

García Palacios, Joaquín and Guerrero García, Beatriz. "The virtual reality of terminological borrowing". *Aspects of Cognitive Terminology Studies: Theoretical Considerations and the Role of Metaphor in Terminology*, edited by Silvia Molina-Plaza and Nava Maroto, Berlin, Boston: De Gruyter Mouton, 2024, pp. 95-108. <https://doi.org/10.1515/9783111073149-005>

Joaquín García Palacios and Beatriz Guerrero García

The virtual reality of terminological borrowing

1. Introduction. State of the Art.

In today's languages, the importance of lexical borrowings is unquestionable, as several studies on neologisms have proved, whose results show their preponderance among neologisms of units from other languages. Among all these studies, two examples stand out: (1) the results obtained between 2010 and 2020 in the Red de observatorios de neología del español peninsular (NEOROC) which show that lexical borrowing is in fact “una de las estrategias más habituales para la renovación léxica del español” during that period of time (García Palacios 2022); and (2) the indications given for the Italian language in the Introduction section of *Il vocabolario Treccani. Neologismi* (Adamo and Della Valle 2018: XIV), where the authors state that “i forestierismi – nella quasi totalità di provenienza angloamericana – costituiscono il 20,11 % della produzione neologica rilevata nei quotidiani (a fronte di poco più del 10 % riscontrato nel dizionario pubblicato nel 2008)” [“foreign words –the majority of which are of Anglo-American origin– make up 20.11% of the neological production retrieved from newspapers (against the percentage slightly over 10% found in the dictionary published in 2008)”]¹. The importance of these linguistic elements is also reflected in the many studies that have been and continue to be devoted to them, both from the perspective of studies on bilingualism in which cross-linguistic transfers are frequent (Serigos 2017), and from the perspective of studies on standardization or language planning in which the importation of units from a different linguistic system instead of the regular formations in a language often occupies a central place (Rodríguez Medina 2000; Freixa 2019). As we can see, there are several approaches to linguistic borrowing from very different perspectives, but they mainly focus on issues such as the characteristics of an Anglicism or other types of loanwords, the typology of the loanwords, their use and adaptation (Zenner, Speelman, and Geeraerts 2012).

As far as the language user is concerned, the relatively spontaneous manifestations of the speakers usually show their ideological position in favor or against these units, positions that are often vehemently defended as well as attacked, as it happened in the past with the ongoing controversy over the use of Gallicisms in Spanish (Lázaro Carreter 1985) or as it happens nowadays in a matter such as Anglicisms, an issue that has been going on for over 70 years. (Lorenzo 1996; Franco Trujillo 2016).

¹ [Translation by the authors].

However, studies devoted to lexical borrowing that focus on the process that generates them rather than on specific examples as outcomes of that process are scarce (Guilbert 1973; Castillo 2002; Guerrero Ramos 2013). In the present article, our aim is to direct our research towards the borrowing procedure and to observe how it is developed in LSP (language for specific purposes). We would then refer to terminological borrowing (“*emprunt terminologique*” in Humbley 2018), as the process that implements new lexical units coming from foreign linguistic systems in the target language. Said lexical units are used to represent and communicate certain concepts of a specialized field, and this double dimension, conceptualizing and communicative, will therefore be involved in the appreciations we will make throughout this article.

Terminological loanwords have been assessed in studies in a different way from general-language loanwords. On many occasions, there have been attempts to characterize (and justify) these terminological loanwords, considered almost exclusively on the basis of one criterion: that of denominative need (Onysko and Winter-Froemel 2011). However, several reasons show us that the reality behind them is much more complex than these studies can show. The first and most obvious of them is that terminological borrowing does not always occur when in response to a denominative need (Serigos 2017). Moreover, the pragmatic conditioning factors of specialized communication are evident in these units, so that the parallelism with general-language loanwords is only partially valid. These obvious differences, in addition to others that we will discuss later, lead us to consider the special nature of terminological borrowings with regard to general borrowings and other types of neologisms.

In this particular case, the unique course that many of these units initially follow solely within specialized communication leads us to put into perspective the Communicative Theory of Terminology (CTT) (Cabré 1999) assessments regarding the unique character of lexical units regardless of their status as terms or words. Furthermore, it should be considered that terminological loanwords function in a slightly different manner from other terminological units, determined partly but fundamentally by the fact that two linguistic systems come into play and, therefore, two systems of meaning within the communication that takes place within the same cognitive domain.

At the same time, they have distinctive characteristics with respect to other types of neology, since they are not units generated with the resources of the language into which they have been introduced, but units imported from another linguistic system, with all that this implies, such as entering into a process of assimilation and adaptation to the target language.

In the past, the concept of loan used as a metaphor from the economic sphere to refer to units coming from another language has been widely discussed. Studies such as those of Haugen (1950), Adamo and Della Valle (2017), among others, evaluate and consider this denomination in their respective languages as quite unfortunate. Therefore, by calling it “*préstamo*” (es.), “*prestito*” (it.), or “*emprunt*” (fr.), for example, the economic metaphor may lead to inadequacies and mismatches with the reality that this denomination designates, a phenomenon that is also observed in other languages. Making use of an accurate metaphor is vital in terms of information processing and conceptualization, especially in those cases in which it appears in a blurred form and its use is not fully conscious, due to its cognitive

function and the repercussions it has on the conceptual system and on the construction of meaning (Moreno Mojica 2016; Lombard 2005; Sánchez Ibáñez 2022). Given that in linguistic borrowing there is no loss of linguistic heritage for the donor language (L_A), that there is no need for any kind of restitution or return, and that no compensation for that language on the part of the target language (L_B) is involved, this metaphor is insufficient and leads us to try to consider another approach that would allow us to provide a better explanation of this language procedure, as is done in García Palacios (2022), where a photography concept is used to explain the borrowing procedure for the first time.

2. A new metaphor: borrowing as a virtual copy

In digital photo development programs (Adobe 2018), the starting point for image processing is usually the photograph in a format that allows its further editing. To avoid damaging the raw image, however, it is customary to work not from that original, but from a virtual copy. We can make as many copies as we wish from such a virtual copy and manipulate each of them to obtain different results: change from color to black and white, increase the contrast, lower the color saturation, zoom in on a certain area of the photograph, and so on. Some copies will differ from the original more than others—all of them resemble the original, but none of them is exactly the initial one. As a matter of fact, the master photograph is not altered, no matter how many modifications are made to the copy or copies that are generated and all copies pile with the master or original photograph since they have not lost their relationship to it.

All these examples allow us to establish similarities between the process of linguistic borrowing and the photographic virtual copy: the loanword that is imported into the L_B follows its own path that entails no alteration whatsoever of the original term in the L_A . In fact, the original term does not exit the language in which it was first originated, but it is a virtual copy of it that does. Said copy is modified in the passage to another language, so there is no patrimonial loss for the L_A and, consequently, no restitution of any kind will be necessary for the L_B .

The virtual copy does not lose its relationship with the original term, as was the case with the photographic virtual copy. However, there is an important difference with respect to the former. It is possible to erase the history of modifications of the photographic virtual copy, that is, to undo what has been done previously, and return to an earlier version of the copy. This is not the case with loanwords, since the imported unit follows its own path in the L_B that cannot be undone. The latter point has significant, loan-related cognitive implications. The modifications that the importer of the loanword makes on the virtual copy before transferring it to the L_B can lead to the generation of a unit that carries important modifications that will eventually be transferred to the target language. As we will see further on, the level of linguistic competence in the starting language, as well as the degree of cognitive competence in the specialized field, will determine if the transfer from the original term to the virtual copy, and from there to the different copies in the L_B , will entail substantial changes with respect to the original term of the L_A .

Although the differences between the original photograph and the copies derived from the virtual copy are particularly significant, the relationship between them remains the same. Likewise, as in the case of terminological borrowing (and, also, in general borrowing), one of the constants that arises in all of them is preserved, i.e. the relationship between the copy

(or copies) and the existing model in the L_A , the “étimo inmediato” addressed by Pratt (1980: 115).

3. Terminological borrowing as a virtual copy: cognitive considerations

Approaching the study of terminological borrowing from a perspective that focuses especially on its cognitive and communicative dimensions seems necessary in order to, on the one hand, see how the mechanisms that constitute our conceptual system are reflected in language and, on the other hand, to understand the distinctive characteristics of this transfer of specialized knowledge when it is conveyed through terminological borrowings. This analysis must be flexible enough to consider the double formal and semantic structure of these items, as well as the procedures of lexical reconstruction related to extralinguistic factors (Varo 2020). By shifting the subject of study from lexical items to their conceptual dimension (Zenner, Speelman, and Geeraerts 2012), we would be moving closer to the turning points marked by Lakoff (1987), who defines metaphor as a cognitive process of transferring cognitive structures from one domain to another and explains that “our basic-level concepts correspond to [the] preconceptual structure and are understood directly in terms of it” (Lakoff 1987: 270). From this perspective, we can then reflect on how concepts from a domain of expertise are crystallized when one enters into contact with them through a foreign language, and also on how this cognitive transfer from one language to another is accomplished, along with the undeniable consequences that this has. In addition, the role of the expert in communicating these concepts in their own language through terminological borrowings becomes essential.

Within this communicative context, it seems highly relevant to emphasize on the cognitive dimension of the specialist, an expert in a domain of expertise, with the capacity to conceptualize from the perspective of such field. Therefore, they will be able to select those elements of their experiential basis that are important for the communicative purpose, in this case, the specialized concept to be addressed, which is closely related to other concepts of the same cognitive domain. On many occasions, this process can be qualified as denominative, which implies the projection in their language use of semantic search processes and combination of stored information, in this case having as a result the implementation of terminological borrowings in the discourse (Varo 2020). Although it would be a cognitive process intrinsic to human nature and, therefore, to the cognitive capacities of any speaker, the communicative role that this user plays as a specialist must not be overlooked, since their perception of how a certain term should be used must match the perception of the receiver in order for effective communication to take place (Lakoff 1987). This highlights the importance of their language use as experts, as well as the causes and consequences of introducing terminological borrowings in the discourse from a cognitive perspective. Despite the fact that sometimes experts do not fully take into consideration their responsibility in terms of the relevance of the choices they make with regard to their linguistic interactions (Berthoud 2016), these choices determine the way in which the specialist perceives language, as well as the reasons that lead them to use certain terminological units and not others.

Socio-educational factors acquire particular importance in the transfer of specialized knowledge, namely the perception of a language and its use being closely related to the context in which it was acquired (Iacozza, Costa, and Duñabeitia 2017). In this particular case, the internal dynamics of different scientific communities and the relationships between

their members condition their access to specialized knowledge and, consequently, their use of terminology, especially in the current globalized context (Sánchez Ibáñez 2014). Therefore, it is not surprising that extralinguistic factors determine the presence of borrowings in cases of total bilingualism or in other instances in which bilingualism should be considered as limited (Gómez Molina 2000). A relative bilingualism that may arise as a consequence of the experts' constant exposure to the English language, that may blur the barriers between languages and, consequently, between what has been conceptualized in each one of them on the grounds that "frequent and diverse language use prompts a shift in the way we encode our concepts, making those belonging to our native language overlap with those of our second one" (Ivaz, Griffin, and Duñabeitia 2019: 83).

We are dealing with a process that is not symmetrical between the two languages, since the exchanges only occur in one direction. This *linguistic subordination*, understood in terms of "terminological dependence" (Humbley and García Palacios 2012), may be another consequence of the social dynamics mentioned above, being one of its most important manifestations the fact that scientific production in many areas is mostly written in English (Linder and De Sterck 2016). The constant exposure and ongoing reading of specialized texts in this language, even if experts use their native language to transmit this specialized knowledge, would be partly contributing to these linguistic asymmetries, since the terminological borrowings that these experts implement in educational contexts "tendrán seguramente un grado de implantación muy alto entre los especialistas en formación a los que se están dirigiendo, ya que este escenario específico es de vital importancia para la consolidación conceptual y terminológica del especialista" (Porrás-Garzón 2022). Thus, by frequently resorting to these borrowings, either because of considering English as just another working tool due to continuous exposure to this language or overlooking other communicative options that could also work, the boundary between languages would continue to blur. This dividing line will become increasingly less clear as the familiarity of these experts with English increases, to the point where the expert no longer perceives the lexical item of the second language as something foreign or unusual in the communication they perform: "once we start having these different experiences that attach us to a language—albeit a foreign one—this language is no longer foreign to us" (Ivaz, Griffin, and Duñabeitia 2019: 86).

It is therefore essential to consider how the specialist deals with these terms and what they mean for them in the communicative contexts in which they participate daily as part of their specialty. The expert constructs meaning through their interaction with a certain specialized field, which enables them to establish a set of relationships that determine the processing of a reality from which they will extract the elements they are interested in expressing in the communicative interaction. Nevertheless, if the experiential basis of their specialty taken as a reference is usually encountered in English, it would be expected that this language, being an element that is also part of this interaction, would have consequences in the construction of meaning and the procedures by which it is reflected in the language. Firstly, because when coming into contact with new specialized concepts through English the expert would be prone to create "nuevos moldes de interpretación que llevan a extremos la versatilidad del lenguaje sustentada en la imaginación mental y los cambios y reajustes lingüísticos" (Varo 2020: 27), which would probably lead them to prefer foreign elements in the LSP they use. It is precisely the implementation of borrowings that reflects in the

linguistic structure “el modo en que los sujetos percibimos, experimentamos y categorizamos el mundo” (Pérez y Rojas in Moreno Mojica 2016: 50), the world of the specialty in this case. Thus, it could be considered that the expert makes use of terminological loanwords as they consider them the most natural and adequate option to express the concept, its context and the constituent elements required for its comprehension, and to provide his language with the necessary tools to communicate from the specialty. However, this interaction through a foreign language would entail complex processing that involves a permanent and fluctuating relationship between the source language and the target language of the borrowed item. Instead, it is a process that, once the virtual copy of the term from the L_A has been originated, focuses mainly on the diffusion of the generated copy and the integration of the new meaning—possibly coinciding with the original, but not necessarily—through a loanword that the new linguistic code assumes and assimilates with greater or lesser difficulty.

It should also be asked whether this approach that presupposes borrowing as the most reasonable option for the denomination of a specialized concept constitutes an oversimplified reality, since it assumes implicitly the existence of an alleged cognitive uniformity “entre las comunidades lingüísticas a las que esos especialistas pueden pertenecer” (Sánchez Ibáñez 2014: 30). This approach should be put into perspective, given that the contextual and cultural elements inherent to the foreign term often differ when it is transferred to a different linguistic and cultural frame. This would hinder effective communication, regardless of the language involved. Thus, the question arises as to whether lexical reconstruction routes allow the concept to be transmitted with the nuances and constituent elements that the expert deems essential, or whether it is not possible to access them from the terminological loan, since the concept has not entered the new language framed in the same context as it had in the donor language.

The neological character of a terminological loan depends directly on the fact that the item is perceived as new by the community of experts. This is a common situation, especially when the loanword responds to a denominative need in the target language, but it can raise certain issues in cases where the borrowing is not necessary because there is an already-existing term for that specific concept. Making use of the experiential basis to ground certain words in a conceptual domain is undoubtedly placed at the root of these remarks (Moreno Mojica 2016), by properly characterizing the meaning of linguistic elements through the underlying conceptual structures on which they are based, and which provide them with the essential context for their understanding (Fillmore in Ibarretxe and Valenzuela 2012: 31). However, in a context of specialized communication, this may differ, since the meaning of these terminological units may not be conveyed uniformly to all experts to the same extent and with the same implications. This might be due to the linguistic differences between native speakers of the language in which this specialized knowledge has been generated and the other experts, to whom it has been derived from a linguistic frame different from their own. Consequently, although the receiver, by virtue of their expertise, has the necessary cognitive schemas that allow them to process, reconstruct and assimilate the new concept, these processes may vary from the way in which a native speaker of the language from which it was imported would assimilate the original term. This has been suggested by certain experimental studies that indicate that the user is able to process semantically novel words through lexical reconstruction routes that differ from those used to process familiar items (Varo 2020).

Nowadays, the asymmetrical relationship that exists between English and other languages to which the terminological units are exported is undoubtedly at the heart of this whole issue. This relationship must be placed in a globalized as well as multicultural context, in which English has become the language of scientific exchange due to economic, cultural, and political reasons. This, as is well known, implies that most specialized information exchanges are carried out in this language, since it is in English-speaking countries where scientific development takes place and, consequently, from where a large part of the specialized terms are proposed, with which experts from other countries come into contact with in English.

The linguistic asymmetries between the two languages give rise to the detriment of the receiving language, as evidenced by the unidirectional nature of the transfer between the two codes. With fewer specialized texts available in L_B , specialized communication and terminology are affected, since the experts' communicative performance is limited in specialized scenarios, which are essential for the spontaneous production and conveyance of terminological equivalents (Porrás-Garzón 2022; Linder and De Sterck 2016).

This is a context in which several conditioning factors converge, which together contribute to the configuration of the terminological dependence that perpetuates the asymmetries between the two communities. Firstly, conditioning factors of the general trends occurring at that moment in history in terms of the status of the different languages and their relationship with each other. Secondly, factors regarding the individual experts' assessment of the specialized communication in their own language and in the language used in international communication. Finally, factors regarding the criteria used by the linguistic community of experts in a given subject area to assess the characteristics that communication within their specialty should have.

Hence, extralinguistic circumstances are largely responsible for terminological borrowings entering the language, without the English language playing an active role in this process. On the contrary, it is the receiving language that does. The process of extracting the virtual copy of the original term from the L_A has been driven by individually taking that copy and bringing it into their own language, in which it will serve to name a concept of a specialized subject area. It is the L_B that receives these foreign elements and tries to incorporate them into its lexicon, with the consequent adaptation to its structure. It is in the L_B where these loanwords are subject to processes of assimilation or rejection.

Under another perspective, it is in the L_B where the communication that facilitates the incorporation of the loanword as an item representing a specialized concept of a specific cognitive domain will take place. Within the new linguistic community of experts in a specialized field, the positive or negative evaluation of this item (and subsequent acceptance) will be based on whether it satisfactorily fulfills its communicative function—possibly without considering whether it is an element that is well adapted to the new linguistic system in which it has been introduced. In this sense, one of the added but fundamental challenges for the receptor language is to mitigate the consequences that arise at the conceptual level, due to the transfer of an element that had been conceptualized in a different cultural frame. In other words, to ensure that the loans are adapted to the new cultural context and are able to fulfill their specialized communicative function in it, since it is not a mere transfer of elements, but rather “adaptarlas a un nuevo contexto de uso en el que quizá sea necesario

hacerlas más transparentes desde un punto de vista cognitivo para intentar paliar las asimetrías disciplinares entre las dos comunidades lingüísticas” (Sánchez Ibáñez 2014: 31).

The perception of the borrowing as a foreign and somewhat strange element within the receptor language presents a disadvantage from the point of view of its processing, since it differs from the structures previously known to the speaker. Nevertheless, this general approach can be put into perspective if we think of the loanword as a lexical label that the speaker, an expert in a specialized field, uses as the most natural way they know to refer to a concept within their specialized field of knowledge. The existence of this *communicative normality* for the expert, who often does not stop to reflect on the linguistic origin of the terminological units, immersed as they are in a communication involving several languages that would only further relativize the principle that “en un contexto de lengua extranjera nuestro sistema cognitivo parece regirse por principios de pragmatismo y racionalidad alterando la percepción del mundo y de nosotros mismos” (Duñabeitia and Planchuelo 2022: 133).

The communicative act in a foreign language is fundamentally different from that generated in the native one, which at a cognitive level could imply that the emotional response or the processing of information is reduced. In a specialized context, these principles of pragmatism and rationality may be the reason that leads the expert to choose the English loanword, with the intention of detaching themselves from the possible emotional charge of a potential equivalent in their native language and representing the new concepts of their specialty as objectively as possible. While there are studies that point out that this emotional distance is not driven by cognitive differences between the native and foreign language (Iacozza, Costa, and Duñabeitia 2017), and that this process does not entail any risks for the general language, the situation is slightly different when it comes to specialized communicative contexts, mainly because “the more one talks about a given concept, the more entrenched it becomes in one’s cognitive apparatus” (Zenner in Mevis 2021: 43). For this reason, the use of loanwords results in the linguistic community becoming familiar with the conceptualization that has been performed in another language rather than in its own, perpetuating on the specialized level the cultural, linguistic, and cognitive asymmetries.

4. Conclusions

Approaching the process of borrowing in LSP from a cognitive perspective has led us to adopt a designation for the concept of lexical borrowing that better reflects the reality and complexity of this phenomenon, which, beyond its linguistic dimension, entails fundamental aspects of a psychological and social nature. The proposed new metaphor, that of “virtual copy”, would be more appropriate because it would neutralize the economic implications that hindered the correct understanding of the concept. Furthermore, it better reflects a process in which the term has not left the donor language, but rather a process in which the modifications made are carried out in the target language using the virtual copy of the original term which has already left the source language. Moreover, it can simultaneously account for the differences between the original term and the borrowed term, as well as the relationship that remains between the two items.

The implementation of the virtual copy metaphor has revealed a series of elements that, from a cognitive point of view, are particularly important in the process of

terminological borrowing. This process has not been approached from an abstract perspective, but with reference to a specific moment—current times—and to specific linguistic communities, those of experts in many scientific fields who constantly use English in their communications, even though it is not their first language. The fact that the majority of texts in certain specialized fields is largely produced in English implies that the specialist comes into contact with the new specialized concepts mainly from this language, something that has important cognitive and terminological consequences:

- Since the conceptualization has been carried out in English, when the expert selects the parts of their experience deemed important for the communicative purpose, they incorporate English borrowings into their language, which are a projection of the mechanisms of lexical reconstruction they have employed.
- This expert no longer considers the English language as a foreign one, and sees it as just another working tool that, by using it continuously in a way that interferes with communication in their mother tongue, contributes to perpetuate the asymmetries and dependencies that exist between the two codes.
- The expert usually does not contemplate the scope and repercussions of their lexical choices. They see terminological borrowing as the most natural and appropriate way to represent the specialized concept without considering the cognitive and linguistic differences between the two communities.
- The differences caused by having English as a first language or having learned it for professional purposes, are a sign of the different experiential base that one or the other possesses, which can lead to ground the meaning in the conceptual domain in a different way, as well as to interfere in the proper transmission of the nuances and elements contained in the original term that the expert considered necessary and that led them to include the loanword in the discourse.

In this process of terminological borrowing, English does not play an active role, but rather different circumstances of an extralinguistic nature have led to the implementation of the borrowing in the new language. It is in this new language that different adaptation processes take place, in addition to those related to its written or spoken representation, which have several consequences:

- Changes that often occur to make the loanword more cognitively transparent, in an attempt to alleviate the linguistic differences between the two codes.
- The processing of a foreign element contemplated as such by filters other than those used with traditional words.
- Cultural, linguistic, and cognitive asymmetries accentuated at the specialty level, as well as dependence on the L_A , caused by the fact that the borrowed terms have been conceptualized within the schemas of another language.

Finally, throughout this whole framework, the need to delve deeper in the near future into a series of fundamental elements for the study of terminological borrowing can be inferred. The consideration of borrowings within the specialized discourse of the digital era, which operates under less rigid rules than in the past, and which, having broadened its scope of circulation, has the potential to appear in a greater diversity of contexts. Therefore, digitalization, which provides us with the tools to broaden the channels of dissemination, causes at the same time the alteration of the rigid filters to which specialized communication

was subjected and, therefore, makes specialized communication more exposed to interferences in the global, digitalized, and interconnected context.

The fact that today's society demands quality dissemination of scientific knowledge is closely related to the previous point. The linguistic basis of this dissemination lies in the mother tongue of the speakers and, therefore, it should be based on principles that, with regard to loanwords, highlight the possible opacity of these items, since they are elements that are difficult to interpret from the perspective of the first language of the speaker, and that have not conveyed the entire system of relationships that the terms had in the source language, and that possibly left part of their core elements in the process of virtual copy.

REFERENCES

- Adamo, Giovanni & Della Valle, Valeria. 2017. *Che cos'è un neologismo*. Roma: Carocci.
- Adamo, Giovanni & Della Valle, Valeria. 2018. *Il vocabolario Treccani. Neologismi. Parole nuove dai giornali 2008-2018*. Roma, Istituto della Enciclopedia Italiana.
- Adobe. 2018. "Adobe Photoshop Lightroom Classic CC Help." https://helpx.adobe.com/pdf/lightroom_reference.pdf (last modified 15 October 2018)
- Berthoud, Anne-Claude. 2016. Le défi du multilinguisme pour l'enseignement supérieur et la recherche. In *Actes de la Segona Jornada de la Càtedra Pompeu Fabra: El multilingüisme en blanc i negre, Barcelona, Spain, 2017*, 19–27. Barcelona: Universitat Pompeu Fabra.
- Cabré, M^a Teresa. 1999. *La Terminología: Representación y Comunicación*. Barcelona: Universidad Pompeu Fabra.
- Castillo Fadic, Natalia. 2002. El préstamo léxico y su adaptación: un problema lingüístico y cultural. *Onomázein* 7(2002). 469–496.
- Duñabeitia, Jon Andoni & Planchuelo, Clara. 2022. El sexo léxico. In M.^a Mar Galindo & M.^a Carmen Méndez (eds.), *La lingüística de amor. De la pasión a la palabra*. 123–139. Madrid: Pie de Página.
- Franco Trujillo, Erik D. 2016. *El anglicismo en el español nacional de México*. Ciudad de México: El Colegio de México PhD tesis.
- Freixa, Judit. 2019. Augment constant de manlleus en la premsa catalana: una conseqüència de la mundialització? *Treballs de sociolingüística catalana* 2019(29). 43–64.
- García Palacios, Joaquín. 2022. El préstamo y los préstamos en español. In García Palacios, J. (dir.) *El préstamo como procedimiento de actualización léxica*. Granada: Comares. 1-24.
- Gómez Molina, José R. 2000. Transferencia y cambio de código en una comunidad bilingüe área metropolitana de Valencia (I y II). *Contextos*. XVII–XVIII(33–36). 309–360.
- Guilbert, Louis. 1973. Théorie du néologisme. *Cahiers de l'Association Internationale des Études Françaises* 25. 9–29.
- Guerrero Ramos, Gloria. 2013. El préstamo lingüístico, uno de los principales procedimientos de creación neológica. *Quaderns de filologia. Estudis lingüístics*. 18(2013). 115–130.
- Haugen, Einar. 1950. The analysis of linguistic borrowing. *Language* 26(2). 210–231.
- Humbley, John & García Palacios, Joaquín. 2012. Neology and Terminological Dependency. *Terminology* 18(1). 59–85.
- Humbley, John. 2018. *La néologie terminologique*. Limoges: Lambert-Lucas.

- Iacozza, Sara, Costa, Albert & Duñabeitia, Jon Andoni. 2017. What do your eyes reveal about your foreign language? Reading emotional sentences in a native and foreign language. *PLOS ONE* 12(10). 1–10.
- Ibarretxe-Antuñano, Iraide & Valenzuela, Javier. 2012. *Lingüística cognitiva*. Barcelona: Anthropos.
- Ivaz, Lela, Griffin, Kim & Duñabeitia, Jon Andoni. 2019. Self-bias and the emotionality of foreign languages. *Journal of Experimental Psychology* 72(1). 76–89.
- Lakoff, George. 1987. *Women, Fire, and Dangerous Things. What Categories Reveal about the Mind*. Chicago/London: The University of Chicago Press.
- Lázaro Carreter, Fernando. 1985. *Las ideas lingüísticas en España durante el siglo XVIII*. Barcelona: Crítica.
- Linder, Daniel & De Sterck, Goedele. 2016. Non-native scientists, research dissemination and English neologisms: What happens in the early stages of reception and reproduction? *Ibérica*, 32(2016). 35–58.
- Lombard, Carol G. 2005. Conceptual metaphors in computer networking terminology. *Southern African Linguistics and Applied Language Studies* 23(2). 177–185.
- Lorenzo, Emilio. 1996. *Anglicismos hispánicos*. Madrid: Cátedra.
- Mevis, Alice. 2021. Prototype effects behind French loans in Middle English: A cognitive account of lexical borrowing. *LaMiCuS* 5(5). 34–56.
- Moreno Mojica, Javier Aníbal. 2016. La lingüística cognitiva: una aproximación al abordaje del lenguaje como fenómeno cognitivo integrado. *Revista Colombiana de Humanidades* 48(88). 41–47.
- Onysko, Alexander y Esme Winter-Froemel. 2011. Necessary loans - luxury loans? Exploring the pragmatic dimension of borrowing. *Journal of Pragmatics* 43(6). 1550–1567.
- Porrás-Garzón, Jorge M. 2022. *El anglicismo terminológico. Consecuencias léxicas del uso de textos escritos en inglés en las clases de medicina en español*. Barcelona: Universitat Pompeu Fabra PhD thesis.
- Pratt, Chris. 1980. *El anglicismo en el español peninsular contemporáneo*. Madrid: Gredos.
- Rodríguez Medina, M^a Jesús. 2000. El anglicismo en español: revisión crítica del estado de la cuestión. *Philologia Hispalensis* 14(2000). 99–112.
- Sánchez Ibáñez, Miguel. 2014. La adecuación cognitiva en la traducción especializada: una vía para calibrar la dependencia terminológica. *Termin@lia* 10(2014). 27–36.
- Sánchez Ibáñez, Miguel. 2022. El préstamo léxico como proceso connotado: vías para la reconstrucción discursiva y la superación de la sincronía en la categorización de la importación léxica. In García Palacios, Joaquín (ed.), *El préstamo como procedimiento de actualización léxica*. Granada: Comares. 25–54.
- Serigos, Jacqueline. 2017. Using distributional semantics in loanword research: A concept-based approach to quantifying semantic specificity of Anglicisms in Spanish. *International Journal of Bilingualism* 21(5). 521–540.
- Varo, Carmen. 2020. Claves para descifrar la naturaleza neurocognitiva de la neología. In Ruth M. Lavale-Ortiz (ed.), *Cognitivismo y neología: estudios teóricos y aplicados*. 13–34. Madrid: Iberoamericana Vervuert.
- Zenner, Eline, Speelman, Dirk & Geeraerts, Dirk. 2012. Cognitive Sociolinguistics meets loanword research: Measuring variation in the success of anglicisms in Dutch. *Cognitive Linguistics* 23(4), 749–792.

DE GRUYTER
MOUTON

ASPECTS OF COGNITIVE TERMINOLOGY STUDIES

THEORETICAL CONSIDERATIONS AND
THE ROLE OF METAPHOR IN TERMINOLOGY

*Edited by Silvia Molina-Plaza
and Nava Maroto*

APPLICATIONS OF
COGNITIVE LINGUISTICS

DE
G

Applications of Cognitive Linguistics

Edited by
Gitte Kristiansen
Francisco J. Ruiz de Mendoza Ibáñez

Honorary editor
René Dirven

Volume 55

Aspects of Cognitive Terminology Studies

Theoretical Considerations and the Role of Metaphor
in Terminology

Edited by
Silvia Molina-Plaza and Nava Maroto

DE GRUYTER
MOUTON

Contents

Silvia Molina-Plaza and Nava Maroto

Introduction — 1

Part 1: New theoretical developments and applications

Ona Domènech-Bagaria

- 1 Specialized texts and levels of specialization: A cognitive perspective — 17

Pilar León-Araúz and Pamela Faber

- 2 Including the cultural dimension of terminology in a frame-based resource — 39

Marie-Claude L'Homme

- 3 Polysemy and representation of meaning in terminology — 73

Joaquín García Palacios and Beatriz Guerrero García

- 4 The virtual reality of terminological borrowing — 95

Ana Bocanegra-Valle

- 5 The language of shipping forecasts: A corpus-driven study of specialized terms and phraseological units — 109

Part 2: Metaphors in terminology studies

Patricia Martín-Chozas, Isam Diab-Lozano and Elena Montiel-Ponsoda

- 6 Representing metaphorical terms in the Semantic Web: A proposal from a sociocognitive perspective — 133

Javier Herrero Ruiz

- 7 Metaphor and metonymy in specialized discourse revisited. An illustration through the lexicon of telecommunications — 163

ISBN 978-3-11-107253-1

e-ISBN (PDF) 978-3-11-107314-9

e-ISBN (EPUB) 978-3-11-107361-3

ISSN 1861-4078

Library of Congress Control Number: 2024933404

Bibliographic information published by the Deutsche Nationalbibliothek

The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available on the internet at <http://dnb.dnb.de>.

© 2024 Walter de Gruyter GmbH, Berlin/Boston

Typesetting: Integra Software Services Pvt. Ltd.

Printing and binding: CPI books GmbH, Leck

www.degruyter.com

