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On the primacy of metonymic construal in lexicalization processes

Abstract

In the present paper I take a look at the process of lexicalization on the basis of etymological data and examine what cognitive processes play a role in its actuation. The analysis takes place within the frames of a functional explanation according to which lexicalization is governed by two basic principles of novel usage: expressivity and efficiency. For this reason it is necessary to go beyond pure linguistic analysis and investigate the cognitive background of the choice of conventional expressions for being used in novel ways for effective reference and representation. I will discuss specific cognitive factors and show how lexicalization originates in various cognitive mechanisms in the mind of the individual speaker when new categories and concepts are named.

Keywords: lexicalization, naming, conjunctivity, metonymy, construal, conceptualization, categorization

1 Introduction

In cognitive approaches to language it is a common view that language is an instrument for the categorization of experience (e.g. Croft & Cruse 2004: 74, Geeraerts 1997: 7-8, 20, Tomasello 1999: 166). The categorizing function of language reveals itself especially in the fact that it stabilizes conceptual structure against fragmentation (Anderson 1988: 93). Fixed conceptualizations and stabilized conceptual structures are essential for economical and effective thought. Their coding in language evidently facilitates the activation of the appropriate cognitive routines and thus contributes to a category reaching a degree of entrenchment, through which it achieves unit status (cf. Langacker 1987: 100). This will create an effective “instrument for organizing, processing and conveying information” (Geeraerts 1997: 6).

Through the process of categorization, when perceiving the world around us, we recognize individual phenomena as belonging to different groups, in spite of the fact that no two of them are ever exactly the same. We do this by selectively sorting their features, that is, we ignore certain differences and focus on specific similarities and commonalities. Being able to do this has an adaptive advantage (Harnad 2005: 31, 34). In this way we do not perceive and experience the world as a huge (and chaotic) array of individual phenomena but as a relatively stable and ordered set. Recognition happens on the basis of concepts, the mental representations of categories, because they function as “pattern-recognition devices” by specifying relevant properties and thus providing schemas for finding similarities (Smith & Medin 1981: 8).

The categorizing function makes language an enormously powerful instrument of social cognition through providing an enhanced possibility for representation and transmission of cultural categories (Tomasello 2000: 40). These categories are coded in the lexicon of a language providing a relatively well-defined system of culturally significant concepts (cf. Tomasello 1999: 169-170, Tomasello 2003: 51), which represent knowledge bundles about co-varying and contingent features of the environment (cf. Macphail 1996: 288). As such they serve as the basic building blocks for constructing and operating a mental model of this environment. A community's shared knowledge of their natural and socio-cultural environment is largely based on this "social super-model", which is necessary for functional communication and through this for an adaptive interaction (Csányi 1992: 38).

Environment in this context means the segment of reality that a social group or an individual experiences and interacts with, including other individuals and interactions of and with them. Due to the complexity of human behavioural organization, the notion of environment does not only include our natural and material environment but also our social and cultural environment, which consists of socially and culturally determined components to an exceptionally high degree. However, as a result of our existence as biologically determined human beings, cognition of our physical environment retains its basic and primary status. The conceptual structures representing our complex and abstract socio-cultural environment will remain embodied and based on experience of our spatial environment. Consequently, our linguistic capacity is based on our sense of space, both visual and kinesthetic, and human symbolic knowledge is rooted in our interactive behaviour with our physical environment. Givón (1998: 46) argues "that a big chunk of the neurology that nowadays supports human language is but an evolutionary outgrowth of the visual information processing system." Lakoff (1990: 73) claims that spatial perceptual mechanisms lie at the bottom of human rationality. Langacker's (1987) Cognitive Grammar is also founded on the conviction that our knowledge of spatial relations forms the basis of linguistic structures. Johnson (1987) has given a detailed explanation of how linguistic meaning emerges through the metaphorical projections of image schemata, which arise in the mind from bodily experience.

The coding of cultural categories in language is manifest in language change, mainly its lexical and semantic aspects. This is not a simple labelling process but – due to the cognitive-communicative function of language, its representational-referential character – it involves specific cognitive processes on which categorization is based. Coding happens through the emergence of new expressions, which originates in the synchronic linguistic activity of speakers. Such usage is cognitively motivated by the perspectives an individual speaker takes on a segment of reality. If the novel conceptualization proves to be contextually functional (i.e. effective and informative), the new expression will become conventionalized, which means the adoption of the new perspective by the speech community. This shared conceptualization is the result of cultural categorization comprising common perspectives of understanding and will function as an adaptive new cultural category in the social cognition of the community.

A historical lexical-semantic analysis of these developments reveals specific cognitive processes that operate in speakers' synchronic linguistic activity during spontaneous and context dependent pragmatic usage which in the long run leads to conventionalized conceptualizations resulting in semantic fixation in the structure of language (Győri 1996, 2002, 2004). In this paper I will take a look at how metonymic construals in this activity influence lexicalization processes.

2 Cognitive factors behind metonymic construals

Geeraerts (1997: 105) has claimed that novel usage is governed primarily by two basic communicative principles: expressivity and efficiency, where “expressivity is always the primary cause of change, whereas efficiency involves the choice of the linguistic means realizing the expressive intention”. The semantic extension which occurs during the creative-innovative usage of an otherwise established expression is possibly due to the malleability of the underlying conceptual structures, the fuzzy boundaries of categories. Based on these, speakers employ various cognitive mechanisms in the form of metaphor, metonymy, narrowing or broadening of meaning, blending, etc. – i.e. extending, constraining or combining categories – for the sake of immediate expressiveness in their communicative interactions. Thus, a speaker trying to comply with particular spontaneously arising communicative needs also faces a cognitive challenge. When phenomena of reality are to be designated for the sake of discourse, they must also be conceptualized in functional ways for economical and efficient representation in order to facilitate effective thinking. Kövecses (2010) stressed that novel conceptualizations are also effected by the immediate circumstances of the discourse and identified five kinds of such contextual effects: the physical setting, the knowledge about discourse participants, the cultural context, the social setting and the linguistic context.

In lack of a conventional sign, reference to a phenomenon requires some kind of cognitive clue. Carroll (1985) conducted a study which offers insight into how novel expressions can be used to cope with the communicative-cognitive challenge. In Carroll’s study subjects were asked to make up names for various things, either unfamiliar or only lacking a conventional name. It was observed that the names generated tended to describe and categorize because they referred in some degree to properties of the name’s referent, like e.g. “molasses peanut cookie” for a cookie containing molasses and peanuts, “tire changer” for a person who is changing a tire, or “rayed triangle” for a triangular shape pierced by a line segment (Carroll 1985: 13, 21). Carroll (1985: 3) termed this “creative naming”. When the subjects were asked to rate the names they produced according to quality, the names that were easy to learn and remember (i.e. descriptive, natural, etc.) and easy to use (i.e. distinctive, brief, etc.) were rated as “good names” (Carroll 1985: 5). As the criteria for easy remembering and easy usage indicate, names are the better the more unambiguously they highlight a category. Theoretically, the mentioning of even one property is a description, though an incomplete one, which nonetheless may prompt the whole category. This capacity of an expression is determined by the salience of the property in question and is due to what Rosch (1978: 30) called the cue validity of features, which is the degree to which a particular feature of a category has the capacity to cue the complete category, i.e. the total set of its features.

We can now explain why “good” names are descriptive. From a cognitive point of view, the usage of descriptive terms is the most economical way to make up names for groups of entities. This is true in several respects. Naming by description is a procedure that:

- (i) facilitates the cohesion of a mental category by emphasizing relevant attributes;
- (ii) supports the connection by direct reference to attributes;
- (iii) helps us create new mental categories by the explicit grouping of features.

Furthermore, straightforward reference to some obvious attribute (or property) of the phenomenon as a clue is cognitively the least challenging. Thus, an expression characterizing the given phenomenon from perceptual, functional, spatial, temporal, or some other relational aspect will be the most effective. As a consequence, in the etymological examples given below the metonymy PROPERTY FOR PHENOMENON can be observed.

At this point the question may arise why speakers choose one conventional expression over another in order to express a particular new idea with it. Having the whole system of language in mind, we can also ask why lexicalization processes take certain avenues and not others. After all, several conventional expressions may present themselves for reference to the same phenomenon and the same expression can be used to refer to different phenomena. In other words, the same phenomenon can be characterized in different ways, other things being equal, while a certain feature can be characteristic of phenomena falling normally under different categories. Kövecses (2000) has shown that not only the same target domain can be characterized by different source domains, but also how the same source domain can be mapped onto different target domains, of course with a different focus. There appears to be nothing ultimately compelling about referring to something in one particular way. For instance, Eng. *glass* ‘a vessel for drinking’ derives its name from the material it is made of, while Hung. *üveg* ‘the material glass’ has come to denote metonymically a different object made of this material, namely bottle. Theoretically, other metonymical expressions could have done the job just as well. Kövecses and Radden (1998) have made a detailed analysis of the specific cognitive and communicative principles that govern the selection of vehicles in novel metonymic expressions. Their results show that three determinants of conceptual organization – human experience, perceptual selectivity, and cultural preference – constrain the cognitive principles, while the communicative principles originate in the need for clarity and relevance.

The fact that the choice of an expression for reference and the judgement of its appropriateness is within the individual speaker’s scope of decision is obviously one manifestation of “[t]he *perspectival nature of linguistic meaning* [, which] implies that the world is not objectively reflected in language” (Geeraerts 1997: 8). Thus, subjectivity must naturally also play a role in semantic change (Traugott & Dasher 2002: 99). According to Traugott’s historical-functional perspective, subjective construal or altered perspective can also play a role in the construction of occasional meanings as witnessed in lexicalization:

Subjectification involves speakers recruiting forms with appropriate meanings to externalize their subjective point of view. This is an activity that draws on cognitive principles but takes place in the context of communication and rhetorical strategizing. (Traugott 1999: 189)

Thus, subjectification is an important force in lexicalization due to “the attempt on the speaker’s part to increase the informativeness to the interlocutor of what is being said, i.e. a cognitive-communicative motivation” (Traugott 1995: 49).

By examining lexicalization processes we can also draw inferences about category formation in general. It especially shows that the formation of new conceptual categories is not independent of human interaction with the environment because descriptions pin-point just the essence of this interaction, i.e. whether this essence lies in the mere perception of real world attributes (cf. PIE **bher-* ‘bright, brown’ > Eng. *bear*, CHARACTERISTIC COLOR FOR [ANIMATE] OBJECT) or in the recognition of certain attributes as functionally relevant for a particular kind of behaviour (cf. PIE **kwel-* ‘to revolve, move around’ > Eng. *wheel*, < CHARACTERISTIC FUNCTION FOR OBJECT). However, when speaking about naming by description as category formation, we have to bear in mind that here the basis for classification becomes explicit by marking only one particular property while others stay implicit. As for instance the etymology of Eng. *cloud* (< PIE **gel-* ‘to form into a ball’) shows, ‘ball-like’ is the explicit property that served as the ground for coding, based on the metonymy SHAPE FOR OBJECT, but there must be also other features participating in the categorization, although only implicitly. The effectiveness of the metonymical construal in

spite of this ‘hiddenness’ of features – since clouds are not the only ball-like things in the world – is due to the fact that the high correlational structure of attributes probably yields such a high level of feature integration in the category that when activating one feature, the totality of the connecting features is also activated (Rosch 1978: 29, cf. also Langacker 1987: 385). Which feature or features get the activating role in naming by description will depend on the cue-validity of features:

Cue validity is a probabilistic concept; the validity of a given cue *x* as a predictor of a given category *y* (the conditional probability *y/x*) increases as the frequency with which cue *x* is associated with category *y* increases and decreases as the frequency with which cue *x* is associated with categories other than *y* increases. (Rosch 1978: 30)

In particular cases of naming by description, it is the feature with the highest cue-validity that is the best candidate for becoming the activator in naming a phenomenon. The cue-validity of features may be influenced by the speakers’ capacity for alternate construals (cf. Langacker 1987: 138), and the speakers’ varying perspectives can have the effect of raising the cue-validity of different features. To take the example of Eng. *cloud* again, it is obvious that it was construed as a ball-like object in the sky, which raised the cue-validity of the feature BALL-LIKE. In contrast, the German word for ‘cloud’ reflects a totally different construal in the form of the metonymy FUNCTION FOR OBJECT: Germ. *Wolke* ‘cloud’ < PIE **welg-* ‘wet’. Whereas *cloud* was conceptualized on perceptual grounds, namely its shape, *Wolke* was construed on functional grounds, i.e. its function to yield precipitation. As another example for a similar state of affairs consider the etymologies of Eng. *skin* (< PIE **sek-* ‘cut’ via the extended root **skend-* ‘to peel off’ through Scandinavian transmission) and Eng. *hide* (< PIE *(*s*)*keu-* ‘cover, conceal’), where the alternate metonymical construals as ORIGIN FOR OBJECT vs. FUNCTION FOR OBJECT are clearly detectable.

On the above grounds, essential parallels can be detected between linguistic category coding (lexicalization) and conceptual category formation. At the linguistic level categorization is always explicit to a certain degree. The explicitness manifests itself in marking certain features (though usually not more than one) of the category via a coding expression while others stay implicit. E.g., as the etymology of Eng. *gold* (< PIE **ghel-* ‘to shine, glitter’) (Watkins 1985: 21) shows, GLITTERING (or SHINING) is the explicit feature that served as the basis for the coding. Though only part of the complete conceptual construal is revealed in this way, this parsimonious solution is probably due to a reflection of cognitive economy, one of the principles of category formation proposed by Rosch (1978).

All things being equal, it is the high correlational structure of attributes, yielding a high level of feature integration in the category, that is responsible for the fact that by activating one feature, the totality of the connecting features is also activated. In fact there are four factors influencing the choice of an attribute that will be assigned the activating role: cue-validity, cognitive economy, perceived world structure, conjunctivity.

Salience of a feature, i.e. high cue-validity, is always a function of existing knowledge: the features we discern as salient must be ones that we already have knowledge of as separate categories (Rosch 1978: 29, cf. Geeraerts 1997: 44). Any linguistic innovation is therefore accomplished with the help of already conventional devices in the language (cf. Croft 2000: 104). This will naturally put specific constraints on such innovations because “[o]ne influence on how attributes [in category formation] will be defined by humans is clearly the category system already existent in the culture at a given time” (Rosch 1978: 29). Croft (2000: 108) talks about the *creation of salience* because several terms might “successfully establish reference [...] and the properties chosen thereby become more salient” (Croft 2000: 109). The

type of knowledge playing the most important role here, and serving as the ground for metonymic expressions, usually relates to perceptual attributes or characteristic functions or activities. Thus, a hat is a thing that shelters (Eng. *hat* < PIE **kadh-* ‘to shelter, cover’) (Watkins 1985: 26): FUNCTION FOR OBJECT, a thumb is a “thing” that is swollen (as compared to other digits of the hand) (Eng. *thumb* < PIE **teu-* ‘to swell’) (Watkins 1985: 71): PERCEPTUAL ATTRIBUTE FOR OBJECT, a hawk is a “thing” that grasps (Eng. *hawk* < PIE **kap-* ‘to grasp’) (Watkins 1985: 27): ACTIVITY FOR ANIMATE OBJECT. In some cases it is not totally obvious whether the metonymic construal is based on a perceptual attribute or on some other knowledge. Thus, in the case of Germ. *Hahn* ‘rooster’ < PIE **kan-* ‘sing’ PERCEPTUAL (ACOUSTIC) PROPERTY FOR ANIMATE OBJECT and ACTIVITY FOR ANIMATE OBJECT seem to be valid explanations for the lexicalization process.

Closely connected to cue-validity are the principles of ‘cognitive economy’ and ‘perceived world structure’ (Rosch 1978: 28-29), since processing a feature with high cue-validity will require the least cognitive effort. Perceived world structure hinges on human perceptual organization and will thus most unambiguously influence which attributes of particular phenomena will serve as cognitive cues for a given category. In some sense perceived world structure seems to be over-ruled by functional considerations when knowledge of the particular function of an object dominates over the information picked up by the sense organs due to the characteristic interaction with a given phenomenon. However, in many cases the knowledge of function derives quite straightforwardly from perceptual characteristics, i.e. the perception of structure. E.g. the etymology of Eng. *rain* (< PIE **reg-* ‘wet, moist’) (Watkins 1985: 54) reveals a perceptually salient feature on which the conceptualization was based, while a functionally salient feature which obviously depends on the perception of structures was used for that purpose in the case of Eng. *hut* (< PIE **(s)keu-* ‘to cover’) (Watkins 1985: 60).

Brown (1979) claims that the creative usage we find in naming behaviour is primarily influenced by conjunctivity. In fact it is largely responsible for the cases in the above examples as well. The cognitive links based on conjunctivity include also relationships that can be determined logically, without appeal to empirical conditions. Conjunctive relationships are psychologically more salient on logical grounds and have thus possible cognitive priority. According to Brown (1979: 259) transitive relationships are prominent examples of conjunctivity: e.g. ‘kind of’ and ‘part of’ relationships. Conjunctivity appears to be a general determinant of cue-validity, since ‘kind of’ and ‘part of’ relationships are just as much capable of cueing a category through their salience, as in the case of the development from Old Eng. *fugol* ‘bird’ to Eng. *fowl* ‘a kind of bird, namely a domestic one’ or from Old Eng. *dēor* ‘animal’ to Eng. *deer*: KIND OF THING FOR CONCRETE THING. Similarly, a ‘part of’ relationship can be detected in Hungarian *farkas* ‘wolf,’ which can be analyzed into *farok* ‘tail’ and the derivative suffix *-as* forming adjectives from nouns meaning approximately ‘having [something], with [something]’, so the noun *farkas* is the result of conversion. Thus, the etymology of the Hungarian word for wolf is quite transparent: ‘[the one] having/with a tail.’ Furthermore, temporal/causal conjunctivity can also raise the cue validity of a feature: PIE **weid-* ‘to see’ > German *wissen* ‘to know’ and Eng. *wise* (Drosdowski et al. 1963: 769, Watkins 1985: 74). CAUSE FOR (COGNITIVE) ACT and CAUSE FOR (COGNITIVE) PROPERTY, since knowledge occurs in conjunction with seeing, i.e. knowledge is caused by seeing.

3 Determinants of conjunctivity

These factors (cue-validity, cognitive economy, perceived world structure and conjunctivity) work together as the motivational basis mentioned earlier because they jointly facilitate the reliance on familiar knowledge when new categories are processed. Even an individual feature that is selected to refer to a new category will have to exist as a familiar category in its own right in the speaker's knowledge if cueing is to be accomplished with it. Furthermore, only familiar categories can surface as features of other categories in our perception of world structure and familiarity with them will naturally contribute to processing ease and thus be cognitively economical. The function of the cognitive mechanisms of category extension and restriction, and – due to our cognitive disposition to perceive similarity and contiguity (Anttila 2003: 431) – especially metaphor and metonymy (Traugott & Dasher 2002: 27), is exactly to exploit such knowledge. In addition, conjunctivity of any type appears to be the simplest and most basic activator of an associative act.

Thus, the reason why these mechanisms may universally induce certain specific conceptualizations is the generality of particular types of knowledge, which count as familiar, independent of the cultural context. This is the most obvious in the case of metonymy, as the contiguity of the referents of the source and the target domains of the semantic extension is very often universally salient. This may also be the reason for the dominance of metonymic onomasiological changes in certain lexical fields, e.g. in the case of emotion expressions (Győri 1998). The cognitive underpinning of this seems to derive once again from Rosch's (1978) two basic principles of categorization: perceived world structure and cognitive economy. The fact that “the perceived world is not an unstructured total set of equiprobable co-occurring attributes” (Rosch 1978: 29) will influence the way humans universally perceive things and conceptualize them across different cultures, and so it will also narrow down the range of possible lexicalizations.

The cognitive salience of contiguity derives from the perception of this close correlational structure of the world, which appears to be left unaffected by the cultural context. Conjunctive cognitive links are likely to be so deeply entrenched universally that their utilization should have considerable priority in conceptualization and in the ensuing lexicalization process. This may create similarities in how certain phenomena are understood and conceptualized reflected in their lexicalizations in different languages. Such a similarity can be witnessed e.g. between German *Zorn* ‘anger’ (< PIE **der-* ‘to split, peel, flay’) (Drosdowski 1963, Kluge 1975) and Hungarian *harag* ‘anger’ (< Proto-Finno-Ugric **kur3* ‘anger,’ cognate with PFU **kura-* ‘to peel, flay’) (Rédei 1986-1991). Thus, in both cases we have the metonymic construal PHYSICAL (BODILY) EXPERIENCE FOR EMOTION. The similarity in conceptualization can be explained on the basis of the contiguity between feeling the emotion of anger and the accompanying physiological sensation of pressure in the body. This correspondence is not surprising in view of the fact that the metaphor ANGER IS EXPLOSION (OF THE BODY) is very common in many languages today (cf. Kövecses 1995).

Conceptualizing certain phenomena in terms of such universally perceived salient correlations will also satisfy the principle of cognitive economy by providing “maximum information with the least cognitive effort” (Rosch 1978: 28). Cognitive economy will thus engender universal tendencies in the content of conceptualizations since the forming of categories the more economical cognitively the more salient features are utilized. More salient features will simply provide more information with less cognitive effort. Cognitive economy must be at least partly responsible also for such universals because the four basic cognitive

mechanisms behind lexicalization (metaphor, metonymy, category extension and restriction) obviously best fulfil its requirements by highlighting the most salient features of a category.

These principles will engender universal tendencies in conceptualization and hence lexicalization jointly with the cue-validity of features. By virtue of their cognitive status, i.e. their explicitness, perceived world structure and conjunctivity are the most evident cognitive grounds shared by interlocutors striving for mutual intelligibility in the process of coining novel expressions. Thus, features deriving from perceived world structure and conjunctive relationships are likely to have the highest cue validity, i.e. cue their respective categories most efficiently and economically. Since the principle of perceived world structure may universally influence the way humans perceive phenomena and conjunctivity can be determined on logical grounds, the salience of features induced by them, and the cue validity of these, should be independent of cultural context, giving rise to universal conceptualizations.

The above processes serve only as the basis for the more specific similarities in the content of universal conceptualizations. The universally perceived world structure and conjunctivity relations are only starting points for more abstract levels of conceptualizations. They are likely to influence the topological structure of conceptual domains that may eventually serve as the source domains of metaphorical and metonymical extensions, and this structure is further preserved in mappings onto a target domain (cf. Lakoff 1990). Since ‘perceived world structure’ also influences our taxonomical view of the world, category extension and restriction, as manifest in semantic broadening and narrowing, may also yield universal lexicalized conceptualizations by way of a similar chain.

Although, other things being equal, cue-validity should correlate with conjunctive relationships inherent in universally perceived world structure, under particular cultural-environmental circumstances (of a speech community) the salience of features will also depend on aspects of socio-cultural functionality, i.e. the role these phenomena play in interactive behaviour. It should be noted, however, that there is an embodied level of functionality which is universal. This is clearly shown in the developments of Eng. *wind* < Common Germ. **windaz* ‘wind’ < PIE **we-* ‘to blow’ and Eng. *eye* < Common Germ. **augon* ‘eye’ < PIE **okw-* ‘to see’ (Onions 1966: 1008, Watkins 1985: 45, 73), where the metonymic construals are based on FUNCTION (OR “ACTIVITY”) FOR PHENOMENON (OF THE NATURAL ENVIRONMENT) and (PHYSIOLOGICAL) FUNCTION FOR BODILY ORGAN respectively.

As opposed to this, cultural influence can be detected e.g. in the development of Germ. *Hose* ‘trousers’ < Common Germanic **huson* ‘covering for the legs’ < PIE **(s)keu-* ‘to cover’, where the garment is obviously construed as ‘a thing covering (the legs)’ on the basis of the most salient feature (based on its function): FUNCTION FOR OBJECT. Therefore, if a culturally functional interpretation of the world is to be achieved, perceived world structure as such cannot have a deterministic cognitive effect on cue-validity. A culturally determined shift in accent concerning the salience of features will result in different features exhibiting high cue-validity. This will engender culture-specific conceptualizations as bases of lexical coding in the language.

The salience of features of phenomena to be conceptualized can thus be affected and ultimately depend on knowledge of the function, origin, etc. of these phenomena and may therefore be functionally determined by specific cognitive factors. This functionally determined salience will influence the possible construals of phenomena and through this the choice of an expression to be used in coding. This procedure is reflected in creative-descriptive naming. It can also be observed in etymologies that such naming draws on the

existent category system under the influence of functional knowledge. For example, Latin *murus* ‘wall’ < PIE **mei-* ‘to fix, to build fortifications or fences’ demonstrates the salience of the knowledge of activity connected to the object, hence the metonymic construal ACTIVITY FOR (RESULTING) OBJECT. Germ. *Wand* ‘wall’ < PIE **wendh-* ‘to turn, wind, weave’ demonstrates the salience of knowledge of origin (in the sense of how the object was created: Germanic tribes erected walls by weaving branches together and covering them with mud), hence the metonymic construal ORIGIN FOR OBJECT.

4 Conclusion

The above analysis has shown that the underlying cognitive mechanisms of lexicalization processes can offer us clues about cultural category formation in general. Formation of new conceptual categories cannot be independent of human interaction with the environment because descriptive naming found in lexicalization reflects the essence of this interaction, be it the mere perception of real world attributes or the recognition of certain attributes as functionally relevant in interactive behaviour.

The data show that the high correlational structure of attributes will yield a high level of feature integration in the category, which explains the fact that the cognitive activation of one feature is capable of recruiting the totality of the connecting features in conceptualization. Primarily four cognitive factors influence the choice of an attribute that will be assigned the activating role. These are cue-validity, cognitive economy, perceived world structure, conjunctivity.

The high cue-validity of a feature always depends on existing knowledge as the features we discern as salient form separate categories in our familiar knowledge base. Of the four factors conjunctivity is the one that primarily influences creative naming behaviour, affecting cue-validity governed by the principles of cognitive economy and perceived world structure. This results in metonymic construals as they require the least cognitive effort for interpretation.

These mechanisms may universally induce certain specific conceptualizations depending on the generality of particular types of knowledge counting as familiar independently of the cultural-environmental context. Although in these circumstances cue-validity correlates with conjunctive relationships inherent in universally perceived world structure, under particular cultural-environmental conditions the salience of features will also depend on aspects of socio-cultural functionality.

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