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ARTICLES

THE PRELINGUISTIC BASIS OF SPATIAL SEMANTICS

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Space is one of those categories that are of pre-linguistic nature and its elementary ideas are not of metaphorical origin. Quite the contrary, they are frequently used as vehicles for metaphorizing into a great variety of notional domains. Fundamental spatial terms are considered as related to their motivational background.

Human beings live in a three-dimensional world despite the fact that our ability to move along the third, that is, the vertical axis is used to a much lesser degree when compared to the other two axes reserved for horizontal movements. Henceforth we shall restrict our attention to the space in which human beings have always lived; space as an all-embracing cosmic network will have to remain outside the scope of our interest. Of course, the pragmatic human space is likewise three-dimensional defined by three axes named up – down (vertical), front – rear, and right – left (the latter two planar). The vertical axis is objectively given by the gravitation which enables us to distinguish what is up (or above) from what is down (or below). The two planar dimensions are closely linked to the asymmetric arrangement of the human body. The front – rear axis is determined by the localization of our organ of sight, nose, and mouth upon the same side of our face so that we may observe the direction in which we intend to move. As for the right – left axis, this opposition is probably conditioned by the hereditary statistical predominance of right-handedness.

Our closest relatives the primates are accustomed to freely move in the trees but our prehuman ancestors gradually restricted their physical mobility along the vertical axis. And yet the vertical axis has preserved its relevance. The importance of the up – down distinction within our existential space considerably

transcends the extent of physical movement of humans above the horizontal two-dimensional plane (however, the modern technology of flying including rocket propulsion has opened for us the infinite distances of the universe where it is hard to distinguish what is up and what down. And yet, the focal role of the vertical axis consists not so much in the bottom → top or top → bottom movement, but rather in its numerous connotations so often utilized for the purpose of modulating interpersonal relations in society as well as for our interpretation of the cosmic order. Human beings have never turned their eyes away from the sky because careful observation of it has been a matter of survival, and at the same time it is the sphere of gods. The classical model of the cosmos is alternatively called the cosmic tree, tree of life, Yggdrasil, and so on; it is a tree constructed vertically as consisting of heaven above, the world of the mortals – and of the underworld (Cook 1974: 9-12).

Throughout the world of languages (and in the realm of mythology) we find the contrast up — down functioning in a multitude of instances. Let us mention that the two above mentioned opposite terms, up and down, are defined as axiologically unequal. Here we shall try to answer the question where does this inequality come from.

The position above as well as the upward movement is perceived and evaluated as something better than the position below and the downward movement.

Observation of the two complementary types of vertical movement in our surroundings, especially in the living world teaches us of their inherent inequality. The tendency to move downward is spontaneous and caused by the gravitation which has nothing to do with our will. All inert objects simply have this "ability" — as if it were a kind of inherent mana. Early thinking might have interpreted it as a radiation of a superior force residing above. And yet, mythologies explaining Heaven and Earth as lingering in their primeval embrace, usually characterize their subsequent separation as lifting the heavenly father upwards not as pushing the earthly mother downwards (see Grey 1953, especially the Chapter Nga Tama a Rangi, pp. 1-5; Gill 1876: 58-60; Blixen 1987: 230-231; Gifford 1924: 18; and others).

On the contrary, the upward movement is largely a manifestation of the individual will, of his/her inner strength. This situation might be characterized in a different way too: what is above is *inherently* active, while what is below has to overcome its inbuilt passivity in order to rise upward. This seems to be in accordance with what we know about many religions in which such a motif reverberates. The asymmetry of upward – downward (or up – down) is an elementary quality of our world including the living world both today and in our prehuman past, most strikingly or prototypically in the domain of animal predators. Let us briefly consider the activities carried out by victorious predators. The position above is that of the successful hunter who manages to strike down his prey. Up or above is tantamount to victory, to strength, to good health and ultimately to life, while down is the posture of the defeated and weak, of disease and ultimately of death. It follows that whoever is up or above deserves respect, admiration, and obedience.

The contrast up – down (above – below) is one of the fundamental notions of non-metaphorical origin (cf. Lakoff – Johnson 1980: 56). Terry Regier generalizes this statement and characterizes space as a "privileged position as a foundational ontological category in language, a position which most other domains do not share" (Regier 1995: 63). Space has "the fundamental role of acting as an organizing structure for further conceptual material" (Talmy 1983: 4). The domain of space is very frequently employed as a source of metaphors when constructing the terminology of other cognitive domains including that of time. Of course, there are many possibilities for metaphorization of the vertical axis and their research would require a considerable amount of time and effort. The high position may be realized, for example, as a tall tree (totara) or as a celestial body (Moon) in the subsequent quotations. In Maori traditional poetry, the death of a chief may be described as *Kua hinga te totara o te wao nui a Tane* "The totara of the great forest of Tane has fallen" (Krupa 1996: 20-21) or as *Ka whati ra te tara o te marama* "The moon´s horn broke away" (Krupa 1990: 98). The axis up – down also serves as a device for expressing a polite attitude. In Japanese the speaker intending to give something to a person he respects would include in his utterance the verb *ageru* "to give upwards" written with the character for *ue* or *kami* ("above"). When asking an estimated person to give or help him, would utilize the verb *kudasaru* written with the character for *shita* ("down").

The fundamental contrast between up and down reappears in the myth of the beginning or creation of the cosmos as a union of two ancestors or principles, namely, of Heaven (cf. Maori *Rangi*) and Earth (*Papa* literally "a flat surface"). The former is active and the latter passive; it is light and warmth, rain and wind, lightning and thunder that comes from above. Down is symbolized by a flat earth but also by its considerable passivity that is receptive. The earth passively receives rain that makes it fertile and produces offspring, which action is obviously perceived as spontaneous but not voluntary.

And yet we are aware that there is such a phenomenon as the activity arising from the entrails of the Earth. Such are the volcanic eruptions epitomized in Hawaiian religious ideas as the goddess Pele (she is female and thus conforms to the feminine image of the Earth). Should we ignore the fact that although the volcanic activity issues forth from the Earth (reminding us of childbirth), the eruptions prototypically take place atop high mountains?

The opposition front – rear also has specific axiological connotations. A higher value is assigned to the former member of the contrast. It is in the front that a living being enters into contact with the environment, investigating it as an instrument of deliberately or purposefully acting. What is in the rear may not deserve increased attention and if yes, the direction of movement has to be reversed at least in the case of danger from behind.

As mentioned before, the opposition right – left seems to be motivated by the higher frequency of right-handedness, maybe by some differences between the two brain hemispheres and by the excentric localization of some internal organs (heart, liver, spleen, etc.) but the culture-conditioned axiology obviously

prevails. The right side is positively evaluated in Christian doctrine and also lexically in some languages. Thus in Marquesan the right hand is *'ima atamai* ("clever hand") or *'ima oko* ("strong hand"). In many European languages right refers not only to the right hand but also to law (cf. German *Recht*, French *droit*, Slovak and Czech *právo* and Russian *pravo* and *pravil'nyj* "correct"). The distinction right – left may be used as an auxiliary means to refer to cardinal points of the compass (see Tallqvist 1928).

The spatial axis front – rear has been borrowed by many if not all languages for the temporal domain. Lexemes that originally denoted location within space, especially locative nouns meaning "*in front of* or *before*" and "*behind*", were adopted to function in the temporal meaning to refer either to past or to future events. While in space we can freely move either forward or backward and return to where we started this is hardly possible in time. The essence of time is highly elusive and from the pragmatic point of view we are not sure whether time is moving around us or is it ourselves moving in it. Herbert Clark speaks of "moving-ego metaphor or moving-time metaphor" (Clark 1973). Is the objective speed of time constant even if it may be perceived as psychologically changing? And perhaps the very idea of time as a cyclic category familiar from many myths and religious beliefs was born because of the metaphorization of space. Just as the idea of time running backward?

In the domain of space we have no problem of distinguishing what is in front of us and what behind us. However, there are some problems with the temporal metaphors of these two ideas. For example, Maori *mua* means simply "before" when referring to spatial domain, but when it is employed in its temporal sense it may refer either to the past that is "the former time, formerly, the past" or to the future that is "the time to come, the future". Here the two different conceptions or attitudes seem to clash depending upon whether we consider the temporal arrangement of two events as a serial arrangement or whether we view an event in relation to ego. If the two words (*mua* versus *muri*) are projected into the social sphere, *mua* refers to something sacral, but *muri* to something profane, secular (cf. Maori *mua* "the sacred place" versus *muri* "the common place, working place). And besides, mua in the meaning of past correlates with the ancestors and with the seniority of a child; *muanga* denotes "the first-born, elder child" and *muringa* to "the youngest child".

Ego ("I, me") is the centre of space for each of us, coinciding with now and here and in my (or our) immediate vicinity there may appear persons who are referred to as "you, you all" while all other persons irrespective of the relative distance from ego are mentioned as "he, she, they". The personal pronouns may be parallelled by demonstrative pronouns; "this, these" may refer to persons or things close to ego while "that, those" go with more distant persons or things. In many languages (Latin, Japanese, Maori) the system of demonstratives is trichotomous; Latin *hic – iste – ille*, Japanese *kono – sono – ano*, Maori *teenei – teenaa – teeraa* correspond with the first, second and third persons.

The space in which human beings live and move about is based upon the abstract three-dimensional network that is gradually filled up with plenty of spe-

cific information concerning the geography of the environment in both the wider and narrower senses and including the lay-out of personally and socially as well as culturally relevant elements. In other words, when studying the complete spatial arrangement of a linguistic community we must take into account its multi-layered nature as well as the multiplicity of the lay-outs that may be completely or partially coextensive or overlapping.

The space surrounding us may be configured in several ways. There are languages in which this configuration or specification takes place as a metaphorized body. Examples of such organic metaphor are given by J. P. Dayley for the Amerindian language of Tzutuyil (Dayley 1985: 155-159) and for another Central American language of Tzeltal by Stephen C. Levinson (Levinson 1992: 21-23). However, this type of expansion of space terminology seems to be widespread throughout the world. Evidence for this is supplied by Sumerian (Diakonov 1979: 21-22), Akkadian (Diakonov 1967: 306), but sporadically also by Hebrew, Polynesian and Indonesian languages. Neither can other configurations be excluded. The whole of ancient New Zealand was configured by Maori mythology as the cultural hero Maui´s fish (*Te Ika a Maui* or "Maui´s Fish" meaning the North Island) and canoe with quite a few details belonging to the scene (*Te Waka o Maui*, i. e. "Maui´s canoe"). The insular world of the Polynesians calls for the application of the opposites sea – land and shore – interior both of which are ingenuously fused in one single contrasting pair *tai* ("sea") – *uta* ("land").

Slovakia provides an interesting example of coextensive spatial structuring of the territory of a country. There is the contrast between northern and southern Slovakia (the transition between them may be viewed as gradual). From another point of view this subdivision coincides with what is called *Horniaky* (derived from *hore* "up") and *Dolniaky* (derived from *dolu* "down"), that is the hilly part (*Horniaky*) in the north opposes the lowlands (*Dolniaky*) in the south. And finally, the larger hilly and northern part is sometimes viewed as a typical Slovak ambient while the smaller southern lowlands are inhabited, in addition to the Slovak ethnic and linguistic majority, by people whose mother tongue is Hungarian.

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