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Perception Verbs In Ladakhi: A Cognitive Approach Konchok Tashi^{*}

"God! This woman sees more with her nose than she does with her eyes. That's because she is blind with love, Sir."

(Plautu Miles Gloriosus)

Abstract

This article is a cognitive semantic account of polysemy in the semantic field of perception verbs in Ladakhi language. It explores why and how our experience and understanding of the five senses constrains and shapes the way in which we create mappings between the physical domain of perception onto more metaphorical and abstract conceptual domains of experience. The different extensions of meaning in these verbs have not taken place as a result of chance, but are grounded in our own conceptualisation of these sense modalities. Therefore, the focus is on the analyses of the meanings of perception verbs in Ladakhi and it shows how the study of polysemous categories play important role in linguistic analysis in terms of prototypes and metaphors that are central to cognitive linguistics.

Key words: Cognitive Linguistics, Perception verbs, Metaphor, Polysemy

Introduction: The main purpose behind the present study is the analysis of the polysemy that exists in the semantic field of perception verbs in Ladakhi language. Words in this language not only convey the actual core meanings (i.e. the prototype meanings) but they are used to express other meanings as well (e.g. $t^h opt$ set and also 'to be visible'). The

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aim is, therefore, to find out not only the different semantic extensions, but also to show as to **why** and **how** these polysemous senses happen in the language under investigation.

The semantic field of perception verbs is one of the important domains in linguistic research. Due to their wide variety of constructional and syntactical possibilities and their rich polysemous structures, these verbs have been the object of study not only in morpho-syntax (Dik and Hengeveld 1991; Enghels 2005; Fernandez Jaen 2006; Garcia-Miguel 2005; Gisborne 1996; Horie 1993; Roegiest 2003) but also in semantics (Alm-Arvius 1993; Horno Cheliz 2002, Ibarretxe-Antunano 1999a, Rojo and Valenzuela 2004-2005; Sweetser 1990; Viberg 1984).

According to Sekuler and Blake (1994), perception is a biological process wherein the brain derives descriptions of objects and events in the world, using information gathered by the senses. Thus, the five senses—vision, hearing, touch, smell and taste—have been described as "channels for information about the world" (Sekuler and Blake 1994), and as "different modalities for conveying information about the physical world" (Classen 1993:4). There are two key words in these definitions: **information** and **different**. The five senses give us information about the world we live in, but the way this information is perceived, processed, and understood by human beings is different. These differences are based on biological and cultural constraints. Biologically, each sense has its own receptors—eyes, ears, skin, nose, mouth—and its own pathways to the brain. Each sense receptor responds to different stimuli: light, sound waves, mechanical disturbances, volatile substance, and soluble substances.

There are three main elements in perception: the person that carries out the perception or perceiver (PR), the object—animate or inanimate—being perceived (OP) and the act of perception itself (P).

Polysemy

Lexical semantics is a subfield of linguistic semantics. It is the study of how and what the words of a language denote (Pustejovsky, 1995). Words may either be taken to denote things in the world, or concepts, depending

on the particular approach to lexical semantics. The units of meaning in lexical semantics are lexical units. One can continually add new lexical units throughout one's life, learning new words and their meanings.

Lexical semantics covers theories of the classification and decomposition of word meaning, the differences and similarities in lexical semantic structure between different languages, and the relationship of word meaning to sentence meaning and syntax. One question that lexical semantics explores is whether the meaning of a lexical unit is established by looking at its neighborhood in the semantic net (by looking at the other words it occurs within natural sentences), or if the meaning is already locally contained in the lexical unit. Another topic that is explored is the mapping of words to concepts. As tools, lexical relations like synonymy, antonymy (opposites), hyponymy and hypernymy, polysemy and to a certain degree homonymy as well - are used in this field.

The English term *polysemy* is of Greek origin and it can be split into two morphemes as *poly* and *semy*. *Poly* refers to 'many' and *semy* refers to 'meaning.' Thus the term *polysemy* means 'multiple meanings' or 'many meanings' but all the meanings come from the same etymology. For example, the word 'mouth' (of a river vs. of an animal) is a case of *polysemy*. 'The two senses are clearly related by the concepts of an opening from the interior of some solid mass to the outside, and of a place of issue at the end of some long narrow channel' (Hurford, 1983: 123). Apresjan (1973: 5) defines *polysemy* as 'the similarity in the representations of two or more senses of a word'.

Polysemy has been a central concern in lexical semantics, lexicography, translation studies, and natural language processing. Its study has been particularly prominent in so-called Cognitive Linguistics. Taylor (1995: 99) defines polysemy as "the association of two or more related senses with a single linguistic form".

Polysemy is a sub-area in the broader problem of meaning and its analysis. The study of polysemy, or of the 'multiplicity of meanings' of words, has a long history in the philosophy of language, linguistics, psychology, and literature. Words often have several meanings in all the human languages of the world. Polysemy is at the centre of current semantic research, a phenomenon whereby a single linguistic form is paired with a number of distinct but related meanings or senses. In another words, it is a state of meaningfulness in which a given word expresses more than one meaning. Therefore, it is intimately linked with the problem of ambiguity. In some sense polysemic analysis tends to become an exercise into disambiguation of a sentence.

Prototype

The concept of prototypes is reminiscent of the renowned American psychologist Eleanor Rosch (1973, 1977 & 1978). Rosch introduces the role of prototypes to elucidate human's categorization. According to Rosch (1978: 36), prototypes can be defined as the 'clearest cases of category membership defined operationally by people's judgments of goodness of membership in the category'. A prototype of a category is thus viewed as salient exemplar of the category. The prototype meaning is the most prominent and the most typical member of a category. It is the example that first comes to mind when one thinks of that category. Hence, category members do not have equivalent status; some are more important or central than others. In other words, the prototype is the typical member of a category to which other members are related in a motivated way (Rosh 1977, 1978). Applying the notion of category and categorization to the study of words and their polysemous senses, words are considered as categories and their polysemous senses as members of such a category.

The classical view on categorization claims that categories are defined in terms of a conjunction of necessary and sufficient binary features: that linguistic analytical categories impose a set of necessary and sufficient conditions for the membership in the category. This requirement not only implies that categories have clear boundaries and that all members of a category have equal status (Taylor, 1995: 25). However, the membership of our mental categories cannot be defined in terms of necessary and sufficient conditions.

Theoretical framework: Cognitive Linguistics

Within the framework of cognitive linguistics the knowledge and experience human beings have of the things and events that they know well is transferred to those other objects and events, which they are not so familiar with, and even to abstract concepts. Lakoff and Johnson (1980) were among the first ones to pinpoint this conceptual potential, especially in the case of metaphors. However, this does not only apply to the field of metaphor but to other figurative resources which are not considered part of the language in more traditional linguistics, such as metonymy (Panther and Radden 1999; Radden and Kövecses 1996 and Kövecses and Radden 1998).

Within this framework, polysemy is defined as a systematic relation of meanings (Lakoff, 1987: 316 & Johnson, 1987: 193). When speaking about polysemy, the fact that we are dealing with multiple meanings is not the main point. Rather it is the fact that those multiple meanings are related not in an arbitrary but in a systematic and natural way.

Cognitive Linguistics

The cognitive approach is a new approach to the study of semantics that emerged in the mid 1970's. The most influential linguists working along these lines and focusing centrally on cognitive principles were Charles Fillmore, George Lakoff, Johnson, Ronald Langacker, Leonard Talmy and Sweetser etc. The main difference with previous approaches lies in the fact that languages are seen as based on *human cognition*, i.e. human perception and understanding of the world. In other words, it proposes that the meanings are motivated and grounded more or less directly in experience, in our bodily, physical and social/cultural experiences, and then elaborated by structures of imagination such as metaphor and metonymy.

As human beings the way in which we interact with our world through our spatial and temporal orientation, our manipulation of objects, our perception of the things that surround us and our bodily movements influences how we construct and understand meaning. Based on empirical research in different areas such as Cognitive Psychology (Rosch 1973,

1977, 1978, 1983; Rosch and Mervis 1975), and Anthropological Linguistics (Berlin and Kay 1969; Kay 1975) Cognitive Linguistics argues that both the design features of languages, and our ability to learn and use them are accounted for by general cognitive abilities, kinaesthetic abilities, our visual and sensimotor skills and our human categorisation strategies, together with our cultural, contextual and functional parameters (Barcelona 1997: 8).

One of the main tenets of cognitive linguistics is the idea of embodiment, i.e. how meaning is grounded in the nature of our bodies and perception, in our interaction with the physical, social and cultural environment that surrounds us. Concepts are grounded in our bodily experience and then elaborated by structures of imagination, i.e. metaphor. For cognitive linguistics, meanings do not exist independently from the people that create and use them (Reddy, 1993); all linguistic forms do not have inherent form in themselves, they act as clues activating the meanings that reside in our minds and brains. This activation of meaning is not necessarily entirely the same in every person, because meaning is based on individual experience as well as collective experience (Barcelona, 1997: 9).

Within the framework of Cognitive Linguistics, Sweetser (1990) reviews some of the semantic extensions of perception verbs in English. Her main aim is to provide a motivated explanation for the relationships between senses of a single morpheme or word and between diachronically earlier and later sense of a morpheme or word. She proposes a semantic link-up that can account for this pervasive tendency in the Indo-European languages to borrow concepts and vocabulary from the more accessible physical and social world to refer to the less accessible worlds of reasoning, emotion, and conversational structure; what she calls the 'Mind-as-Body metaphor' that can be considered as what Lakoff and Johnson (1980) call 'conceptual metaphor'. The Mind-as-Body is motivated by correspondences between our external experience and our internal emotional and cognitive states. These correspondences are not isolated; they are parts of a larger system. This metaphor involves our conceptualizing one whole area of experience (i.e. the mind) in terms of another (i.e. the body).

Metaphor

Metaphor is one of the basic imaginative cognitive mechanisms. The links between polysemy senses are defined in terms of conceptual connection (e.g. metaphor). Metaphor is defined as "mappings" or "projections" between conceptual domains. This cognitive device can be distinguished from metonymy because the connections made between things are different for each case (Lakoff and Turner 1989). In metonymy, the mapping takes place within the same domain whereas in metaphor, on the other hand, the mapping is across different experiential domains (Lakoff 1993). Hence, metaphor in cognitive linguistics is understood as a mapping or correspondence between two conceptual domains, where properties from one domain, the source, are transferred onto another domain, the target.

Lakoff and Johnson argue that "metonymic concepts are grounded in our experiences. In fact, the grounding of metonymic concepts is in general more obvious than is the case with metaphoric concepts, since it usually involves direct physical or casual associations" (1980: 39). In cognitive linguistics, metonymy and metaphor occupy a central role in thought and language. They are the means by which it is possible "to ground our conceptual systems experientially and to reason in a constrained but creative fashion" (Johnson, 1992: 351).

The diverse uses of perception verbs are grouped under two major categories: one signifies 'prototypical' meaning; the second designates the non-prototypical meaning and metaphorically extended meanings in physical domain as well as in conceptual domain. These two major categories are semantically related to each other by means of a metaphorical shift from prototypical meaning to physical space and mental space. The following study on the perception verbs implies that the senses of the word are related to one another more or less closely by means of metaphor.

Analysis

Prototypical Meanings of Vision and Hearing

The semantic field of perception verbs has five components: vision, hearing, touch, smell and taste. However, the components 'touch' and 'smell' have not been included in the present study as these behave differently in Ladakhi language. Although the label 'perception' refers to verbs such as see, look, hear, listen, sound, smell, touch, feel and taste among others, as an overall group, it is very important for our analysis to bear in mind that these verbs can be classified in three different groups according to the semantic role of their subjects.

The first group of verbs is traditionally described as "the receiving of an expression by the senses independently of the will of the person concerned" (Poutsma 1926: 341. As for instance example 1 and 2 shows:

 t^hoŋt∫əs 'to see' (LED: RN) tiwi t^honduga

television see-pr-Q 'Can you see the television?'

 ts^hort∫əs 'to hear' (LED: RN) ŋas kut∫o ts^hor
 I-erg noise heard 'I heard a noise.'

In examples 1 and 2 above, the subject does not consciously control the stimuli; it refers to a state or inchoative achievement. The process described in both the verbs used above, namely $t^h ont$ is 'to see' and $ts^h ort$ is 'to hear' are that of the perception of various phenomena via the relevant sense organ: eye and ear respectively.

This set of verbs is called 'passive perception' (Palmer 1966: 99), 'inner perception' (Leech 1971: 23), 'cognition' (Rogers 1971: 206, 1972: 304),

'stative with experiencer subject' (Lehrer 1990: 223), and 'experience' (Viberg 1984: 123).

The second group of verbs is those exemplified in 3 and 4 below:

3. ltats 'to look at, to watch' (LED: RN)

k^hos ŋaa ltas he-erg I-dat look-pst 'He looked at me.'

4. pant \$\$\overlines\$ `to listen' (LED: RN)
pas \$\$nasts^hul panspin
I-erg news listen-pst
'I listened to the news.'

These verbs are called 'active perception verbs' (Poutsma 1926: 341; Leech 1971: 23; Rogers 1971: 206, 1972: 304), 'active experiencer subject' (Lehrer 1990: 223), and 'active' (Viberg 1984: 123). They refer to an "unbounded process that is consciously controlled by a human agent" (Viberg 1984: 123).

The last group is formed by that verb whose subject is the stimuli of the perception as illustrated in 5 below:

5. t^hoŋt∫əs 'to be looked' (LED: RN) migra takna k^heraŋ rdemo t^hoŋduk spectacles wear-cond you good look-pr 'You look good if you wear spectacles.'

This group is called 'flip verbs' (Rogers 1971: 206, 1972: 304), 'stimulus subject' (Lehrer 1990: 223), 'copulative' (Viberg 1984: 123), and 'percept' (Gisborne 1996: 1).

Viberg (1984) established the differences between experience and activity verbs on the one hand and copulative verbs on the other, on the basis of what he calls 'base selection', i.e. the choice of grammatical subject among the deep semantic case roles associated with a certain verb. In the former case, verbs are 'experiencer-based'; that is to say the verb takes an animate being with certain mental experience as a subject. In the later case, verbs are 'source-based' or 'phenomenon-based', as the verb takes the experienced entity as a subject.

As seen from the description of each group above, these different types of perception verbs receive different terms according to different authors. This study follows Viberg's terminology for the experiencer-based verbs (i.e. active and experience) and Gisborne's for the source-based ones (i.e. percept). Therefore, the basic paradigm of the verbs of perception in Ladakhi is show in table 1 below:

Sense Modality	Experience	Activity	Percept
Vision	t ^h oŋ 'see'	ltaʻlook'	t ^h oŋ 'look'
Hearing	ts ^h or 'hear'	pan 'listen'	
Taste	puk 'taste'	puk 'taste'	

Table 1: The basic paradigm of perception verbs in Ladakhi.

Non-Prototypical Meanings of Vision and Hearing

Non-prototypical meanings are all those extended meanings, both physical and metaphorical, that these verbs can convey apart from the central prototypical meaning of physical perceptions in Ladakhi.

Vision

Vision is by far the most studied sense of the five. The semantic field of sight has been analyzed not only from the point of view of polysemy (Bauer 1949; Prevot 1935; Garcia Hernandez 1976; Alm-Arvius 1993) but also from the language acquisition perspective (Landau and Gleitman 1985; C. Johnson 1999). This section presents an analysis of the main extended meanings that vision verbs convey in Ladakhi.

The verbs used for the following analysis are $t^{h}on$ 'see' and lta 'look' in Ladakhi extensions of above stated examples 1 and 3 of the first group and the second group respectively.

1.1 'to be visible, to look (a certain way or like something)' (LED: RN) k^ho ladakspa tsoks t^hoŋduk he ladakh-person like see-pr 'He looks like a Ladakhi.'

The sense in example 1.1 above is an extension from the prototypical meaning of the perception verb t^{h} on 'see' used metaphorically to refer to 'to be visible, to look (a certain way or like something)'.

- 3.1 'to face, to be pointed towards' (LED: RN) gonpa ŋosla ltase t∫^hakp^hul monastery towards watch prostrate-offer 'Do the prostration facing toward the monastery.'
- 3.2 'to look after, to take care of' (LED: RN)
 k^has p^hamaa maltas
 he-erg parents-dat neg-watch-pst
 'He did not look after (his) parents.'

The senses in examples 3.1 and 3.2 above are extensions of the prototypical meaning of the perception verb lta 'look' used metaphorically to refer to 'to face, to be pointed towards' and 'to look after, to take care of' respectively.

Hearing

Hearing is said to be the sense of linguistic communication and in fact in all the meaning, both concrete and abstract, it seems to be so. There are always two elements involved in this sense: the hearer and the speaker. The latter could be a person or an object, known or unknown, but the fact is that it is always present. The verbs analyzed in this sense are $ts^{h}or$ 'hear' and pan 'listen' in Ladakhi extensions of above stated examples 2 and 4 of first group and second group respectively.

2.1 'to perceive, to feel (that something) is good, bad, delicious etc.' (LED: RN) ŋaa k^hardʒi ʒimbo mats^hor I-dat food tasty neg-hear 'I did not feel the food tasty.'

In example 2.1 above, the sense is extended metaphorically used to refer to 'to perceive, to feel (that something) is good, bad, delicious etc.'. It is an extension from the prototypical meaning of the perception verb $ts^{h}or$ 'hear'.

4.1 'to obey' (LED: RN) gergani k^haa manans teacher-gen mouth-dat neg-listen-pst 'The students did not obey the teachers.'

The sense in example 4.1 above is an extension of the prototypical meaning of the perception verb pan 'listen'. The sense is metaphorically extended to refer to 'to obey'.

Taste

The physical sense of taste is generally linked to personal likes and dislikes in the mental world. According to Buck (1949: 1031), among Hindus there are six principal varieties of taste with sixty-three possible mixtures and among Greeks six, including the four fundamental ones: 'sweet', 'bitter', 'acid' and 'salt'. This makes the sense of taste very accurate from a descriptive point of view as it allows us to express ourselves very precisely when we want to describe a taste. The verb used in this sense is pukt $j \in s$ 'to taste' in Ladakhi.

The diverse uses of puk 'taste' are grouped under two major categories: one signifies 'prototypical' meaning; the second designates metaphorically extended senses in physical domain. These two major categories are semantically related to each other by means of metaphorical shift from the prototypical meaning. The following study on the semantic extensions of puk implies that the senses of the word are related to one another more or less closely by means of metaphorical extensions.

Prototypical Meaning of Taste

The word taste described in the *Oxford Advanced Learner's Dictionary* (1996) as "To be able to recognize flavors in food and drink". This definition corresponds to the prototypical understanding of the perception verb puk 'taste' as illustrated in example 6 below.

6. pukt jəs 'to taste, take a taste' (LEUD: AH)
k^hardʒiaŋ ts^ha gazukt jikdak puk
food-in salt how-v.be search
'Taste whether the salt is enough in the food.'

The most central meaning of the perception verb puk in Ladakhi is almost same as "taste" in English. In this sense, the meaning in example 1 above refers to 'taste'.

Metaphorical transfer of puk (in physical domain)

An important kind of motivation for meaning extension comes from metaphoric mappings. Metaphor involves a transfer from one domain of conceptualization onto another. Consequently, there is one meaning involved that is called 'prototypical' and another one that is 'transferred' or metaphorical.

There are several ways in which senses develop from the prototypical meaning, but very often they develop through the process of metaphor. Consider the following examples:

6.1 'to search by touch, feel around with the hand' (LEUD: AH)			
metudpo gardak nuk			
Match box where-v.be search			
'See where the match box is?'			
6.2 'to test' (Additional)			
sikelpo ŋas rdza∫ik nuga			
bicycle I-erg little search-Q			
'Can I test the bicycle little bit?'			

The senses in examples 6.1 and 6.2 above are alike, because their objects are concrete and physical. All these senses are metaphorically transferred within the physical domain to refer to 'to search by touch, feel around with the hand', and 'to test' of some concrete objects. These two senses are semantically related to the original meaning by means of metaphorical shift from prototypical meaning to physical space and mental space.

Conclusion

This article is a cognitive semantic account of polysemy in the semantic field of perception verbs in Ladakhi. The data analysis presented in this article showed that these verbs convey a wide range of both physical and metaphorical meanings apart from the prototypical physical sense perception. It attempts an analysis of the polysemy of perception verbs in Ladakhi viz. Vision, Hearing and Taste. The diverse uses of *lta* 'look', $ts^{h}or$ 'hear' and puk 'taste' are grouped under two major categories: one signifies 'prototypical' or the central meanings; the second designates 'non-prototypical meanings' or the metaphorically extended meanings in physical domain as well as in conceptual domain. These two major categories are semantically related to each other by means of metaphorical shift from prototypical meaning to physical space and mental space. The mappings between the source domain and the target domain are carried out by a device: Metaphor. This cognitive device makes it possible to link a physical domain with an abstract domain. As proposed in Cognitive Linguistics, meanings are motivated and grounded more or less directly in

experience, in our bodily, physical and social / cultural experiences, and then elaborated by structures of imagination such as metaphor.

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Abbreviations

LED	Ladakhi English Dictionary
RN	Rebecca Norman
pr	present tense
Q	question
erg	ergative case
dat	dative case
pst	past tense
cond	conditional
neg	negative
gen	genitive
v.be	verb to be