

Traces of “crystallized” conceptual metaphors in ancient Indo-European languages: the relationship of language with space and body

Marianna Pozza¹

Abstract: The paper aims to discuss some cases of metaphorical linguistic expressions in some ancient Indo-European languages, in order to show how conceptual metaphors (in the sense of Lakoff and Johnson 1980) “materialize” in certain linguistic expressions through the use of concepts such as spatiality and embodiment. Furthermore, it will be observed that in some circumstances it is possible to imagine, for the reconstructed linguistic phase, a polysemy of certain Proto-Indo-European (PIE) roots – usually interpreted as homonymic – precisely by virtue of the metaphorical logic mentioned above. We shall also consider the idea of a one-to-one correspondence between form and function of a linguistic sign and that of an intrinsic “naturalness” and “transparency”, in the light of more general processes of linguistic change.

Key words: naturalness theory, conceptual metaphors, linguistic change, ancient Indo-European languages, semantics.

1. Introduction²

The idea of a one-to-one correspondence between form and function of a linguistic sign (which, notoriously, is “something that stands for something else”) has always aroused the interest of linguists, as well as philosophers and human beings in general, who have often tried to classify the more or less “natural” strategies by which language concretely renders the forms of thought. At the same time, in the field

¹ Sapienza Università di Roma; marianna.pozza@uniroma1.it.

² I would like to thank the two anonymous reviewers of *Studii de Lingvistică* for their thoughtful comments and efforts towards improving this article. The errors and imperfections that remain in the published version are mine. This research was carried out within the PRIN Project 2017 “Ancient languages and writing systems in contact: a touchstone for language change” coordinated by Paolo Di Giovine, Sapienza University of Rome.

of cognitive linguistics (which will be discussed below), it has been possible to shed light on a series of categorization processes, based on linguistic prototypes, as well as on linguistic metaphors as a concrete expedient for the realization of human cognition.

The purpose of this contribution is to provide some examples all connected with the idea that a single word or expression may be able to manifest, in a more or less “brilliant” (i.e. transparent, iconic) way, traces of the “motivation” which generated it, without prejudice to the indispensable principle of arbitrariness, which, however, is always complementary to that of motivation, which is not excluded for the functioning of a sign. As observed by Prandi (2012 and forthcoming), in particular, motivation is simply not pertinent, just as arbitrariness is compatible both with motivation and with its absence. From the second half of the Nineteenth century, in fact, the theories on the arbitrariness of the linguistic sign advanced by Ferdinand de Saussure (1916) took shape and, in a certain sense, “destroyed” the naturalistic etymology of the past, according to which the sign would be “descriptive”, and the external form of the symbol could have been “created” by “Nature”.

2. The relationship between form and function of a linguistic sign: the *continuum* between naturalness theory and cognitive linguistics

According to linguistic structuralism (in particular de Saussure) the meaning of a linguistic form is determined by the language system itself. The world and the way in which people interact with it is extra-linguistic and language is autonomous. However, if we think about the so-called “Naturalness Theory” or the cognitive perspective, we have the possibility of interpreting linguistic facts differently³. When we refer to a morphological phenomenon as natural, we do not intend to oppose it to something unnatural; rather we consider it as a scalar quantity that classifies a more or less natural phenomenon. The idea of a transparent word, of a word capable of “illuminating” through its “self-clarification”, of a “one meaning-one form” correspondence, occurs every time man intends to give a “name” – other than a name-label – to a new concept.

However, as recalled by Belardi (2006: 141), language is a faculty which, in view of enormous savings and enrichment in allusiveness, tends to develop polysemy. This is accomplished even

³ Cf. among others, Crocco Galêas (1998), Dressler *et al.* (1987), De Cuypere and Willems (2008), Dressler and Kilani-Schoch (2016). See also Bybee (1985) and Taylor (1995) for the main topics about the relationship between meaning and form of a linguistic sign and for linguistic categorization, both issues connected with the so-called “natural morphology”.

in the morphological categories (a plural does not imply the quantity of the named entities, otherwise a language should assume as many endings as there are designated entities)⁴ and in the semantic ones (*man* means both ‘male’ and ‘human’). Some linguistic expressions are “easier” to understand/remember/articulate etc. (cf. Indonesian *orang* ‘man’: *orang orang* ‘men’), to the extent that they manifest the most natural realization of an abstract category. On the contrary, suppletivism, for example, is more complex, hence less intuitive, so considered less “natural” (as in the case of the Italian adjective *eburneo* ‘made of ivory’ vs *avorio* ‘ivory’, or *partenopeo* ‘Neapolitan’ vs *Napoli* ‘Naples’ etc.). Another case of non-biunivocal correspondence between *signifiant* and *signifié* can be found in the case of the so-called “extended/multiple exponence”, where one grammatical meaning (morphosyntactic feature) is expressed through several morphemes: in the case of Gr. pluperfect ἐλελύκετε ‘you had solved’ the value “past” (within the category “tense”) is realized both by the prefix ἐ-(augment) and by the thematic vowel -ε-, the value “active” (within the category “voice”) is realized both by morph -κ- and by the desinence -τε etc.

Haspelmath (2006) speaks of markedness as complexity, and comes to the conclusion that the notions of markedness and iconicity are not primitive and should be replaced by the concepts of frequency of use and ease of processing (“economy principle”), otherwise iconic structures would be preferred by speakers, to the detriment of any other possible push that would obscure the underlying structure and would make communication too difficult. However, it has been seen that this phenomenon occurs only in theory, because unnatural thrusts occur very frequently and the language always finds a way to make it easy to handle by its speakers (adequacy to the system, too). The transparent / opaque opposition should therefore be replaced with the more correct unusual / familiar (cf. Haiman 1983)⁵. Starting from this premise, we can also carry out a reflection on the problem of the origin of language and on the role that iconicity may have played in its development. It is evident that language must have developed gradually, starting from simpler, therefore more natural, iconic and non-arbitrary elements, and in direct connection to concrete reality, through manual gestures, such as mimicking daily actions, and simple vocal productions, such as cries that reproduced animal sounds to signal a danger, for example.

⁴ In any case, think of the need that some languages show in indicating number categories such as trial, major and minor paucal (as in Sursurunga, an Oceanic language spoken in Papua New Guinea) etc.

⁵ See, among others, Dressler and Kilani-Schoch (2016: 358 ff.), who underline that the parameter of iconicity refers to analogy relations between meanings and forms and that within Natural Morphology concepts are relative or gradual, assuming fuzzy internal and external boundaries.

Cognitive sciences⁶ have proposed an alternative theory to those which understood metaphor as a simple linguistic tool. Language is not conceived as an innate phenomenon but as an integral part of human cognitive structures, closely linked to the context and circumstances in which it is used. In this approach, the actual linguistic expression becomes a communication channel of images already conceptualized at the level of thought.

The theoretical function of categorizing is one of the functions of “linguistic thinking”. One of the prerogatives of the human mind is in fact to continually understand something according to analogical schemes, and it is clear that this mechanism has an interest in the study of language which is, in fact, a symbolic system through which our experiences about the world around us are codified. In fact, language exists thanks to the interaction between matter, senses and representation. Cognitive linguistics postulates that language recalls other cognitive systems and that, therefore, it must be described as an integral part of an all-inclusive psychological structure (according to the traditional point of view, however, it is considered useful to establish a distinction between linguistic and extra-linguistic knowledge). Our conceptual system is fundamentally metaphorical in nature.

On the other hand, as stressed by Belardi (2002a I: 113), linguistics has a duty to deal with both etymologies and metaphors and to distinguish the “metaphorical” leap from the etymological contiguity. We resort to metaphors given our inability to know directly and exactly what happens at the neuronal level in our head. For example, with regards to the “motivations” of the formation of verbs that denote a certain mental activity, such as *thinking, grasping, reflecting, intending, concentrating, intuiting, learning, understanding, considering* etc., it should be noticed that they are all metaphors⁷.

According to the theory of conceptual metaphor, in particular, metaphor is a way of representing and organizing our world, and not a decorative tool of language. The correspondences between the “source domain” (concrete) and the “target domain” (abstract) are ontological. The conceptual metaphor, which is motivated by experience, is therefore configured as a linguistic “epiphenomenon” of our mental structure, conceived as embodied, that is, deeply rooted in sensitive

⁶ Cf., among others, Lakoff (1983, 1987), Lakoff and Johnson (1980, 1999); Langacker (1982, 1986, 1987-1991, 2002²), Talmy (1983).

⁷ Cf. Lat. *considerare* ‘observe the stars (to draw their hopes)’ = ‘understand the stars’ with the eyes = ‘consider, examine’. The term, which belongs to the semantic field of navigation, would therefore indicate the observation of the sky and the stars (see the connection between the prefix and the name *sidus, -eris* ‘star’) in order to predict the future, or to orientate themselves at sea (therefore visual and cognitive aspects): it is evident the semantic shift from the concrete ‘to observe the stars’ (or later simply ‘to observe attentively’) to the abstract which designates a purely mental cognitive activity of thought.

and sensor-motor human experience. This does not mean so much that the mind is “inside” the body, but that the neural and cognitive mechanisms that allow us to perceive and move in the world also create our conceptual systems and our way of reasoning⁸. The idea of embodied experience implies that we have a species-specific view of the world, due to the unique nature of our bodies. In other words, our construction of reality is largely mediated by the nature of our bodies. A case in point of how embodiment affects the nature of the experience is the framework of colour (Evans and Green 2006: 44): while the human visual system has three types of photoreceptors or colour channels, other organisms have a different number. In other words, the concepts we have access to and the nature of the reality we think of and speak about are a function of our embodiment: we can only talk about what we perceive and conceive, and the things we perceive and conceive derive from embodied experience.

3. The shift from the “modular-” to the “label-” sign: the “Belardian” theorem

If, in fact, the word comes to describe the extra-linguistic reality in a transparent way, one can easily think that it also reflects its nature. From this point of view, Saussurean arbitrariness becomes inconceivable, especially if we think of the ancients, whose relationship with the world in some way had to be “rationalized”. In this regard, the case of the so-called “folk etymology” is interesting, a process by which speakers modify the material form of the words they use, so that the name can clearly be a consequence of the thing, according to a theoretical conviction of very remote ancestry: see, for example, It. *negromante* ‘necromancer’ – as associated with black (*negro-* ‘black’ < Lat. *niger* ‘black’) magic – for the expected ***necromante* < Gr. νεκρός ‘dead’ + μάντις ‘fortune teller’.

In many studies⁹, Belardi has described and motivated the transition from the so-called “modular sign” (characterized by a high degree of transparency) to the “fixed sign” (where the articulation of the morpheme boundaries is now blurred). When – he observes – meaning ceases to be analytical (that is, organized on the basis of the description of certain qualities or certain aspects of reality reported to some guiding notions) and becomes synthetic, the type of sign rather than descriptive becomes a sort of label. In Latin, for example, when **ex-āg-s-men* ‘what get pushed out from’ changes into Lat. *exāmen* ‘swarm (of bees)’ the sense of its root and therefore of its relationship with *āgo* ‘lead, push’ is lost¹⁰.

⁸ Cf. Lakoff and Johnson (1999).

⁹ See in particular Belardi (1985, 1993, 2002a and 2002b).

¹⁰ Cf. Belardi (1985: 46) and Belardi (1990: 165 ff.).

The words we use today represent the “substance” of those which were “born” in prehistoric times, even if obviously they have suffered losses, changes, imbalances: there is always some trace of the material of the past, a wreck, a fragment that lasts over time. Although this acoustic-articulatory material may have undergone some changes and adaptations over time, traces (albeit minimal) of the past emerge.

When we think of the internal “transparency” of a word we think of how much “bright” and “original” (in the etymological sense of the word) can emerge from it: in essence a word also tells us something about the culture of the people who used it. It is precisely through a careful etymological and comparative analysis that always keeps textuality and culture in mind that it is possible to discover what is “hidden” behind the consonants and the vowels of a word, which constitute only the “formal skeleton” of the whole linguistic sign.

Particularly fascinating (see Lazzeroni 1988 and 1998: 9 ff.) is the image that transpires from Greek νέκταρ ‘nectar’, the drink of the gods that makes them immortal and preserves them from aging, which is composed of an element denoting death νεκ- (Lat. *nex*, Gr. νέκυς) and the reduced degree of PIE *ter(ə)- ‘to cross, to go through (adversity)’= ‘overcome death’¹¹: hence νέκταρ would be the magical food that ‘crosses’ and therefore conquers death, which is not a “natural” death, but a violent, premature one (cf. Lat. *nex* ‘(violent) death, killing’). The supposed descriptive value remains a mere virtuality until we understand why ‘conquering’ is called ‘crossing’. The image is clarified in the Vedic texts (where we find *nāṣtrā* tṛ-, which coincides with νέκταρ) and in the Latin tradition, as demonstrated by Benedetti (1989). Through the reconstruction of the etymology of the two Greek words νέκταρ ‘nectar’ and ἀμβροσίη ‘ambrosia’ it was possible to reach the concept of a bipartite representation of death and that of the achievement of immortality: ἀμβροσίη comes from *n̥₁-mr̥₂-to-m, where n̥₁ indicates ‘deprivation, lack of’ and mr̥₂ (cf. Lat. *mors* ‘death’) the “natural” death (from old age) and denotes the divine substance, drink of the gods, which guarantees them immortality.

In the *Odyssey* Circe tells Ulysses that the ambrosia was brought to Zeus by a flock of doves from a remote source behind sacred rocks; the same myth is found in the *Rigveda* (ancient Indian sacred text), where it is said that the *soma*¹² was brought to Indra from the sky by an eagle, and in the *Avesta* (sacred Iranian text), where the *haoma* is carried to the peaks of Mount Haraiti by birds.

In particular, a “signage” function, in terms of meaning, was

¹¹ Watkins (1995: 391).

¹² Lazzeroni (1991), in an interesting comparison between Greek and Vedic culture on the concept of immortality, informs us that in the Vedic ritual songs the gods are not intrinsically immortal, but predisposed by nature to immortality: to continue to be so, they will have to feed on the *soma*, a juice obtained from the pressing of a plant which is an essential part of the sacrificial offering.

carried out by the consonantal scheme of the proto-form, to which affixes were gradually added and in which the various apophonic mechanisms then acted.

4. The cognitive perspective and the conceptual metaphors: the body as “linguistic core” and the role of the space in the antiquity

Our linguistic system is inextricably interwoven with the rest of our physical and cognitive worlds and language is systematically grounded in human cognition.

Our senses do not passively observe the world but question it. The different perspective between vision and listening is particularly interesting: the first would seem to consist mainly of a “physical” type of activity, the second in a “mental” activity. In essence, as brilliantly clarified by De Mauro (1994: 875), receptive linguistic activity is not conceived outside its global coalescence with general *intelligere*; moreover, when the human being intends/listens it is the globality of human intelligence that dominates¹³. The fact that an expression like *I hear you* also means *I understand you* makes fully understand the fact that the “perceiver” tries to put himself in the same emotional condition as the interlocutor. From this point of view, studies on mirror neurons¹⁴, especially regarding empathy, are particularly interesting and relevant, since they demonstrate that the human being is able to “live” the actions and emotions/reactions of others as if they were their own.

Cardona (1985: 62) already extended the analysis on the body model, observing how it is projected on the territory; in fact, the linguist demonstrates how certain features of the terrain are attributed to terminology relating to parts of the body. The use of some terms expressing / denoting the various parts of the body is found in different languages (Indo-European, Caucasian, Somali,

¹³ For this reason, compared to the great number of articulations of *verba dicendi*, which categorize the production side, there is a small number of *verba recipiendi* of a generic nature.

¹⁴ A group of neurophysiologists from the University of Parma, under the guidance of Professor Giacomo Rizzolatti, studying the premotor cortex of the macaques, discovered that in a particular area dedicated to programming movements, the F5 area, there are neurons that are activated (and that ‘fire’) not only at the moment of an action, but also when observing the action itself performed by another macaque. These are called “mirror neurons” and are therefore named after the fact that they are activated even when they reflect, like a mirror, someone else’s action. Mirror neurons work when the observation of a motor act induces the observer to activate the same neuronal circuit responsible for its execution, and therefore its automatic simulation. Cf. Rizzolatti and Craighero (2004); Rizzolatti and Sinigaglia (2006); Rizzolatti and Vozza (2007). On the link between mirror neurons and language see Cuccio, Caparezza and Gallese (2013: 75-76).

and especially in some Australian languages) where we can identify a series of geomorphonyms, or denominations of the characteristics of the land. For example, in Australian Aboriginal Dyrbal we find cases such as *binda* 'shoulder', which means 'waterfall'; *garrgal* 'humerus' which means 'secondary arm of water'; *jarra* 'thigh' which means 'clearing in the vegetation'; *bungu* 'knee' which means 'bend of the river' and 'wave'; *yolnulikan* 'elbow', which means 'branch, fork, inlet, bay'¹⁵.

If one could not resort to the so practicable expedient of the metaphorical denomination, in the languages there would have to be an extremely higher number of unmotivated¹⁶ label-names and no trace of the action of imagination, which instead continually crosses the systematic underlying arbitrariness of the lexicon (Belardi 2002a I: 125).

Because they are based on a series of biological experiences (such as, for example, the perception of body heat), we are able to understand metaphors such as LOVE IS HEAT, LOVE IS DISEASE, LOVE IS WAR, LOVE PENETRATES THE BODY, LOVE EMANATES FROM THE EYES OF THE BELOVED etc.¹⁷

The place of the metaphor is the thought and only subsequently the language, and it is the mind that acts as a hinge between the cognitive and phenomenological world. The interaction theory is accepted and declined in different perspectives; among them, the hypothesis promoted in 1980 by Lakoff and Johnson in *Metaphors We Live By* stands out, the founding text of the cognitivist approach to the study of metaphorical expression¹⁸.

This "multifunctional" approach (straddling linguistics, psychology, philosophy, and neurology) makes linguistic choices in a certain sense more "motivated" because, apart from the utopian iconicity and biunivocal correspondence between form and function,

¹⁵ Cf. Wierzbicka (1992: 3): "Certainly, all human beings have heads, eyes, ears, and hands; and all human beings know the sky above their heads and the ground under their feet. But they don't think about these things in the same way. And language doesn't reflect the world directly: it reflects human conceptualization, human interpretation of the world. As a result, words referring to parts of the body, and words referring to the world around us, can be as language-specific as those referring to customs, rituals, and beliefs".

¹⁶ When we speak of "motivation" we should keep in mind that this notion should be restricted to the strictly linguistic relationships between signs present in the system (*Apfelbaum* 'apple tree' compared to *Apfel* 'apple' and *Baum* 'tree', or Lat. *fornaio* 'baker' compared to *forno* 'oven'), and it is therefore essential to keep functional motivation separate from virtual and by now only historical motivation (Gusmani 1984: 19).

¹⁷ Cf. also the conceptual metaphor COHERENCE IS A COMPLETE BODY which is realized in the metaphorical expression *having neither head nor tail*. For the analysis of which in the context of ancient Greek literature see Hualde Pascual (2018: 45 ff.). For the German sector, see Serra Borneto (1999). Note, in the case of the last two metaphors, the concept of entry and exit from the "body-container".

¹⁸ The reference literature is endless. See, by way of example, Lakoff and Johnson (1980 and 1999), Langacker (1982; 1987-1991; 2002), Talmy (1983), Evans and Green (2006).

it gives life to metaphorical linguistic expressions that are far from being separated from reality¹⁹. We must always distinguish between conceptual metaphors, which are “mental schemes”, and the different linguistic expressions of these metaphors, which represent their concrete realizations.

5. Some ancient linguistic “epiphenomena” of conceptual metaphors

Let’s now look at some examples, taken from various ancient Indo-European languages, where some metaphorical linguistic expressions are clearly manifestations of conceptual metaphors with which we “live”, most of the time without even paying attention to them.

In the context of the ancient Near East, for example, as noted by Silvestri (2010: 19) and Dardano (2018: 48), words are ‘poured’ (cf. Sumerian *gù ... dé* ‘pour the voice’ > ‘speak from top to bottom’, ‘filled by pouring’ (think of the Hittite expression *uttār šunna-* ‘filling the words’ > ‘refer, transmit’, or the Latin *fundere preces* ‘to pray’, literally ‘to pour prayers’ and the use of the Greek verb *ἔχω* ‘pour’, which can refer to the voice or the word, in the sense of ‘reciting, speaking’). The words therefore “come out” from the body and are “poured out”.

In Hittite (see Francia 2010), when you wanted to express the notion of ‘thinking’ you could use a periphrasis, consisting of the concrete verb ‘to speak’ (*mema/i-*) associated with some spatial expressions such as *āppa-za Zi-ni* ‘from the (bottom) of the soul’ or *-za karti peran* ‘towards the heart’, therefore the act of reflecting is seen as an event that starts from the outside or from the inside of one’s body, the only metaphorical reference point for the concrete linguistic expressions.

In the Latin sector – in particular in Plautus – it has been observed (see in particular García Jurado 2003) that very often words are considered as ‘food’ or ‘drink’ on the basis of ontological metaphors, so that ‘saying nonsense’ is ‘cooling your mouth’ and ‘speaking badly and unintelligibly’ is ‘speaking dark or dirty’, as opposed to ‘speaking clearly’²⁰. Such expressions would seem to be based on metaphorical schemes as ABOVE IS GOOD-POSITIVE; BELOW IS BAD-NEGATIVE. Likewise, on the basis of similar schemes, different dichotomies of various aspects of reality are formed, such as WHAT IS WARM/CLEAR/WHITE IS ABOVE = POSITIVE VS WHAT IS COLD/DARK/BLACK IS BELOW = NEGATIVE.

García Jurado (2003: 151-152) analyses some Plautine

¹⁹ See also Torricelli (2006: 1728), according to which language is unmotivated because it is metaphorical and is metaphorical because it is self-motivated.

²⁰ Which confirms the strong link between the concept of vision and that of knowledge, as we will see later.

expressions used in comic contexts, in which ‘chilling the mouth’ is used as a synonym for ‘saying nonsense’ (for example *os frigefacere* ‘refresh the mouth’) and observes that also in Cicero ‘to speak awkwardly’ is expressed by *frigidus* and *frigide loqui*. Other recurring expressions are *laute* versus *sordide loqui*, which combine expository clarity with the clarity of vision (and which then presuppose a further semantic evolution of the type: ‘dark’ > ‘dirty’ > ‘vulgar’).

Metaphors create a mapping between one, more concrete, experiential domain, and one, more abstract, domain, by projecting cognitive patterns. The theory of “embodiment” in particular, claims that “the structure used to put together our conceptual system grow out of bodily experience and makes sense in terms of it; moreover, the core of our conceptual systems is directly ground in perception, body movement, and experience of a physical and social nature” (Lakoff 1987: xiv).

There are substantial differences between denoted and described (object) and, moreover, the description (for example the concept of ‘shining’ to describe the moon, which, in Latin, is *luna* ‘the brilliant’ < **lowksna* < PIE **lewk-* ‘to shine’) is not denotation. We could in fact attribute the concept of ‘shining’ to many other equally brilliant entities (Belardi 2002a II: 420), or, differently, we could describe the moon through another one of its characteristics, not necessarily its brilliance. Thus, if the PIE root **dey*²¹ ‘to shine’ gave rise to the Latin verb *dicō* ‘I say, I speak’, to the Greek δεικνυμι ‘to show, indicate’ etc., the act of speaking could be seen as the act of “making external reality shine”, illuminating it through words.

Words meaning ‘to see’, ‘to know’, ‘to indicate’ would seem to have a common origin, as in the case of PIE **sek*^w- ‘to follow (with the eyes)’ > ‘to see’ > ‘to speak’ (Lat. *sequor*, Gr. ἑπομαι ‘to follow’, Goth. *saihwān* ‘to see’), and PIE **weyd-* (Lat. *video* ‘to see’, Goth. *witan* ‘to know’, OHG *weizen* ‘to show’, Gr. οἶδα ‘I know [because I have seen]’, Czech *viděti* ‘to see’ and *věděti* ‘to know’ etc. As clearly illustrated by Dettori (1994: 125 ff.), the *verba dicendi* would have

²¹ See in particular Mayer Modena (1986) and Silvestri (2000 and 2010). See also Bréal (1901: 121), who speaks of a sort of “décoloration” of the verbs indicating the act of speaking. Cf. also Porzio Gernia (2006: 1404), who underlines that **dey-* ‘to shine’ belongs to the oldest Indo-European lexical heritage and is the only common term that can be reconstructed in the field of religion. From the Indo-Europeans took the name of their supreme light god, **Dyēus pətér* (Lat. *Iuppiter*, Umbr. *iupater* [voc.], Gr. Ζεὺς πατήρ and Ved. *Dyāuṣ pitā*), qualified as ‘father’, that is, the universal principle that generates and governs. In a world rich with metaphors and perceived by the ancients as “terrifying” because of lightning and weapons (obtained thanks to the cut stone technique), the metaphor of the ‘stormy sky’ opposed to the ‘solar sky’ emerges (**dyew-* < **dey-* ‘to shine’), as noted by Bader (1998: 67 ff.). Since the rumble of thunder is comparable to the sound of the rolling stones, lightning (the weapon of the god of the storm) has been assimilated to bullets falling from the sky like stone weapons. Zeus himself is the god of both the solar and stormy skies (*ibid.*).

developed from those of ‘following’, starting from the sense *persequi rem*. The scholar underlines that for the prehistoric “hunter”, the acts of ‘seeing’ and ‘following’ were deeply connected and functionally inseparable. As already noted by Vendryes (1932: 206), in fact, « les verbes qui expriment l’idée de “voir” ont pris parfois le sens de “dire”. Par la parole on exprime ce que l’on voit, même s’il s’agit d’une pure vision de l’esprit ».

Knowledge, in fact, is metaphorically understood as mental vision²² (Sweetser 1990: 38). In particular, as observed by Belardi (2002a II: 88), the proto-form from which the two different meanings attested in most Indo-European languages derive, probably referred to the technical language of the game: ‘sniff the tracks, chase’, from which ‘follow’, but also ‘follow with the eyes, to see’ (Engl. *to see*), ‘spy, indicate, announce’ and then ‘say’ (Lat. *insece* ‘tell me’, Germ. *sagen* etc.). Furthermore, it is no coincidence that the Latin verb *video* shifts from the concrete value of ‘to see’ (when it is accompanied by concrete words such as ‘eyes’) to a more abstract idea, connected with a sort of ‘mental vision’ (when associated with more abstract words such as ‘dream’)²³.

For the same reason it is therefore possible to imagine that the Hittite verb *ištanḫ-*, which means ‘to taste, to savour’, can be traced back²⁴ to the PIE root **steh₂-* ‘to stand’, which is in turn connected with the idea of ‘knowledge’, on the basis of the experiential metaphor IDEAS ARE FOODS²⁵ or TO TASTE IS TO KNOW. The connection found in other Indo-European languages between the concrete and local value of reflexes of PIE **steh₂-* and their abstract and metaphorical meaning (cf. Gr. ἐπιστήμη ‘knowledge, expertise’, Lat. *superstitiosus* ‘who knows the truth’ < *‘which stands above’ etc.) acquires more value through the etymological interpretation of *išta(n)h-*.

Within the same theoretical framework, that of cognitive semantics, it is also possible to reconsider, in my opinion²⁶, the homonymy between the Indo-European roots **men-* ‘to think, to have in mind’ and **men-* ‘to delay, linger, remain’. We should instead imagine the existence of a single archetype, whose different semantic

²² The connection between vision and knowledge is already present in Platonic philosophy and in Aristotle. We then find it in the Middle Ages where the inner senses acquire importance, because it allows, according to tradition, a person to reach true knowledge. It is the “inner eyes”, the spiritual and intangible ones, however, that have the primacy in the cognitive sphere over all the other senses and symbolize contemplation. True knowledge, therefore, is placed in the internal space of the body and identified not only with the mind but also with the heart. The idea that the act of ‘considering’ is born right in the heart is therefore fundamental.

²³ The “deferred view” in the sense proposed by Torricelli (2006).

²⁴ Cf. Pozza (2014 and 2019).

²⁵ For this metaphor, see Lakoff and Johnson (1980: 46–47); for the metaphor PERCEPTION IS RECEPTION and PERCEPTION IS CONTACT BETWEEN PERCEIVER AND PERCEIVED, see Lakoff (1993: 235–236).

²⁶ Cf. Pozza (2020).

values represent the developments of a metaphorical shift from a concrete to an abstract meaning, hence from ‘to delay, remain’ (Lat. *maneō* ‘I remain, wait’, Arm. *mnām* ‘to remain, wait’, Skr. *man-* ‘to delay, remain’, Gr. μένω, μίμνω ‘I remain, I stop’ etc.) to ‘to think, comprehend’ (cf. Lat. *mēns, mentis* ‘mind’, Arm. *i-manam* ‘to understand’, Skr. *man-* ‘to think, believe, comprehend’, Gr. μένος ‘vital spirit, force of spirit’ etc.). The fact that one can think that a PIE root such as **men-* was originally polysemic and that, therefore, it conveyed both the meaning of ‘to think, have in mind’ and that of ‘to delay, remain’, supports the parallel interpretation that sees in **mel-* a similar polysemy, testifying to a further “experiential” connection between (initial) stasis and (subsequent) reflection, so that it is possible to explain cases such as Hitt. *māl-* ‘thought, mind, spiritual force’ and Gr. μέλω/μέλομαι ‘to take care of, think of, be important to, be the subject of thought’. This correlation reminds us of that between Gr. μένος ‘vital spirit, force (of spirit), courage’ and Gr. μένω, μίμνω ‘I remain, I stop’, or of that between Lat. *memor* ‘which has in mind, remembering’ and Lat. *mora* ‘pause’. As focused on by West (2007: 33), poetry is to be seen as ‘recall’: when someone who is speaking or singing calls something to mind, it is at once expressed in words, so that **men-* may also refer to utterance, as in Vedic *mānyate* ‘think; mention’, Lithuanian *menù, mĩnti*, or Latin *mentionem facere*.

Very interesting is also the hypothesis according to which it would not be necessary to postulate, as the main etymological dictionaries usually do, two distinct Indo-European roots for **bheug(h)-*, one with the meaning of ‘to bend’, the other with ‘to flee’ (Esposito 2011: 275). In fact, if we rely on the theoretical assumption that semantic change, although not predictable, is not arbitrary, but motivated (Lakoff 1987: 107), the motivation for this semantic change can be reconstructed by identifying the conceptual metaphors and metonymies underlying language. The semantic development that leads this root to describe, in Greek (φεύγω) and in Latin (*fugiō*), the ‘escape’, is based on the development ‘bend’ > ‘yield, surrender, submit’, resumable in the metaphor GIVING UP IS FOLDING PHYSICALLY, traceable in intermediate realizations that describe a concrete action, such as ‘to bow’. The identification of the thought patterns underlying certain semantic developments allows to evaluate the possibility of a hypothesis of change (Esposito 2011: 276).

Since the mind is an “off-limits zone” (Belardi 2002a II: 136) for our empirical-cognitive abilities, for the denomination of the activities connected with the mind, intense and extensive use is made of metaphors drawn from denominations of situations that can be well explored by the sensory system. The impenetrable/indecipherable, in essence, favours the creation of metaphorical interpretations and denominations.

6. Concluding remarks

As we have seen, one could imagine a shift from an analytical modularity to a synthetic opacity, which causes, as a consequence, a less “conscious” use of the language. Words can “speak” to us less, or in any case in a less clear, less “luminous” way, than, perhaps, happened at the time of the origins.

In the internally motivated word, we see “better”, in a more evident way, the reason for its formation, while the internally “freezed” word is unmotivated. It is precisely this motivation that led to the right conviction that the linguistic sign has an arbitrary relationship with the ontological referent²⁷. The motivation is not only “experiential”, but also cultural²⁸, and it can be observed, therefore, also in the – almost “automatic” – realization of concepts already present in our mind. Even in the absence of a true biunivocal correspondence between the two components of the sign, the expressions analysed in the present contribution nonetheless have a lower “gradient” of opacity. Moreover, it should be added that certain metaphorical concepts generally shared in our culture arise from individual acts of creation aimed at the establishment of new concepts whose history and development can be traced through documents. Lakoff and Johnson’s idea of a natural origin for most metaphorical concepts is not incompatible with the principle according to which the heritage of active conceptual metaphors is a “layered” structure²⁹. This is the case, for example, of the cognitive use of Lat. *comprehend* ‘to grasp, to understand’, *comprehensio* ‘act of grasping, understanding’, which is Cicero’s translation of the Greek verb καταλαμβάνω ‘to grasp with the mind, understand’ coined by the Stoic philosopher Zeno to refer to the mind’s apprehension of the data of sensations (see in particular Prandi 2017).

It is certainly true, as underlined by Belardi (2001: 28) that the so-called “rationalizing-metalinguistic etymology” aims at discovering arbitrarily (albeit with good intentions), in the form of the container, some residue of a “discursive structure” manifesting the form of the content, by selecting part of the string of the container to identify

²⁷ See in particular Belardi (1990).

²⁸ Most of the world’s languages transfer the concrete (spatial) domain to the abstract (temporal) domain. In the Amerindian language Aymara, for example, the metaphor for referring to time provides for an unusual association of the future and the past respectively with ‘what lies behind’ and ‘what stands before’ the observer, for whom the past is something that lies before self, while the future is something that comes to place itself behind it, since it cannot be seen. Whether it is a cultural variable, or a cognitive primitive is the subject of a study by Bartolotta (2006: 86, 93).

²⁹ According to Glebkin (2014), from a cultural-historical point of view, conceptual metonymy and metaphor could be considered the basic means of semantic evolution in pre-theoretical cultures, which are characterized by a lack of abstract cognitive domains.

“glimpses” of other words. Nonetheless, what we have tried to do here was to show some examples where some linguistic expressions (in some cases, as we have observed, metaphorical) where the connection with the thought is more evident or where some traces of “brilliant” schemes of the past still emerge, even if with less “brightness” than that which, perhaps, was supposed to manifest at the dawn of time.

References

- Bader, F. (1998), « Principes de méthode étymologique », in Negri, M. et al. (eds), *L'indoeuropeo. Prospettive e retrospettive*, Il Calamo, Roma, p. 31-80.
- Bartolotta, A. (2006), «La metafora Spazio-Tempo in prospettiva: evidenze linguistiche del “futuro dietro le spalle”», in Bombi, R. et al. (eds), *Studi linguistici in onore di Roberto Gusmani, I*, Ed. Dell'Orso, Alessandria, p. 83-98.
- Belardi, W. (1985), «Considerazioni sulla ricostruzione dell'indoeuropeo», in Ambrosini, R. (ed.), *Tra linguistica storica e linguistica generale. Studi in onore di Tristano Bolelli*, Pacini, Pisa, p. 39-66.
- Belardi, W. (1990), «Genealogia, tipologia, ricostruzione, leggi fonetiche», in Belardi, W. (ed.), *Linguistica, filologia e critica dell'espressione*, Roma, Il Calamo, p. 155-218.
- Belardi, W. (1993), «Sulla tipologia della struttura formale della parola nelle lingue indoeuropee», *Rendiconti dell'Accademia Nazionale dei Lincei*, 9/4, p. 535-570.
- Belardi, W. (2001) «Di alcuni fondamenti teorici dell'etimologia», in Benedetti, M. (ed.), *Fare etimologia. Presente, passato e futuro nella ricerca etimologica*, Il Calamo, Roma, p. 7-56.
- Belardi, W. (2002a), *L'etimologia nella storia della cultura occidentale*, 2 vol., Il Calamo, Roma.
- Belardi, W. (2002b), *Il tema del segno lessicale nella diacronia linguistica*, Il Calamo, Roma.
- Belardi, W. (2006), *Il mondo fuzzy del dopo-Babele*, Il Calamo, Roma.
- Benedetti, M. (1989), «Gr. *véκταρ*, ved. *nāṣṭrā-tr̥*», *Studi e saggi linguistici*, 29, p. 77-86.
- Bréal, M. (1901), « Les verbes signifiant “parler” », *Revue des Études Grecques*, 14/61, p. 113-121.
- Bybee, J. (1985), *Morphology. A Study of the Relation Between Meaning and Form*, Benjamins, Amsterdam-Philadelphia.
- Cardona, G. R. (1985), *I sei lati del mondo. Linguaggio ed esperienza*, Laterza, Roma-Bari.
- Crocco Galêas, G. (1998), *The Parameters of Natural Morphology*, Unipress, Padova.
- Cuccio, V., Caparezza, M., Gallese, V. (2013), «Metafore che risuonano. Linguaggio e corpo tra filosofia e neuroscienze», *Rivista dell'Associazione Italiana Studi Semiotici*, 17, p. 75-80.
- Dardano, P. (2018), «Fraseologia indoeuropea nell'Anatolia preclassica: note sulla locuzione ‘versare le parole’», *AION N.S.*, 7, p. 47-66.
- De Cuypere, L., Willems, K. (2008), “Introduction: Naturalness and Iconicity”, in De Cuypere, L., Willems, K. (eds), *Naturalness and Iconicity in Language*, Benjamins, Amsterdam-Philadelphia, p. 1-23.

- De Mauro, T. (1994), «Intelligenti pauca», in Cipriano, P., Di Giovine P., Mancini M. (eds), *Miscellanea di studi linguistici in onore di Walter Belardi*, Il Calamo, Roma, p. 865-875.
- Dettori, E. (1994), «Un'ipotesi su ΕΝΝΕΠΙΩ (“Storia di una radice”)», *AION*, 16, p. 117-169.
- Dressler W. et al. (1987), *Leitmotifs in Natural Morphology*, Benjamins, Amsterdam-Philadelphia.
- Dressler, W. Kilani-Schoch, M. (2016), “Natural Morphology”, in Hippiusley A., Stump, G. (eds), *The Cambridge Handbook of Morphology*, Cambridge University Press, Cambridge, p. 356-389.
- Espósito, R. (2011), «Etimologia e motivazioni metaforiche: il campo lessosemantico della fuga tra semitico e indoeuropeo», in Manco, A., Silvestri, D. (eds), *L'etimologia. Atti del XXXV Convegno della Società Italiana di Glottologia*, Il Calamo, Roma, p. 273-278.
- Evans, V., Green, M. (2006), *Cognitive Linguistic: An introduction*, Edinburgh University Press, Edinburgh.
- Francia, R. (2010), «Ittita *appa* “(via) da”», *Incontri Linguistici*, 33, p. 161-166.
- García Jurado, F. (2003), «Le Metafore del ‘parlare’ in latino», in Luraghi, S., Gaeta., L. (eds), *Introduzione alla linguistica cognitive*, Carocci, Roma, p. 147-157.
- Glebin, V. (2014), “Cultural-Historical Psychology and the Cognitive View of Metonymy and Metaphor”, *Review of Cognitive Linguistics*, 12, p. 288-303.
- Gusmani, R. (1984), «A proposito della motivazione linguistica», *Incontri Linguistici*, 9, p. 11-23.
- Haiman, J. (1983), “Iconic and Economic Motivation”, *Language*, 59, p. 781-819.
- Haspelmath, M. (2006), “Against Markedness (and What to Replace It with)”, *Journal of Linguistics*, 42, p. 25-70.
- Hualde Pascual, P. (2018), «Metáforas del amor en la poesía de la Grecia antigua (II): De la tragedia ática a la poesía helenística», *Cuadernos de Filología Clásica: Estudios griegos e indoeuropeos*, 28, p. 41-81.
- Lakoff, G. (1983), “The Metaphor System and its Role in Grammar”, in Beals, K. et al. (eds), *What We Think, What We Mean, and How We Say It. Papers from the Parasession on the Correspondence of Conceptual, Semantic and Grammatical Representations*, Chicago Linguistic Society, Chicago, p. 217-241.
- Lakoff, G. (1987), *Women, Fire and Dangerous Things. What Categories Reveal About the Mind*, The University of Chicago, Chicago-London.
- Lakoff, G. (1993), “The Contemporary Theory of Metaphor”, in Ortony, A. (ed.), *Metaphor and Thought*, Cambridge University Press, Cambridge, p. 202-251.
- Lakoff, G., Johnson, M. (1980), *Metaphors We Live By*, The University of Chicago Press, Chicago-London.
- Lakoff, G., Johnson, M. (1999), *Philosophy in the Flesh. Embodied Mind and Its Challenge to Western Thought*, Basic Books, New York.
- Langacker, R. W. (1982), “Space Grammar, Analysability, and the English Passive”, *Language*, 58, p. 22-80.
- Langacker, R. W. (1986), “An Introduction to Cognitive Grammar”, *Cognitive Science*, 10, p. 1-40.
- Langacker, R. W. (1987-1991), *Foundations of Cognitive Grammar. I. Theoretical Prerequisites, II. Descriptive Application*, Stanford University, Stanford (California).

- Langacker, R. W. (2002), *Concept, Image, and Symbol. The Cognitive Basis of Grammar*, Mouton de Gruyter, Berlin-New York.
- Lazzeroni, R. (1988), «Il nettare e l'ambrosia: su alcune rappresentazioni indoeuropee della morte», *Studi e Saggi Linguistici*, 51, p. 177-199.
- Lazzeroni, R. (1991), «Il bere e il mito dell'immortalità fra India e Grecia», in Scarpi, P. (ed.), *Storie del vino*, Homo edens II, Milano, p. 29-34.
- Lazzeroni, R. (1998), *La cultura indoeuropea*, Laterza, Bari-Roma.
- Mayer Modena, M. L. (1986), «“Vedere”, “illuminare” ed “esprimere” nella comparazione semantica indoeuropeo-camito-semitica (sem. ‘mr, lat. loquor, scr. svar- ecc.)», *Quaderni di Acme*, 7, 43-52.
- Porzio Gernia, M. L. (2006), «La *fidēs* tra divino e umano», in Bombi, R. et al. (eds), *Studi linguistici in onore di Roberto Gusmani, III*, Ed. Dell’Orso, Alessandria, p. 1404-1419.
- Pozza, M. (2014), «Itt. *išta(n)h-* e *mema/i-*: ‘esperire’ e ‘riflettere’ tra concretezza e metafora», *Rivista degli Studi Orientali*, 87, p. 57-72.
- Pozza, M. (2019), “From Experiential Contact to Abstract Thought: Reflections on Some Hittite Outcomes of IE **steh*₂- ‘to Stand’ and **men-* ‘to Think’ ”, in Kim, R. et al. (eds), *Hrozný and Hittite: The First Hundred Years*, Brill, Leiden-Boston, p. 317-334.
- Pozza, M. (2020), “On the Semantics of the Proto-Indo-European Roots **mel-*, **men-*, and **steh*₂: from the External-Positional to the Internal-Cognitive Perspective”, *Cuadernos de Filología Clásica: Estudios griegos e indoeuropeos*, 30, p. 11-22.
- Prandi, M. (2012), «Metafore ed estensione lessicale: verbi e nomi di sentimento tra motivazione e arbitrarietà», in Orioles, V. (ed.), *Per Roberto Gusmani. Linguistica storica e teorica. Studi in ricordo, II*, FORUM, Udine, p. 369-383.
- Prandi, M. (2017), *Conceptual Conflicts in Metaphors and Figurative Language*, Routledge, New York.
- Prandi, M. (2020, forthcoming), «Le espressioni idiomatiche tra motivazione e arbitrarietà», in Valenti, I. (ed.), *Lessicizzazioni ‘complesse’. Ricerche e teoresi*, Aracne, Roma.
- Rizzolatti, G., Craighero, L. (2004), “The mirror-neuron system”, *Annual Review of Neuroscience*, 27, p. 169-192.
- Rizzolatti, G., Sinigaglia, C. (2006), *So quel che fai: il cervello che agisce e i neuroni specchio*, Raffaello Cortina Editore, Milano.
- Rizzolatti, G., Voza, L. (2007), *Nella mente degli altri. Neuroni specchio e comportamento sociale*, Zanichelli, Bologna.
- de Saussure, F. (1916), *Cours de linguistique générale*, Payot, Paris.
- Serra Borneto, C. (1999), «La distribuzione degli ausiliari *haben* e *sein* in tedesco», in Gaeta, L., Luraghi, S. (eds), *Introduzione alla linguistica cognitiva*, Carocci, Roma, p. 125-138.
- Silvestri, D. (2000), «Dall’eloquenza della luce allo splendore della parola. “Parlare, dire” e “illuminare, (far) brillare” nelle lingue del mondo antico», *Annali dell’Istituto Orientale di Napoli*, 22, p. 107-125.
- Silvestri, D. (2010), «Lo spazio nella lingua, lo spazio della lingua: Greco, Latino e Sumerico a confronto», *Studi e Saggi Linguistici*, 48, p. 7-24.
- Sweetser, E. (1990), *From Etymology to Pragmatics. Metaphorical and Cultural Aspects of Semantic Structure*, Cambridge University Press, Cambridge.
- Talmy, L. (1983), “How Language Structures Space”, in Pick, H. et al. (eds),

- Spatial Orientation. Theory, Research, and Application*, Plenum Press, New York, p. 225-282.
- Taylor, J. R. (1995), *Linguistic Categorization. Prototypes in linguistic theory*, Clarendon Press, Oxford.
- Torricelli, P. (2006), «Il segno metaforico. Tra motivazione e relatività linguistica», in Bombi, R. et al. (eds), *Studi linguistici in onore di Roberto Gusmani, III*, Ed. Dell’Orso, Alessandria, p. 1716-1729.
- Vendryes, J. (1932), « Sur les verbes qui expriment l’idée de “voir” », *Comptes Rendus des Séances de l’Académie des Inscriptions et Belles-Lettres*, 76/2, p. 192-206.
- Watkins, C. (1995), *How to Kill a Dragon: Aspects of Indo-European Poetics*, Oxford University Press, Oxford.
- West, M. L. (2007), *Indo-European poetry and Myth*, Oxford University Press, Oxford.
- Wierzbicka, A. (1992, ed.), *Semantics, Culture, and Cognition. Universal Human Concepts in Culture-Specific Configurations*, Oxford University Press, New York-Oxford.