. The norm provides for the reparation of a natural asymmetry between the names—which are stable and fixed by a convention—and the object they refer to—which is only seemingly unitary.

According to Proclus, Democritus explicitly discusses the arbitrariness of names by means of four arguments (*fr.* 68 B 26 DK):

1. Ἐκ τῆς ὁμωνυμίας· τὰ γὰρ διάφορα πράγματα τῷ αὐτῷ καλοῦνται ὀνόματι· οὐκ ἄρα φύσει τὸ ὄνομα.  
 "The proof from homonymy: different objects are called by the same name; hence names do not exist by nature."<sup>90</sup>
2. Ἐκ τῆς πολωνυμίας· εἰ γὰρ τὰ διάφορα ὀνόματα ἐπὶ τὸ αὐτὸ καὶ ἐν πράγματι ἐφαρμόσουσιν, καὶ ἐπάλληλα,<sup>91</sup> ὅπερ ἀδύνατον.  
 "The proof from multiple names: if different names refer to one and the same object, they also refer to each other, which is impossible."
3. Ἐκ τῆς τῶν ὀνομάτων μεταθέσεως· διὰ τί γὰρ τὸν Ἀριστοκλέα μὲν Πλάτωνα, τὸν δὲ Τύρταμον Θεόφραστον μετωνομάσαμεν, εἰ φύσει τὰ ὀνόματα;  
 "The proof from changes of names: why did we change the name of Aristocles to Plato, and Tyrtamus to Theophrastus, if names exist by nature?"
4. Ἐκ δὲ τῆς τῶν ὁμοίων ἐλλείψεως· διὰ τί ἀπὸ μὲν τῆς φρονήσεως λέγομεν φρονεῖν, ἀπὸ δὲ τῆς δικαιοσύνης οὐκέτι παρονομάζομεν; τύχη ἄρα καὶ οὐ φύσει τὰ ὀνόματα.  
 "The argument from the lack of corresponding names: why do we derive 'being wise' from 'wisdom,' but from 'justice' we have no verb? Hence names exist by chance and not by nature."<sup>92</sup>

Democritus thus sheds light on the lack of a perfect correspondence between language and reality.<sup>93</sup>

According to the sources, the sophist Protagoras considers both the theories of Democritus and the doctrines about the ceaseless changes of the universe, especially the one proposed by Heraclitus.<sup>94</sup> The latter doctrine surely underlies the Protagorean theory of relativism, according to which “of all things the measure is man, of things that are that they are, of things that are not that they are not” (Pl. *Tht.* 152a. Tr. Graham). If man is the measure, everything he experiences or says is true: as a consequence, two opposed discourses on the same matter are equally true. Plato and Aristotle link Protagoras to the eristic for his attempt to refute the speeches of his antagonists by exploiting the ambiguities of words.<sup>95</sup> He also treats the lack of correspondence which may exist between the ‘natural’ and the grammatical gender of names, blaming, for example, the use of names such as μῆνις ‘anger’ or πῆληξ ‘armour’ as feminine rather than as masculine.<sup>96</sup> The scholars agree on the fact that Aristophanes puts this kind of Protagorean research to shame in his *Clouds*, where Socrates notes that both the rooster and the hen are called with the masculine ἀλεκτροῦν in Greek. It is, thus, necessary to coin a new feminine name, such as ἀλεκτρούαινα! Moreover, even though the name of the kneading-trough, ἡ κάρδοπος, is feminine, it belongs to the o-stem declension which is usually assigned to masculine names (658–680). An echo of the Protagorean research was also seen in the so-called ‘battle of the prologues’ in *Frogs* 1119–1197,<sup>97</sup> where it is however possible that in lines 1182–1195, Aristophanes is alluding to Prodicus’ ‘correctness of names’ theory.<sup>98</sup>

In fact, Prodicus, said by the Suda to be the “disciple of Protagoras,”<sup>99</sup> deals with the so-called ὁρθότης τῶν ὀνομάτων.<sup>100</sup> He was interested in etymology<sup>101</sup> and in homonymy,<sup>102</sup> even if most sources inform us about his research on synonymy. This is where Prodicus shows that words commonly considered as having the same object are not completely interchangeable. Plato’s *Protag.* 337a–c might show Prodicus’ method, which consists in considering two synonyms and in explicating the reason why they are actually (even if sometimes only slightly) different: εὐδοκίμew is not the same as ἐπαινέw because the former is used to denote praise bestowed without any deceit, while the latter should also indicate insincere praise.

We agree with Mayhew’s opinion that Prodicus probably thinks that names are “stipulated (and so in an important sense conventional), but that it helped if they could be derived from or connected to the nature of what they name.”<sup>103</sup> Protagoras and Prodicus are a step ahead of Empedocles. He accepts the conventionality of names as a useful means for communication (νόμῳ δ’ ἐπιφημι καὶ αὐτός), while the two sophists criticize the excessively free use of words, which should adhere to the denoted object with precision. Playing with ambiguities is in fact the best way to deceive, but also to be deceived.

One of the most famous sophists, Gorgias, sheds light on the impossibility for words to convey knowledge of things, because they are of a completely different nature (*fr.* 82 B 3 DK, §§ 83–87):

[...] ᾧ γὰρ μὴνόμεν, ἔστι λόγος, λόγος δὲ οὐκ ἔστι τὰ ὑποκείμενα καὶ ὄντα · οὐκ ἄρα τὰ ὄντα μὴνόμεν τοῖς πέλας ἀλλὰ λόγον, ὃς ἕτερός ἐστι τῶν ὑποκειμένων [...] Εἰ γὰρ καὶ ὑπόκειται [...] ὁ λόγος, ἀλλὰ διαφέρει τῶν λοιπῶν ὑποκειμένων, καὶ πλείστῳ διενήνοχε τὰ ὁρατὰ σώματα τῶν λόγων· δι’ ἑτέρου γὰρ ὁργάνου ληπτὸν ἐστὶ τὸ ὁρατὸν καὶ δι’ ἄλλου ὁ λόγος [...] Τοιούτων οὐδὲν παρὰ τῷ Γοργίᾳ ἡπορημένων οἴχεται ὅσον ἐπ’ αὐτοῖς τὸ τῆς ἀληθείας κριτήριον.

“[...] That by which we communicate is speech, but speech is not the subsisting and existing things themselves. Therefore we do not communicate to our neighbours the existent things, but speech, which is different from the subsisting things [...] Even if speech does subsist, it differs from other subsisting things, and visible bodies differ most markedly from words. For the object of sight is grasped by a different organ than speech



[...] Since such things are called into question by Gorgias, as far as they are concerned the standard of truth fails.”<sup>104</sup>

The awareness of the instability of the perceivable phenomena, which had just begun with Heraclitus, brings thinkers, such as Parmenides and Empedocles, to recognize the conventional *status* of words and the instability of the word-object relation. Gorgias develops this assumption by asserting that it is not possible to know reality by means of words. In this second phase of pre-socratic thought, the word-object relation is thus considered as a mere convention. A well-established and naturally one-to-one correspondence between word and object does not exist, and this is also the reason why asymmetry exists with no exception.<sup>105</sup>

## 4 Conclusions

The comparative analysis of Indian and Greek traditions clearly shows that both followed the same *iter* which led from the intuitive belief in a natural one-to-one word-object relation to the conviction that this relation is a mere convention and a human undertaking. This conclusion is strictly bound to the observation of the ceaseless change and instability of reality. Thus, asymmetry is at first considered as only seeming, and the role of language as a means of knowledge is preserved; subsequently, the existence of asymmetry is recognized and accepted as part of the convention on which language is based. The consciousness of the lack of a well-established and natural word-object relation led to the conclusion that language is definitively an unreliable means of knowledge.

In both India and in Greece, paremyologies play the role of checking the one-to-one word-object relation. This is mostly applied to divine names, as shown by the passages from *R̥gveda*, *Atharvaveda* and the *Nirukta*, and in those by Homer, Hesiod, Pherecydes of Syros, and Heraclitus.

In both the selected groups of sources, the reflection about asymmetry encompasses the thought on the almost technical derivation of words. Compelling evidence of this is offered by some examples from the *Nirukta*, on the one hand, and from Democritus, on the other.

In the passages from the Vedic Upaniṣads and the Buddhist sources, language is presented as a human undertaking, which determines the deception of the ignorant. The latter erroneously concentrates on whole objects and their matching nouns instead of on their single perceptible parts and is prevented both from perceiving that which really exists beyond phenomena and from having access to the phenomena as such (*dharmas*). This kind of speculation, particularly the Upaniṣadic one, perfectly matches the thought of Parmenides and Heraclitus, who are convinced that the majority of people are not able to comprehend reality beyond the multiplicity of phenomena on which names are usually imposed. The Buddhist sources tolerate the asymmetry between the objects of the denotation and the relevant words, exactly as Empedocles does, in order to warrant the mutual comprehension of speakers.

The most important difference between the two cultures, as emerges from these documents, is that a technical-grammatical reflection on language was developed earlier on in India. Therefore, the watershed in the development of Indian reasoning on word-signification is the work of genuine linguists, such as Pāṇini (fourth century BCE) and his first commentators (third-second century BCE). On the contrary, as far as Greek sources are concerned, we are forced to merely adopt the general distinction between thought before and after Socrates.

Nonetheless, both in the ancient Greek sources and in the most ancient Indian ones such as the Vedic passages here quoted, in the period considered here (respectively, mid eighth century BCE-fifth century BCE and twelfth century BCE-fifth century BCE), language is not the

specific object of interest and those who reflect on it are often not grammarians. As a consequence, linguistic phenomena are at first occasionally observed in literary texts, and only later do they become part of technical traditions and of wider philosophical theories about the structure of the world. It is also noteworthy that it is only in India that linguistic theories are mostly influenced by the need to preserve the validity of the ritual<sup>106</sup> and the permanent relation between the words of the sacred text and the objects they refer to.

It is reasonable to assume that the abovementioned specific need is also sufficient justification for the frequent primacy of speculations on language in the subsequent scientific and technical Indian scenario. It is documented at a very early date in the *Nighaṇṭu*'s exegetical-lexical lists (commented on by the *Nirukta*), which, as is well-known, are mainly arranged according to the categories of synonyms, homonyms and theonyms, thus according to the asymmetries of language. This system seems to presuppose the crucial concept of substitution,<sup>107</sup> which may already have played a decisive role in the ancient Vedic ritual-poetic contest in assuring pre-eminence in the sacrificial arena and as a consequence in society. Later the substitution considered as “a theory of truth” (Kahrs 1998: 173) became the focus of the majority of philosophical assertions in Upaniṣadic thought, by means of the so-called “equivalences,” which are often pondered substitutions of objects or concepts with others considered equivalent. To a large extent, this system of “replacement” could be considered as a peculiarly Indian and ritually oriented development of the wide potentialities of asymmetry.

Instead, in Greece the problem of asymmetry was almost always strictly linked to that of the reliability of the words and of the λόγοι they make up. This relation was historically decisive both in the field of rhetoric intended as art of persuasion, especially in political and legal contexts, and in that branch of philosophy which investigates the possibility of knowing reality by means of logical reasoning.<sup>108</sup>

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speech unit is not employed”: the *ekaśeṣa* case” (15th World Sanskrit Conference, Delhi 2012, D.K. 2013), “The *yugapad*-way of using words: how a linguistic taboo became a crucial literary strategy” (*Lingua Posnaniensis* 2013: ICOSAL, Moscow 2012), and (co-authored with Elisa Freschi) *Rule-extension strategies in Ancient India* (Peter Lang 2013). Co-editor with Maria Piera Candotti of *Signless Signification in Ancient India and Beyond* (Anthem 2013). She was project-leader at Cagliari University for the RAS/U.E. Research “*Traces of a ‘heterodox’ concept of kingship in ancient, medieval and modern India*” (2013–2015), in the contest of which she was the editor of the Proceedings of the Conference “Patterns of Bravery. The Figure of the Hero in Indian Literature, Art and Thought, Cagliari 2015,” in *Indologica Taurinensia* XL and co-editor (with M. Dore and H.H. Hock) of “*Vrātya Culture in Vedic sources*,” DK: New Delhi/Bangkok 2016 (Proceedings of a 16th World Sanskrit Conference Panel, Bangkok 2015).

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- 1 This principle has been singled out by Bronkhorst. See Johannes Bronkhorst, “Sanskrit and Reality: The Buddhist Contribution,” in *Ideology and Status of Sanskrit: Contributions to the History of the Sanskrit Language*, ed. Jan E. M. Houben, (Leiden: Brill, 1996), 109–35; Id., “The Correspondence Principle and Its Impact on Indian Philosophy,” *Indo-Sibisōshi Kenkyū* 8, (1996): 1–19; Id., *Language et réalité: sur une épisode de la pensée indienne* (Turnhout: Brepols, 1999); Id., *Language and Reality: On an Episode of Indian Thought* (Leiden: Brill, 2011); Id., “The Correspondence Principle and Its Critics,” *Journal of Indian Philosophy* 41, (2013): 491–99.
  - 2 Pāṇini’s grammar probably dates back to fifth century BCE: the *vārttikas* (“short glosses”) on this grammar are attributed to Kātyāyana; the first commentary on Pāṇini’s grammar, i.e. the *Mahābhāṣya*, was composed by Patañjali, who possibly lived in the third and in the second century BCE respectively.
  - 3 For the poetic-rhetorical outcomes of this general rule see Tiziana Pontillo, “The *yugapad*-Way of Using Words, i.e. How a Linguistic Taboo Became a Crucial Literary Strategy,” in *Proceedings of the International Conference on the South Asian Languages and Literatures*, Moscow, 5–7/07/2012, ed. Alice Davison, Hans H. Hock, Liudmila Khokhlova, “*Lingua Posnaniensis*” 55, 2, (2013): 109–22.
  - 4 M and Vt are quoted from: *The Vyākaraṇa-Mahābhāṣya of Patañjali*, ed. Franz Kielhorn, 1880–1885, Third edition, Revised and Furnished with Additional Readings, References and Select Critical Notes by Kashinath V. Abhyankar (Pune: Bhandarkar Oriental Research Institute, 1: 1962; 2: 1965; 3: 1972 [3 vols.]).
  - 5 A is quoted from *The Aṣṭādhyāyī of Pāṇini*, ed. and trans. Rama N. Sharma (Delhi: Munshiram Manoharlal, 1990–2003 [5 vols.]).
  - 6 A 1.2.64: *sarūpānām ekaśeṣa ekavibhaktan*, “A single remainder of [many] items having the same form occurs, provided that a single ending is used.” A proposal for considering this rule as an exception to the one-to-one symmetry between word-forms and their denotation, to be interpreted as a substitution-rule, is advanced in Tiziana Pontillo, “Where the sense is intended although the corresponding speech unit is not employed”: the *Ekaśeṣa* case,” in *Proceedings of the 15th World Sanskrit Conference*, Delhi 5-10 January 2012 (Vyākaraṇa Session), ed. George Cardona (New Delhi: D. K. Printworld, 2013), 97–132.

- 7 In the Pāṇinian tradition, *artha*, as a linguistic term, does not denote the meaning as a concept, but clearly denotes the object on which a word-form “falls,” i.e. the referent - cf. Jouthe A. F. Roodbergen, *Dictionary of Pāṇinian Grammatical Terminology*, s.v. (Pune: Bhandarkar Oriental Research Institute, 2008). In particular, Kātyāyana and Patañjali consistently use almost “pragmatic” examples, in order to check the functioning of language. See e.g. M 1.250 ll. 20–25 *ad* A 1.2.68, 70 and 71 Vt 2 where it is noted that when someone says “Bring the brother” (*bhrātā nīyatām*) in everyday usage, one’s sister is not brought (*na hi [...] svasā nīyate*). Even though the relation between a word and its referent is considered primordial—*Mīmāṃsāsūtra* 1.1.5: *utpattikas tu śabdasyārthena sambandhaḥ* [...]—see *Śrīmajjaiminipraṇīte Mīmāṃsādarśane: Mīmāṃsakakāṇṭhīrava-Kumārīlabhaṭṭapraṇīta-Tantravārtikasahita-Śābarabhāṣyopetaḥ*, ed. Kashinath V. Abhyankar, and Ganesasastri A. Joṣī (Poona: Anandasrama, 1971–1980 [1929–1934]), it is only in the Mīmāṃsaka tradition that “knowing a language (being linguistic) involves much more than simply ‘knowing the names for things’; it involves, much more basically, having a grasp of the meaning of meaning” (Arnold 2006: 476). See Dan Arnold, “On Semantics and *Samketa*: Thoughts on a Neglected Problem with Buddhist Apoha Doctrine,” *Journal of Indian Philosophy* 34, (2006): 415–78.
- 8 This passage constitutes the very first *vārttika* by Kātyāyana in Kielhorn’s edition of the M and it becomes a general presupposition for later linguistic reflection. Even Nāgeśa Bhaṭṭa (1730–1810) still relies on this relation (*sambandha*), more precisely between an inflected word (*pada*) and its referent, in order to define the signifying “power” or “capacity” (*śakti*) of language.
- 9 In other words, Pāṇini, along with each user of his grammar (who should be a quite good speaker of the Sanskrit language, on the basis of Houben’s reflections) is supposed to know in advance which words of everyday language have to be used. See Jan E. M. Houben, “‘Meaning Statements’ in Pāṇini’s Grammar: on the Purpose and Context of the *Astādhyāyī*,” *Studien zur Indologie und Iranistik* 22, (1999): 23–54. Furthermore, it is presupposed that grammar neither produces words nor teaches their meaning. In fact, all correct language is independent of grammarians. See M 1.7 l. 28–8 l. 1 where a grammarian’s job is compared with that of a potter.
- 10 Both Kashinath V. Abhyankar, and Jayadev M. Shukla, *Patañjali’s Vyākaraṇa-Mahābhāṣya. Āhnika 1–3. With English Translation and Notes* (Poona: Bhandarkar Oriental Research Institute, 1975), and Shivram D. Joshi, and Jouthe A. F. Roodbergen, *Patañjali’s Vyākaraṇa-Mahābhāṣya. Paspasāhnika* (Poona: University of Poona, 1986), divide this *vārttika* into three parts, since Patañjali comments on the relevant three strings separately. With regard to the place occupied by this first *vārttika* and its supposed author, see George Cardona, *Recent Research in Pāṇinian Studies* (Delhi: Motilal Banarsidass, 2004 [1999]), 223–25.
- 11 Of course, this analysis of *śabdārthasambandhe* as a *tatpuruṣa*-compound does not match Patañjali’s interpretation—see e.g. Peter M. Scharf, *The Denotation of Generic Terms in Ancient Indian Philosophy: Grammar, Nyāya, and Mīmāṃsā* (Philadelphia: American Philosophical Society, 1996), 22. In fact, Patañjali’s analysis as a *samābhāra dvandva* implies a more compelling interpretation as “words, meanings and [their] relations,” but this seems to contradict the current use of *vārttika*. See Joshi, and Roodbergen (1986: 90 n. 331); Madeleine Biarreau, *Théorie de la connaissance et philosophie de la parole dans le brahmanisme classique* (Paris: Mouton, 1964), 36; Jan E. M. Houben, *The Sambandha-samuddeśa (Chapter on Relation) and Bhartṛhari’s Philosophy of Language* 37 (Gröningen: Egbert Forsten, 1995), n. 59. Furthermore, Patañjali glosses *siddha* as *nitya* (“permanent”), while *nitya* is commonly attributed to a linguistic form (*nitya* vs. *kārya*). This is the only occurrence, out of almost 150 occurrences of the term, where it refers instead to the object meant by a word. See Maria Piera Candotti, and Tiziana Pontillo, “The Autonomous Process of Denotation: Kātyāyana and Patañjali on the Limits of Analysis,” in *Tīrthayātrā. Essays in Honour of Stefano Piano*, ed. Pinuccia Caracchi, Antonella S. Comba,

- Alessandra Consolaro, and Alberto Pelissero, (Alessandria: Edizioni dell'Orso, 2010), 41–61.
- 12 It finally depends on the intention of making something known, i.e. of conveying some meaning through a verbal expression.
- 13 Cf. Johannes Bronkhorst, *Three Problems Pertaining to the Mahābhāṣya* (Poona: Bhandarkar Oriental Research Institute, 1987), 40. *contra* the hypothesis that according to Patañjali, a word is a mental or psychical entity. For further reflection on this feature of the signification and some comparable passages from/in Bhartṛhari, see Maria Piera Candotti, and Tiziana Pontillo, “The Earlier Pāṇinian Tradition on the Imperceptible Sign,” in *Signless Signification in Ancient India and Beyond*, ed. Tiziana Pontillo, and Maria Piera Candotti (London, New York, Delhi: Anthem Press, 2013), 129–30.
- 14 See Max Deeg, *Die altindische Etymologie nach dem Verständnis Yaska's und seiner Vorgänger* (Dettelbach: Röhl, 1995). For the assumption of a rhetoric and narrative scope of these technical figures of speech, see also Hans Schmeja, *Interpretationen aus dem Ṛgveda* (Innsbruck: AMOE 1987) and Tiziana Pontillo, “Can the So-called ‘Identifications’ be Included Among the Narrative Techniques of the Late Vedic Literature?” in *Proceedings of the International Seminar on Narrative Techniques in Indian Literature and Arts* - University of Calicut 7–9 January, 2010 (New Delhi: Department of Sanskrit, University of Calicut, 2012), 7–20.
- 15 ṚV is quoted from *R̥gveda-Samhitā with a Commentary of Sāyaṇācārya*, ed. Nārāyaṇa Ś. Sontakke, and Chintaman G. Kashikar (Poona: Vaidika Saṁśodhana Maṇḍala 1983 [1933–1951; 4 vols]).
- 16 *Atharvaveda (Śaunaka) with the Padapāṭha and Sāyaṇācārya's Commentary*, ed. Vishva Bandhu (Hoshiarpur: Vishveshvaranand Vedic Research Institute, 1960–1962).
- 17 Cf. AVŚ 9.5.13 ab.
- 18 Cf. e.g. ṚV 6.16.48; AVŚ 18.1.27–28.
- 19 Nir is quoted from *The Nirukta of Yāska* (with Nighaṇṭu), Edited with Durga's Commentary, ed. Hari M. Bhadrakamkar (Poona: Bhandarkar Oriental Research Institute, 1985).
- 20 For the several steps of this specific kind of Vedic exegesis which crucially relies on paretymologies and other technical devices, see Eivind Kahrs, *Indian Semantic Analysis. The Nirvacana Tradition* (Cambridge: Cambridge University Press, 1998).
- 21 Nevertheless, the verbal noun in *-ana* is one of the canonical technical methods Yāska uses to explain which is the verbal base from which a noun is supposed to derive. See the complete list of these methods in Eivind Kahrs, “Yāska's Nirukta: the Quest for a New Interpretation,” *Indologica Taurinensia* 12, (1984): 139–54.
- 22 We read the same phrase twice in the *R̥gVeda*: ṚV 1.103.2ab; ṚV 2.15.2cd. And there are at least 4 other ṚV occurrences and 1 AVŚ occurrence of the same connection with the verb *prath-*: ṚV 5.58.7; ṚV 6.72.2; ṚV 8.89.5; ṚV 10.82.1; AVŚ 12.1.2; AVŚ 4.26.1. Cf. also ṚV 1.55.1ab and *Śatapathabrāhmaṇa* (Mādhyandina Recension) [ŚBM] 6.1.1.15; 6.1.3.7, where Prajāpati is the agent of the action of *prath-*. ŚBM is quoted from *The Śatapatha-Brāhmaṇa in the Mādhyandina-sāṅkhya with Extracts from the Commentaries of Sāyaṇa, Harisvāmin and Drivedagaṅga*, ed. Albrecht Weber (Varanasi: Chowkhamba Sanskrit Series Office 1964 [1885]).
- 23 This term is merely used here in a pre-classical sense, namely in accordance with the late Vedic lexicon: see the Brāhmaṇa-passages quoted below (§ 2.1), in which *pratyakṣa-* “before one's eyes” is opposed to *paro'kṣa-* “out of sight.”
- 24 For the story of this terminology and its relation with the technical tradition, in particular with Durga's commentary on the so-called three principles of the *Nirukta*, see Tiziana Pontillo, “Il *Parokṣa* come oggetto delle etimologie (del *Nirukta* e dello *Śatapatha-Brāhmaṇa*),” *Rendiconti dell'Istituto Lombardo. Accademia di Scienze e Lettere* (Lett.) 128, (1994):

- 1–19; Ead., “Parole poliseme nel *Nirukta*,” *Annali di Cà Foscari* 33, 3, (1994), s. orient. 25: 303–09; Ead., “Etimologie nel *Nirukta* e nello *Śatapatha-Brāhmaṇa*,” in *Atti del Sesto e del Settimo Convegno Nazionale di Studi Sanscriti*, Venezia 23 novembre 1990-Palermo 20–21 maggio 1993, gen. ed. Oscar Botto, ed. Saverio Piano e Victor Agostini (Torino: CESMEO, 1998), 261–74; Maria Piera Candotti, and Tiziana Pontillo, “La realtà della lingua e le astrazioni dei grammatici: parole, frasi e segmenti nello sviluppo della riflessione linguistica indiana,” in *L'India e la parola*. Volume monogr. di “Humanitas” 61 (3/2006), ed. Alberto Pelissero, 399–460, 414–17.
- 25 Eggeling’s translation of *paro’keṣa* is almost systematically “mystic.” See *Śatapatha-Brāhmaṇa According to the Text of the Mādhyandina School*, transl. Julius Eggeling (Motilal Banarsidass, Delhi 1963–1978 [Oxford 1882–1900]).
- 26 Cf. ŚBM 14.6.11.2.
- 27 This passage is quoted from *The Tāṇḍyamabrahmaṇa Belonging to the Sāmaveda with the Commentary of Śāyānācārya*, ed. A. Cinnasvāmī Śāstrī, and Paṭṭābhīrāma Śāstrī (Benares: Krishnadas-Gupta, 1935–1936 [2 vols]).
- 28 It sometimes also deals with a motivated polysemy. E.g. in the example quoted above, the word-form *rukman* somehow denotes both a plate and the light of the Sun.
- 29 In Nir 10.8 this etymon occurs as one among 15 proposals.
- 30 This ritually planned replacement of words with synonyms and equivalent periphrases was already underlined by Louis Renou, “Art et religion dans la Poétique Sanskrite: le ‘jeu des mots’ et ses implications,” *Journal de Psychologie Normale et Pathologique* 44, 1–2 (1951): 280–85: “La férie appelée Upahavya comporte des mots remplacées par des synonymes voilés, ainsi *soma* par *indu*. [...] le langage doit être ‘courbé,’ c’est à dire à double entendre ou brouillé par l’usage de synonymes” (*ibid.*: 285)
- 31 As far as this last terminological pair, see also Louis Renou, and Liliane Silburn, “*Nirukta* and *Anirukta* in Vedic,” in *Sarīpabhārati*, Volume in Honour of Lakshman Sarup, Hoshiarpur, 1954, 68–79; Klaus Mylius, “Der Upahavya. Ein Vedischer Opferritus,” *Annals of the Bhandarkar Oriental Research Institute*, 58/59, (1977–1978): 203–20, 208–10.
- 32 This passage is quoted from *The Baudhāyana-Śrautasūtra*, ed. and trans. Chintaman G. Kashikar (New Delhi: IGNCa and Motilal Banarsidass, 2003 [4 vols]).
- 33 This passage is quoted from Hari G. Ranade, *Lātyāyana-Śrauta-Sūtra* (New Delhi: IGNCa, Motilal Banarsidass, 1998).
- 34 JB is quoted from *Jaiminīya Brāhmaṇa of the Sāmaveda*, ed. Raghu Vira, and Lokesh Chandra (Delhi: Motilal Banarsidass 1986 [Varanasi 1955]). Another piece of evidence is a commentary on *Āśvalāyanaśrautasūtra* 9.7.28—quoted from *The Śrauta Sūtra of Āśvalāyana, with the Commentary of Gārgya Nārāyaṇa*, ed. Rāmanārayaṇa Vidyāratna (Calcutta: The Asiatic Society, 1864–1874), which connects the *upahavya* precisely with the Chāndogya tradition. The earliest occurrence of the term *upahavya* is AVŚ 11.7.15 but it merely denotes an “added oblation” according to Whitney’s translation (*Atharva-Veda Samhitā*, transl. William D. Whitney (Delhi: Motilal Banarsidass 1962 [Cambridge, Mass., 1905]) and also to Mylius (1977–1978: 204). It is however noteworthy that in the AVŚ passage the *upahavya* is mentioned alongside “sacrifices arranged in secret” (*yajñā gūhā hitāḥ*).
- 35 We are hinting at the *brahmodya* context, see e. g. Louis Renou, and Liliane Silburn, “Sur la Notion du Brahman,” *Journal Asiatique* 1949 [repr. in *L’Inde Fundamentale*, ed. Charles Malamoud (Paris: Hermann 1978)]: 83–116, 87–9; Louis Renou, “L’enigme dans la Littérature ancienne de l’Inde,” *Diogenes* 29, (1960): 38–48; Jan C. Heesterman, *The Ancient Indian Royal Consecration, The Rājasūya Described According to the Yajus Texts and Annotated* (S Gravenhage: Mouton & Co., 1957), 150–52; Paul Horsch, *Die vedische Gāthā- und Śloka-Literatur* (Bern: Francke Verlag, 1966), 405–10; Ludwik Sternbach, *Indian Riddles. A Forgotten Chapter in the History of Sanskrit Literature* (Hoshiarpur: Vishveshvaranand Vedic

- Research Institute, 1975), 16–8; George Thompson, “The *Brahmodya* and Vedic Discourse,” *Journal of the American Oriental Society* 117, (1997): 13–37.
- 36 See e.g. Louis Renou, *Les pouvoirs de la Parole dans le Rgveda* (Paris: de Boccard, 1955), 18; Edwin Gerow, *Indian Poetics* (Wiesbaden: Harrassowitz, 1977), 220.
- 37 These examples are defined as *saṃvijñātāni* “well known” - “communément connus” according to Emilie Aussant, *Le nom propre en Inde. Considérations sur le mécanisme référentiel* (Lyon: ENS, 2009), 45. Cf. *The Nighaṇṭu and the Nirukta. The Oldest Indian Treatise on Etymology, Philology and Semantics*, crit. ed. and trans. Lakshman Sarup (Delhi: Motilal Banarsidass, 1920–1927), where *saṃvijñātāni* is translated as “conventional.”
- 38 For an explanation of all these objections, although oriented to a different aim, see Pontillo (1998: 261–74), and for the discussion of some technicalities involved in the third objection, see Candotti, and Pontillo (2006: 399–460, 411–4).
- 39 Yāska preferably selects the words whose meaning cannot be explained merely with the help of grammar as the specific object of exegetic/pareymological science. On the complementarity between grammar and *nirukta* science, see Pontillo (1998, 272–73) and Candotti, and Pontillo (2006: 399–460: 402–04).
- 40 For the reconstruction of the usage of this term in Kātyāyana and Patañjali, see Maria Piera Candotti, and Tiziana Pontillo (2010: 41–61, 42); Tiziana Pontillo, “‘Where the sense is intended although the corresponding speech unit is not employed’: the ekaśeṣa case,” in *Proceedings of the 15th World Sanskrit Conference*, Delhi 5–10 January 2012 (*Vyākaraṇa* Session), ed. George Cardona (New Delhi: D.K. Printworld, 2013), 97–132; Pontillo (2013, 109–22); Maria Piera Candotti, and Tiziana Pontillo, “*Svabhāva* in Grammar: Notes on the Early History of a Philosophical Term,” in *The Human Person and Nature in Classical and Modern India* (Pisa, Rome: Fabrizio Serra Editore, 2015), 85–110 (Supplemento n° 2 alla Rivista degli Studi Orientali, N.S. 88).
- 41 For a complete survey of Pāṇini’s rules devoted to the zero-replacements and the relevant earliest commentaries, see Tiziana Pontillo, “Allomorfi e morfema ‘Zeromorfi’ in Pāṇini: sostituzione di morfemi con zero fonico” (“Glottologia e Filologia” XII Ciclo 1996–1999), Italy: Faculty of Arts and Humanities of the University of Milan, 1999; for the relevant terminology, see Tiziana Pontillo, ‘Il prototipo e le regole specifiche della letteratura rituale come modello della tecnica di sostituzione di Pāṇini: il verbo lup- e il sostantivo lopa- nei Kalpa-Sūtra,’ *Annali della Facoltà di Lettere e Filosofia dell’Università degli Studi di Cagliari* 21 (58), 2003 [2004], 5–42; for some specific cases, Tiziana Pontillo, “Derivazione denominale metonimica con zeromorfi di tipo LUP in Pāṇini,” *Atti del Sodalizio Glottologico Milanese*, 40 (2000) [2004], 105–49; Tiziana Pontillo, ‘Once Again on *Vyākṛti-Vacane* in *Aṣṭādhyāyī* 1.2.51: *Śravaṇaḥ/Śravaṇā*,’ *Rivista di Studi Sudasiatici* 4 (2010): 97–126; for a speculative interpretation of Pāṇini’s way/method of dealing with the zero-replacements, see Candotti, and Pontillo (2013: 99–153, 129–30) for the connection between the zero-replacement device and the grammatical descriptive method of the rule-extensions, see Elisa Freschi, and Tiziana Pontillo, *Rule-extension Strategies in Ancient India: Ritual, Exegetical and Linguistic Considerations on the Tantra- and Prasaṅga-Principles* (Frankfurt: Peter Lang 2013), 117–8.
- 42 Even though these morphs can be regularly abstracted by means of the process of comparison between *continuum* and *discontinuum* (*anvaya* and *vyatireka*).
- 43 M 1.241 ll. 5–6 (*ad* Vt 29 on A 1.2.64): *yo hi gām aśva iti brūyād aśvaṃ vā gaur iti na jātucit sampratyaḥ syāt*, “If one calls a cow a horse or a horse a cow (as a *mother* which is called ‘*father*’ in the dual form *pitarau*) there would possibly be no comprehension (of the intended sense).”
- 44 Thus, the invention of the fundamental pattern of substitution may have been determined by the sacred belief in this permanent relation, along with the parallel technical need for the symmetry on which the scientific description of morphology could be arranged with little difficulty. This substitution pattern was then able to account for all

- the exceptions to the one-to-one principle of correspondence, such as the phenomena of synonymy and homonymy and the so-called denotation *in absentia*, by focusing on the whole (even inflected) word or its sub-units.
- 45 Kraus thinks that the archaic conception of the biunique word-object relation was exceeded in the fifth BCE. See Manfred Kraus, *Name und Sache. Ein Problem im frühgriechischen Denken* (Amsterdam: B. R. Grüner, 1987).
- 46 Greek reflection on language begins in occasional forms in the archaic poems, which record the first and naive reflections about the lability of the relation between language and reality, or even between speeches and the speaker's actual intentions. Cf. *Il.* 20.24–255, *Od.* 19.203, *Hes. Op.* 78, *Th.* 226–232. Paul Mazon, *Homère. Iliade* (Paris: Les Belles Lettres, 1957); Victor Bérard, *L'Odyssée* (Paris: Les Belles Lettres, 1967); Martin L. West, *Hesiod. Theogony* (Oxford: Oxford University Press, 1966); Martin L. West, *Hesiod. Works and Days* (Oxford: Oxford University Press, 1978).
- 47 Egbert J. Bakker, *A Companion to the Ancient Greek Language* (Malden MA-Oxford: Wiley - Blackwell, 2010); Hermann Fränkel, *Dichtung und Philosophie des frühen Griechentums. Eine Geschichte der griechischen Epik, Lyrik, und Prosa bis zur Mitte des fünften Jahrhunderts* (Munich: Beck, 1962).
- 48 Werner Jaeger, *La teologia dei primi pensatori greci* (Firenze: La Nuova Italia Editrice, 1961), 111–12; Manfred Kraus, *Name und Sache. Ein Problem im frühgriechischen Denken* (Amsterdam: B. R. Grüner, 1987), 30–41.
- 49 Cf. Daniele Gambarara, *Alle fonti della filosofia del linguaggio* (Roma: Bulzoni Editore, 1984), 118–29.
- 50 Cf. ŚBM 1.1.4.4. (seventh century BCE) in which the black antelope skin is called *cárman* by humans and *sárman* by gods.
- 51 Cf. *Mābhārata* 1.69.33, in which the name *Sarvadamana*-, given by the ascetics to Śakuntalā's son, was changed into Bharata, which defines the son in relation to his father - *The Mahābhārata*, crit. ed. Vishnu S. Sukthankar, Sripad K. Belvalkar, and Parashuram L. Vaidya (Poona: Bhandarkar Oriental Research Institute, 1933–1971; 19 vols.). See Tiziana Pontillo, “Il formulario delle paretimologie degli antroponimi nel *Mahābhārata*,” in *Atti dell'Ottavo Convegno Internazionale di Studi Sanscriti*, Torino, 20–21 ottobre, 1995, ed. Irma Piovano, and Victor Agostini (Turin: Edizioni dell'Orso 2001), 97–117.
- 52 His second name, Ἀστυάναξ depends on his father Hector, who is the defender (ἄναξ) of the city (ἄστυ).
- 53 Cf. *Hes. Th.* 197, 272.
- 54 *Hom. Il.* 1.403–404 Βριάρηων - Ἀργείων and *Od.* 5.333–334 Ἴνῳ - Λευκοθέῃ.
- 55 Kirk: “It is surprising to find this concept stated [...] of plural beings.” See: Geoffrey S. Kirk, John E. Raven, Malcolm Schofield, *The Presocratic Philosophers* (Cambridge: Cambridge University Press, 1983), 56. The same principle is attested in the Orphic tradition, as Gambarara observes. Cfr. Gambarara (1984: 169–71).
- 56 Kirk (1983: 57, 71); Giorgio Colli, *La sapienza greca. Epimenide, Ferecide, Talete, Anassimandro, Anassimene, Onomacrito*, Vol. 2, 275, n. 9 A 1 (Milano: Adelphi, 1978); Rudolf Pfeiffer, *History of Classical Scholarship from the Beginnings to the End of the Hellenistic Age* (London: Oxford University Press, 1968), 12; Werner Jaeger, *La teologia dei primi pensatori greci* (Firenze: La Nuova Italia Editrice, 1961), 111. Ζᾶς, “who lives,” and Χρόνος, “time,” are both paretymological forms for the traditional Ζεὺς and Κρόνος.
- 57 *Fr.* 22 B 15 Diels - Kranz [DK]. See: Hermann Diels, and Walther Kranz, *Die Fragmente der Vorsokratiker* (Berlin: Weidmannsche Verlagsbuchhandlung, 1956); *fr.* 93 Fronterotta.
- 58 Tr. Kahn.
- 59 Charles H. Kahn, *The Art and thought of Heraclitus* (Cambridge: Cambridge University Press, 1979), 263–66; Gambarara (1984: 246, n. 10).



- 60 Cf. *fr.* 92, 93 Kahn (= *fr.* 22 B 62, 88 DK).
- 61 *Fr.* 22 B 67 DK; *fr.* 28 Fronterotta.
- 62 Cf. Aeschl. *fr.* 70 TrGF (= 70 N.) Ζεὺς ἐστὶν αἰθὴρ, Ζεὺς δὲ γῆ, Ζεὺς δ' οὐρανός, | Ζεὺς τοι τὰ πάντα χῶ τι τῶνδ' ὑπέρτερον.
- 63 Cf. Francesco Fronterotta, *Eraclito. Frammenti* (Milano: BUR, 2013), 97–100; Marcel Conche, *Héraclite. Fragments* (Paris: Presses Universitaires de France, 31991), 379–83; Jean Bollack, and Heinz Wismann, *Héraclite ou la séparation* (Paris: Éditions de Minuits, 1972); Kahn (1979 : 84–5, 276–81).
- 64 If we accept the integration of πῶρ, the similarity of this Heraclitean fragment with *Kātha Upanisad* 2.5.9 is striking. Ἀλλοιοῦται is also under investigation. Cf. Carlo Diano and Giuseppe Serra, *Eraclito. I frammenti e le testimonianze* (Milano: Arnoldo Mondadori Editore, 1980), 142–43.
- 65 Diano, and Serra (1980: 141).
- 66 Miroslav Marcovich, Rodolfo Mondolfo, and Leonardo Tarán, *Eraclito. Testimonianze, Imitazioni e Frammenti*, trans. Piero Innocenti (Milano: Bompiani, 2007), 668.
- 67 Marcovich (2007: 514–5): “In tal modo, almeno per quanto riguarda la φύσει ὁρθότης τῶν ὀνομάτων, Eraclito può essere stato il padre spirituale del *Cratilo* platonico.”
- 68 *Fr.* 79 Kahn; *fr.* 66 Fronterotta; *fr.* 39 Marcovich. *Etym. Magn.*, s. v. βίος. The text of the *Etym. Magn.* is τῷ τόξῳ, with an οὖν that should preferably not be expunged, as Gambarara (1984: 246, n. 2) observes.
- 69 Conche (31991: 421).
- 70 Thomas M. Robinson, *Heraclitus. Fragments* (Toronto - Buffalo - London: University of Toronto Press, 1987), 111, *fr.* 48. See also Fronterotta (2013: 264–5, n. 2): “Questo punto di vista [...] colloca certamente Eraclito tra le fonti della sezione etimologica del *Cratilo* platonico [...] collocandosi evidentemente, in tale ottica, nella prospettiva ‘essenzialista’ della naturale corrispondenza fra nome e cosa.”
- 71 Lorenzo Miletto, *Linguaggio e metalinguaggio in Erodoto*, in *Annali dell'Istituto Universitario Orientale di Napoli* (Pisa - Roma: F. Serra, 2008), 26.
- 72 Cf. Pl. *Cra.* 402a λέγει πού Ἡεράκλειτος ὅτι πάντα χωρεῖ καὶ οὐδὲν μένει.
- 73 Mil is quoted from *Milindapañha*, ed. Vilhelm Trenckner (London: Luzac, 1962 [1880]).
- 74 M 1.136 l. 8 Vt 10 *ad* A 1.1.56: *ekadeśavikṛtam ananyavat*, which corresponds to *Paribhāṣā* 37. See *The Paribhāṣenduśekhara of Nāgojibhaṭṭa*, ed. and explained by Franz Kielhorn, Part I, Critically edited with the Commentary Tattvādarśa of M.M. Vasudev Sh. Abhyankar (Poona: Bhandarkar Oriental Research Institute 2001 [1962]); Part II Translation and Notes by Kashinath V. Abhyankar (Poona: Bhandarkar Oriental Research Institute, 2001 [1960]).
- 75 M 1.23 ll. 24–27 *ad* Śivasūtras 3–4 Vt 5; M 1.136 ll. 21–22 *ad* A 1.1.56 Vt 11; M 3.2 ll. 13–16 *ad* A 6.1.1 Vt 13: cf. Maria Piera Candotti, and T. Pontillo, “The (In)separable Parts of a Plant in the Mahābhāṣya Imagery i.e. How Nature May Inspire a Grammarian,” in *Pandanus '07*, ed. Jaroslav Vacek (Prague: Signeta, 2007), 43–63.
- 76 M 1.75 ll. 13–4 *ad* A 1.1.20 Vt 5: *sarve sarvapadādeśā dākeṣṭpūtrasya pāṇineḥ* | *ekadeśa vikāre hi nityatvam nopapadyate*.
- 77 MN is quoted from: *The Majjhima-Nikāya*, Vol. 1, ed. Vilhelm Trenckner (London: Luzac, 1964 [1888]).
- 78 This passage is emphasized in Kulatissa N. Jayatilleke, *Early Buddhist Theory of Knowledge* (New York: Routledge, 2008 [1963]), 314–5.
- 79 It is nevertheless noteworthy that, whereas the Brāhmaṇas sometimes resorted to bizarre etymologies in order to illustrate some ritual explanation, in the Pāli sources we often find some wrong definitions of specific terms, i.e. some historically incorrect explanations, targeted on the intentional introduction of a new use of these terms. See

- Jayatilleke 2008: 297. An example (*rūpa*) is analysed in Tiziana Pontillo, “A Dense Definition of Rūpaka. What does *rūpyate* mean in Bhāmaha’s Kāvyaḷamkāra 2.21,” in *Sanskrit Studies* 4, (2015), ed. Upendra Rao (Delhi: D. K. Printworld, 2015), 145–68, 148–51.
- 80 See *The Digha Nikaya*, ed. Thomas W. R. Davids, and Joseph E. Carpenter (London: Oxford University Press/London: Luzac, 1947–1960 [1890; 1903; 1911]).
- 81 These *dharmas* are “classified abstractly by distinctive intrinsic nature” (*svabhāva*): cf. C. Cox, “From Category to Ontology: the changing Role of Dharma in Sarvāstivāda Abhidharma,” *Journal of Indian Philosophy* 32, (2004): 543–97, here p. 553.
- 82 As pointed out and reconstructed by Bronkhorst (1987), they could match with the two expressions *padasaṃghāta* and *varṇasaṃghāta*, which are merely employed as examples in M 2.104 ll. 2–3 *ad* A 3.2.49 Vt 3, but likely derived by means of the agent affix *aN* (A 3.4.67) in the sense of “what collects sound/-s” and “what collects word/-s” respectively i.e. as “individual word” and “individual sound,” both to be considered as indivisible and independent entities in the real language. They should not thus be derived by means of *GHaÑ* (A 3.3.18) in the sense of a “collection of sounds” and “collection of words” respectively.
- 83 ChUp is quoted from *Eighteen Principal Upaniṣad*, ed. Vishnu P. Limaye, and Ranganath D. Vadekar, vol. 1 (Poona: Vaidika Saṃśodhana Maṇḍala, 1958).
- 84 *ādeśa* “rule of substitution.” See trans. Patrick Olivelle, *The Early Upaniṣads. Annotated Text and Translation* (Oxford: Oxford University Press, 1998), 247.
- 85 *vācārambha* ‘verbal handle’ (*ibid.*).
- 86 This is a controversial passage, especially as regards the segmentation of *vācārambhaṇam* as a compound. See Johannes A. B. Van Buitenen, “*Vācārambhaṇam*,” *Indian Linguistics* 16, (1955): 157–62; or as an external *sandhi* (with *scriptio continua*) for *vācā ārambhaṇam* - Franciscus B. J. Kuiper, “*Vācārambhaṇam*,” *Indo-Iranian Journal* 1, 2, (1957): 155–59; as far as the syntactic role of the three nominative cases *vācārambhaṇam vikāro nāmadheyam* and of *agner* are concerned, see Johannes A. B. Van Buitenen, “*Vācārambhaṇam* reconsidered,” *Indo-Iranian Journal* 2, (1958): 295–305; Franciscus B. J. Kuiper, “*Vācārambhaṇam* II,” *Indo-Iranian Journal* 2, (1958): 306–10; Johannes A. B. Van Buitenen, ‘Correction,’ *Indo-Iranian Journal* 4, (1960): 67. However, the speculative point had already been clearly highlighted by Louis Renou, *Les pouvoirs de la Parole dans le Ṛgveda* (Paris: de Boccard, 1955), 18, 23. The ontological individual entity of *agni* is denied because the individuality of *agni* has language as sole point of support. As Van Buitenen concludes: “everything is reducible to the three *rūpas* and can thus be known and recognized through them, in the same way as clay pots can be recognized through clay.” See Van Buitenen (1960: 67). Patañjali’s aforementioned conclusion on the whole-part relationship seems to be tuned to this teaching by Uddālaka interpreted as “a powerful tool for providing an integrative comprehension of the seemingly fragmented reality,” as it is explained by Paolo Visigalli, “Continuity and Change in Chāndogya Upaniṣad 6.14,” in *Puspika: Tracing Ancient India Through Texts and Traditions*, ed. Giovanni Ciotti, Alastair Gornall, and Paolo Visigalli, § 9 (Oxford: Oxbow Books: 2014).
- 87 Cf. fr. 31 B 15 DK, τὸ δὲ βίοντον καλέουσι.
- 88 The manuscripts have a lacuna here.
- 89 Diels accepts Bachet de Meziriac’s conjectural reading of a negative conjunction before καλέουσι (ἢ θέμις <οὐ> καλέουσι [...]). We prefer Bollack’s reading. See: Jean Bollack, *Empédocle*, 2. *Les origines: édition et traduction des fragments et des témoignages*; 3. *Les origines: commentaires 1 et 2*, vol. 3, 94–95 (Paris: Gallimard, 1969), Cf. Carlo Gallavotti, *Empedocle. Poema fisico e lustrale* (Milano: A. Mondadori, 1975), 180–181, nn. 9, 10; Gambarara (1984, 237).

- 90 Here and in the subsequent passages where Graham translates “names exist/do not exist by nature,” we mean “the relation between the names and the objects they denote is/is not by nature.”
- 91 Daniel W. Graham, *The Texts of Early Greek Philosophy. The Complete Fragments and Selected Testimonies of the Major Presocratics*, vol. 2, 606 fr. 167 [F48] (Cambridge: Cambridge University Press, 2010): ἐπ’ ἄλληλα codd. ἐπ’ ἀλλήλα.
- 92 Tr. Graham.
- 93 Donatella Di Cesare, *La semantica nella filosofia greca* (Roma: Bulzoni, 1980), 51–88.
- 94 *Fr.* 80 A 1 DK (50), 80 A 14 DK (217), 80 B 4 DK. See: Michele Corradi, *Protagora tra filologia e filosofia. Le testimonianze di Aristotele* (Pisa, Rome: Fabrizio Serra Editore, 2012), 62, 73, 80–9.
- 95 Corradi (2012, 98–101). *Cf.* also fr. 80 A 1 DK (52): καὶ τὴν διάνοιαν [...] ἐγέννησεν.
- 96 *Fr.* 80 A 28 DK. The scholars are divided into those who think that Protagoras considers that μῆνις and πῆληξ are masculine due to the reference to a manly field, and those who are convinced that this is for morphological reasons: in fact, for the sofiist, –ς and –ξ are more suitably masculine desinences. See Corradi (2012: 152–3, 163–4). For Corradi (*ibid.*:174), Protagoras follows the traditional method which measures the correctness of the names from their adherence to reality, provided that, for the sophist, reality and human opinion (δόξα) coincide.
- 97 For more details *cf.* Charles Segal, “Protagoras’ Orthoepeia in Aristophanes ‘Battle of the Prologues’” (*Frogs*, 1119–97), *Rheinisches Museums für Philologie* 113, (1970): 158–62; Gian Franco Nieddu in Patrizia Mureddu, and Gian Franco Nieddu, “Furfanterie Sofistiche: omonimia e falsi ragionamenti tra Aristofane e Platone,” *Eikasmos. Quaderni Bolognesi di Filologia Classica Studi* 2 (Bologna: Patron, 2000), 35–9; Corradi (2012: 127, 161).
- 98 Pfeiffer (1968: 39–40).
- 99 *Fr.* 84 A 1 DK.
- 100 *Fr.* 84 A 11, 16 DK.
- 101 *Fr.* 58, 59, 63–65 Mayhew, 84 B 4 DK.
- 102 *Fr.* 50 Mayhew (on the term δεινός ‘terrible,’ but also ‘terrific’).
- 103 Robert Mayhew, *Prodicus the Sophist. Text, Translations, and Commentary*, xvi (Oxford: Oxford University Press, 2011).
- 104 Tr. Graham.
- 105 The theoretical debate about the problem of asymmetry also appears in scenes from the classical theatre. *Cf.* Eur. *Hipp.* 383–387 about αἰδώς, which can mean ‘modesty’ or ‘shame,’ and Ar. *Nu.* 636–42 about μέτρα ‘the number of rhythms that a line can contain’ or ‘measures of capacity.’ *Cf.* William S. Barrett, *Euripides. Hippolytus* (Oxford: Oxford University Press, 1964), 230–31; Laura McClure, *Spoken like a Woman. Speech and Gender in Athenian Drama* (Princeton: Princeton University Press, 1999), 131; Alan H. Sommerstein, *The Comedies of Aristophanes. Clouds*, Vol. 3 (Chicago - Warminster: Bolchazy Carducci Publishers/Aris & Phillis Publishers,<sup>2</sup> 1984).
- 106 Nonetheless we cannot exclude that in ancient Greece some connections also exist between the sacrificial lexicon and metrical terminology, as shown by Jesper Svembro, “Il taglio della poesia. Note sulle origini sacrificali della poetica greca,” *Studi Storici* 25, 4, (1984): 925–44; *cf.* Walter Belardi, *Filosofia, grammatica e retorica nel pensiero antico*, 19 (Rome: Ateneo, 1985).
- 107 We hint at Kahrs (1984, 152 ff.; 1998, 159 ff.), who recognizes it as a basic mechanism in the whole exegetic-semantic tradition and particularly in the *Nirukta* genitive formulas (X replaces Y).

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- 108 Cf. Bice Mortara Garavelli, *Manuale di retorica* (Milan: Tascabili Bompiani, <sup>5</sup>2000), 19: “La nascita della retorica si connette pure alla scoperta e al riconoscimento del valore conoscitivo ed educativo che ha la riflessione sulla lingua”; Vickers (1994 [1988]: 40). See Brian Vickers, *Storia della retorica* (Bologna: Il Mulino 1994 [1988]), 40.