

Diversity in (word) meaning: reducing the risk of bias in foreign language vocabulary teaching using prototype theory

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Abstract

In multifaceted and pluricultural settings, foreign language teaching is facing new challenges. This paper proposes a way to bring the concept of transcultural awareness to vocabulary teaching through the theoretical framework of prototype theory within Cognitive Semantics. Selected aspects of prototype theory are used in order to find suitable points of contact that can account for diversity in meaning. This paper argues towards an awareness of diversity in semantic meaning, using the understanding of prototype theory that categories are complex and have fuzzy boundaries. Therefore, learners can be taught a different and multifaceted understanding of word meaning on this theoretical foundation. Exploring and using prototype theory in this manner could pave the way towards teaching diversity in the foreign language classroom on a lexical level.

Keywords: *Vocabulary teaching; transcultural awareness; prototype theory; diversity.*

1. Introduction

Foreign language teaching has come a long way since traditional approaches have slowly been replaced by newer methods. In a globalised world, culture and language can no longer be conceptualised within borders of nations. Languages can no longer be restricted to a tangible culture, rather we operate within a network of cultures that do not have clear-cut confines. Traditional language teaching has long ignored these realities or conveyed them in stereotypical ways, but newer approaches start to integrate these inter- and transcultural dimensions. Research in language teaching is now recognising the importance of imparting communicative skills, with critical incultural communication theories paving the way for a transcultural communication approach (Baker, 2022).

Another rather new approach within foreign language teaching on the linguistic side is the adaption of Cognitive Linguistics. There are various studies that apply Cognitive Linguistics to foreign language teaching (e.g. Holme, 2009; Littlemore, 2009; Tyler, 2012). A few of these studies apply Cognitive Semantics to language teaching in general or vocabulary teaching in specific. There is a theory in Cognitive Semantics that appears to be especially interesting in the field of vocabulary teaching: prototype theory.

Prototype theory, originating in the area of psychology, mainly accounts for a new cognitive view on categorisation. Categorisation is an important element within a transcultural approach to language teaching, since learners are taught to maintain a critical position towards common categorisations (Baker, 2022). It can therefore be hypothesized that prototype theory within semantics can account for a form of categorisation as well as word meaning that focuses on diversity aspects. The aim of this paper is to explore how prototype theory can account for a manner of vocabulary teaching that focuses on diversity in meaning and therefore reduces bias in this area.

2. Transcultural awareness in foreign language teaching

In a globalised world, societies are increasingly diverse in terms of culture. This impacts all aspects of society, including education. Nowadays, it is essential to teach diversity in the classroom (Organisation for Economic Co-Operation and Development [OECD], 2010). Since learning about culture is an essential part of foreign language teaching (Altmayer, 1997), referring to diversity becomes central. Studies have shown that students perform significantly better in a learning environment that “treats diversity as a source of potential growth rather than an inherent hindrance to student performance” (OECD, 2010). Hence, diversity should be a central aspect in the foreign language classroom.

This is where the concept of transcultural awareness comes into play. This approach aims to teach the ability to communicate successfully in a transcultural environment, which covers a

much wider field than traditional approaches (Baker, 2022). Rather than being a monolateral approach, transcultural awareness in language teaching is a multifaceted compilation of different strategies. It is based on the relatively new concept of transcultural communication which Baker and Ishikawa (2021) describe as follows: “Transcultural communication attempts to develop more critical approaches to language and culture [...] to better account for the complex and fluid relationships between languages and cultures in interaction [...].” A central idea here is that cultural boundaries are fluid and transgressive and do not conform to national borders (Baker & Ishikawa, 2021). Therefore, language teaching needs to adapt to these new theories, considering the risk of bias and stereotyping while teaching about culture. Bias and stereotyping can be significantly reduced if learners are aware of cultural fluidity and diversity. Baker and Ishikawa (2021) note that we have to “fundamentally rethink” education since especially in higher education settings we are dealing with a “super-diversity”. They emphasize that students need to be prepared for “multilingual and multicultural settings”.

3. Prototype theory in lexical semantics and diversity in meaning

Prototype theory in the field of Cognitive Linguistics can be understood as a theory that accounts for the description of meaning within a holistic understanding of language. Originally it was a theory of categorisation, and it only became relevant on a semantic level with the transfer to semantics (Dörschner, 1996). Rather than a singular theory, it is an accumulation of various ideas within cognitive studies (Schmid, 2000).

A central idea in prototype theory is that categorisation as a basic human thought pattern facilitates a structured perception of the world (Windeck, 2019). In its more modern version, the prototype is defined as the most typical example of a category which is to be understood in a broad sense. A prototype here is an abstract concept that includes the basic meaning of a category; the boundaries of the categories are fuzzy (Mangasser-Wahl, 2000a). Lakoff (1987) notes that linguistic categories work in the same way as conceptual categories, therefore language uses basic cognitive categorisation strategies. It is assumed that prototypes work similar to basic categorisation. Humans automatically categorise when perceiving the world they live in because it works as a cognitive “shortcut” (Mangasser-Wahl, 2000b). Neurological studies show that categorisation functions as a universal principle of cognition so it can be assumed that for something as complex as language there must exist a multilevel and hierarchical system of categorisation (Müller & Weiss, 2000).

Brdar-Szabó and Brdar (2000) assume that a prototype approach can be used in foreign language teaching as “a basic component of the methodological apparatus of a theory” but not as a “self-contained language theory”. This assumption leads to the aim of this paper. We have already seen that prototype theory is a relevant approach to lexical semantics and,

therefore, it can be hypothesized that the application to vocabulary learning in specific can facilitate a more effective understanding and retention of the items. It can further be hypothesized that prototype theory can account for a certain diversity in the meaning of lexical items. This can be accomplished through teaching diversity awareness for word meanings through the findings of prototype theory.

4. Teaching diversity and reducing bias in vocabulary teaching through prototype theory

The goal of a transcultural language education approach is to educate the learners to use the target language effectively in communicative situations that occur in multicultural contexts. This produces a holistic view of communication that entails a greater range of competencies than the communicative approach focuses on (Baker, 2022). When Kramersch (2021) is talking about “Language as Symbolic Power”, this is what we can derive for language teaching: she gives us a new perspective on language education altogether which she approaches from a post-structuralist point of view. Language learning is no longer about the target language and target culture but rather about communicative strategies and seeing what effects an utterance can have in transcultural settings (Kramersch, 2021). Kramersch (2021) summarises: “A post-structuralist/post-modernist approach to language education will require developing learners’ interpretative abilities, sensitivity to context and appreciation of symbolic complexity.” She continues to explain that teachers now are confronted with the task of teaching about “symbolic conditions” and stresses that there has to be a “re-thinking of the purposes of language teaching within a (post-)humanistic education” (Kramersch, 2021).

This paper aims to apply this to vocabulary teaching in specific using prototype theory as a theoretical concept within Cognitive Semantics that is assumed to account for several problems with this proposition. In the following, several aspects of prototype theory that could be used in order to apply transcultural awareness aspects to vocabulary teaching will be presented.

4.1. Categorisation

As illustrated in chapter 3, categorisation is a basic human mechanism when perceiving the world (Kleiber, 1993). Traditional approaches to language teaching, though, use this fact in a way that often reproduces stereotypes. In order to reduce this risk of bias and stereotyping, especially in lexemes which denote or describe humans, human interactions, or cultural practices, this paper suggests a *diversity awareness*. When we talk about human or cultural concepts, categorising is inevitable, but with awareness about the plurality of cultures, cultural practices and human identities, we might be able to gain a less stereotypical view. If we look at, for example, the word *mother* we automatically generate an image in our mind that may be close to a stereotypical understanding. A prototypical understanding of

categorisation can help to guide our imagination: we know that next to the stereotypical mother (e.g. a woman who gave birth to and is raising at least one child) there are also other members of the category (e.g. a woman or a non-binary person who is raising an adopted child) that we are aware of in a setting of diversity awareness.

Prototype theory here has to be applied in a very broad sense. Referring to findings within this area, it has only been proven that it can be applied to concrete objects. However, there has been evidence that typicality effects are also found for verbs and abstract notions (Lehrer, 1990). Prototype theory negates classic Aristotelian categorisation and offers a theoretical frame where the existence of common attributes is not necessary for all members of a category. Rather than assuming logical categories, categories are described as natural. Criteria for categorisation are not structured in a binary way, rather it is about variation, global similarities and a comparison with referential prototypes (Kleiber, 1993). Prototype theory assumes categories with fuzzy boundaries where members are arranged on a scale from core to periphery; a category has a prototypical inner structure. The decision that an entity is a member of a certain category is always made globally and not analytically (Kleiber, 1993). If we adapt this manner of thinking to categories that refer to humans or cultural practices, we automatically create the possibility of more diversity in our conceptual categories. This is a kind of awareness that should be taught in the foreign language classroom in order to help create diversity awareness.

4.2. Semantic explanations

Wierzbicka (1990) observes that within linguistics, it is often assumed that abstract concepts such as emotions cannot be explained but only be felt. She gives the example of *envy*. Within traditional, structuralist approaches, a full semantic description is difficult since it has been a difficult task to properly describe emotions. Wierzbicka (1990) argues that prototype theory can resolve this problem. If we grasp emotions through a prototype approach, we do not have to construct unwieldy traditional definitions. Rather, we can explain the concept using prototypes. Recipients then can compare their emotions or their understanding of them to the prototypical description and hence get closer to the semantic meaning. Wierzbicka (1990) concludes that concepts are often vague but according to prototype theory, the explanation of semantic meaning does not have to be. These assumptions can be used for vocabulary teaching. Prototype theory here can pave the way to a construction of semantic explanations within teaching contexts that are concrete and understandable but also leave room for possible other meanings in other contexts.

4.3. Economy in speech

The tendency to use language in an economical way is as elemental in human cognition as is the tendency to categorise. It can often be observed that humans tend to choose single lexical

items over long phrases when it comes to their language usage (Lehrer, 1990). Lehrer (1990) explains that prototype theory plays a vital role here since “it facilitates this kind of economy”. Furthermore, Rosch (1978) explains the concept of “cognitive economy” as a basic principle of category formation. Roelcke (2002) corrects this principle and introduces the principle of “efficiency of communication” which explains that within communicative processes we tend to either optimise the effort or the result in order to reach efficiency. Within prototype theory we can see that the goal is to reduce the high number of characteristics that we would have to assume in traditional semantics. This kind of economy could be an aspect taught to language learners. If they are aware of human tendencies to use speech economically, a better understanding for a possible multitude of word meanings is created. This means that when learners are aware that economy principles are used when substituting a bulky phrase by one or more lexical items, it is logical to assume that these items can adhere to meaning in a broad sense with fuzzy boundaries. The contribution towards diversity awareness here is similar to the one mentioned above: the learners are made aware of diversity in meaning.

4.4. Social stereotypes

Lakoff (1987) points out the risk of social stereotypes being used as prototypes to represent entire categories. Nevertheless, he remarks that such social stereotypes are mostly conscious and change with time. Because they “define cultural expectations”, they are often used as arguments in debates. A goal in a transculturally aware language classroom would be to identify these stereotypes and analyse them critically. Prototype theory can help with this since it offers a way to identify prototypes. Prototypes in this respect are cognitive reference points that are identified by speakers in a cultural realm and therefore the typicality judgements will match. It is then the task of critical analysis within a transculturally aware classroom to work towards plurality and against stereotyping.

4.5. Diversity in meaning

The assumptions of prototype theory enable the re-integration of aspects of meaning that a traditional approach to word meaning sees as irrelevant, since in that theory they are not relevant for categorisation (Kleiber, 1993). Lehrer (1990) argues that an important consequence of prototype semantics is that “concepts, and therefore word meanings do not (always or even often) have sharp boundaries”. She further deduces that prototype theory leads to the assumption that vocabulary is flexible. This enables us to use a finite number of lexical items to account for an indefinite number of senses and meaning and it also means that word meanings are often extended for non-prototypical meanings (Lehrer, 1990).

This finding is an important connecting point for transcultural awareness in vocabulary teaching and therefore for diversity awareness. If we assume that categories and word

meanings have prototypical members we automatically surmise the existence of non-prototypical members as well. Fuzzy category boundaries assume a certain diversity in the members that we can count to those categories. In this theoretical framework, we do not need a checklist of characteristics anymore to count an entity as a category member or not. This can be especially important when talking about lexical items that refer to humans or cultural practices. Diversity awareness, that prototype theory can account for, can nurture a sense of diversity in meaning which fosters a broader view on people and culture in multicultural settings.

Certainly, this entails the danger of further establishing binary oppositions that are explicitly contrasting with the aims of a diversity approach to education. It has to be the task of language teachers who enforce diversity awareness to educate the learners towards plurality and not towards newly created binaries.

5. Conclusion

Baker (2015) proposes a radical change of foreign language teaching in the light of “post-normative and intercultural perspectives”. He argues that language teaching has to move away from teaching static linguistic forms and rather needs to equip language learners with communication strategies that help them communicate in a multifaceted environment. This paper proposed the idea of bringing this goal to vocabulary learning through the theoretical framework of prototype theory. It was argued that certain findings of prototype theory, mainly within categorisation and cognitive economy, can be used to work towards teaching diversity awareness within vocabulary teaching.

Further research is needed in order to find out how this can be applied in practice and to build a broader theoretical foundation. Another question of importance will be the didactic implementation of teaching a variety of meaning and senses within word meaning so that diversity can be applied beyond the focus on only prototypical members of categories. Answering these questions is part of a bigger project in form of a doctoral thesis where a model of vocabulary teaching based on selected theories of Cognitive Semantics is proposed.

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