THE LEXICAL ITEM "FILTER" IN THE LINGUISTIC CONTEXT OF CYBERCULTURE: METAPHOR AND INDETERMINACY OF MEANING

O ITEM LEXICAL "FILTRO" NO CONTEXTO LINGUÍSTICO DA CIBERCULTURA: METÁFORA E INDETERMINAÇÃO DE SENTIDO

LA UNIDAD LINGÜÍSTICA "FILTRO" EN EL CONTEXTO DEL CIBERLENGUAJE: METÁFORA E INDETERMINACIÓN DE SIGNIFICADO

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ABSTRACT: This study discusses the extension of the meaning of the word "filter" in its uses in the cyberspace context. Our goal is to analyze its semantic extension by polysemy, considering its use to denote a resource of image manipulation or entertainment. Methodologically, we analyze the use of "filter" in a news report; the semantic categories studied are vagueness, lexical ambiguity (polysemy), and metaphor. Our investigation shows that: (a) "filter" involves semantic vagueness, both in its accommodation within the context of use, with a relative determinacy, and in its use as a strategic determinacy; (b) "filter" presents characteristics of a logically polysemic expression, verified by the detailing of the telic *quale* of the word; and (c) the semantic extension of "filter" can also be explained through the metaphorical interpretation and the understanding that we can comprehend one domain of experience in terms of another.
KEYWORDS: Vagueness. Polysemy. Conceptual metaphor. Metaphorical extension.

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RESUMO: Este trabalho discute a expansão do significado da palavra "filtro" em seus usos no contexto do ciberespaço. Nosso objetivo é analisar como ocorre sua expansão semântica por polissemia, considerando seu emprego para denotar um recurso de manipulação da imagem ou de entretenimento. Metodologicamente, é analisado o emprego de "filtro" em uma matéria jornalística; as categorias semânticas estudadas são vagueza, ambiguidade lexical (polissemia) e metáfora. Nossas análises indicam que: (a) "filtro" comporta vagueza semântica, que tanto é acomodada no contexto de uso, com uma determinação relativa, quanto é utilizada como uma indeterminação estratégica; (b) "filtro" tem características de expressão logicamente polissêmica, verificadas pelo detalhamento das relações lexicais que ocorrem pelo *quale* télico da palavra; e (c) a expansão semântica de "filtro" também pode ser explicada através da interpretação metafórica e do entendimento de que podemos compreender um domínio da experiência em termos de outro.
PALAVRAS-CHAVE: Vagueza. Polissemia. Metáfora conceitual. Expansão metafórica.

RESUMEN**:** Este trabajo discute la expansión semántica de la palabra "filtro" en sus usos en el contexto del ciberespacio. Nuestro objetivo es analizar de qué manera ocurre su expansión semántica por polisemia, tomando en consideración su empleo para denotar un recurso de edición de imagen o de entretenimiento. Como estrategia metodológica de investigación, se analizan los usos de la palabra "filtro" en un reportaje periodístico; las categorías semánticas estudiadas son: vaguedad, ambigüedad lexical (polisemia) y metáfora. Nuestros análisis indican que: (a) "filtro" comporta vaguedad semántica, que tanto puede ser acomodada en el contexto de uso, con una determinación relativa, así como puede ser una indeterminación estratégica; (b) "filtro" tiene características de expresión lógicamente polisémicas, observadas en la descripción de las relaciones lexicales que ocurren en el llamado *quale télico* de la palabra; y (c) la expansión semántica de "filtro" también puede ser explicada a través de la interpretación metafórica y del entendimiento de que es posible comprender un dominio de la experiencia en términos de otro.
PALABRAS CLAVE: Vaguedad. Polisemia. Metáfora conceptual. Extensión metafórica.

1 INTRODUCTION

Life without filters in the social media context of the cyberculture space encompasses a life without editing, especially of images and events. Usage such as this illustrates the semantic change undergone by the word "filter"[1], whose extension of meaning is investigated in this study based on the concepts of vagueness, lexical ambiguity (polysemy), and conceptual metaphor (Kempson, 1977; Pustejovsky, 1995; Lakoff; Johnson, 2002).

Faced with this new linguistic reality for "filter", an innovative usage, this study investigates the polysemic development of this term in the current context of technology-mediated interaction, where "filter" oftentimes seems to designate an image editing and manipulation resource or an entertainment resource.

The research suggests the hypothesis that the extension of meanings of the lexical item "filter" may occur through the metaphorical extension of the word, which, in the context of cybernetic culture, acts as a source domain of a more concrete character, through which the target domain, of a more abstract character, can be discerned, referring to the image editing/manipulating resources. In these terms, when we say that "this person has applied filters to their selfies", the item "filter" works as a metaphor for the "image editing resource", equivalent to the understanding that "this person has applied image manipulation resources to their selfies". From this usage, we would have a semantic derivation for entertainment "filters", such as quizzes and other forms of challenges, which could maintain the meaning of "filter" as a tool for manipulating reality.

The overall goal of this work is to investigate how the semantic extension by polysemy of the lexical item "filter" has occurred in the linguistic context of cyberculture. By cyberculture we understand a culture produced in the electronic and virtual space, of technological basis, which has extended especially from the networks of virtual social relationships. In these networks, social

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[1] In this study, we adopt *word, lexical item, and linguistic expression* as equivalent forms to refer to "filter", without applying theoretically different conceptual values to the terminologies.

interaction (through generalized connection) and virtual communication could also be understood in terms of a cyberlanguage, which individualizes language usage and linguistic practices in the digital environment (Satuf, 2016).

More specifically, the study describes aspects of meaning focusing on innovative usage of the word in the linguistic context of interaction through technology, considering "filter" as image manipulation and "filter" as entertainment, and argues that the aspects of meaning embedded in the cybernetic uses of "filter", as a tool of image editing and entertainment, are products of metaphorical extension, structured in a network of conceptual metaphors.

In methodological terms, this study analyzes the employment of the term "filter" in textual sequences extracted from a journalistic text entitled "Behind filters: Know the dangers that excessive use can cause to self-image", digitally published by Correio Braziliense, in the Social Media section, on 6 October 2020, by Paula Barbirato.[2]

2 INDETERMINACY OF MEANING

The semantic discussions around the indeterminacy of meaning in natural languages traditionally emerge from the conceptual separation of two different mechanisms of indeterminacy that these languages present: ambiguity and vagueness[3]. We choose to call these two semantic phenomena *mechanisms* because we see[4] in ambiguity and vagueness linguistic resources that do not necessarily harm language activity; on the contrary, these mechanisms can even be used in favor of communication quality.

Along the same lines, Chierchia (2003) goes as far as to suggest that vagueness, for example, can be a favorable resource for the precision of discourse, depending on the communicative circumstances, the purpose with which the utterances are produced and, of course, the contribution given to the conversation for contextual information.

2.1 THE VAGUENESS OF THE LINGUISTIC EXPRESSION "FILTER"

There are different ways of conceptualizing vagueness. Kempson (1977) considers that a vague expression is semantically non-specific in terms of any aspect of meaning. In Brazilian Portuguese, *discente* (student), for example, is vague because it has no grammatical gender specification, in contrast to a more specific term like *aluno* (student-masc.) or *aluna* (student-fem.). According to Cruse (1986), a vague meaning covers all the more specific possibilities of the meaning of a word, i.e., it is a more general meaning. In common, these different approaches consider that vagueness is a mode of semantic indeterminacy of linguistic expressions, present in contexts in which some aspect of meaning (either lexical or grammatical) can be referred to as *broad and without defined limits*. Far from being noise or deviation, vagueness goes as far as being "[…] very useful from a communicative point of view. It allows us to express ourselves in an economic and, paradoxically, accurate way, without having to decide many things that would be difficult to decide" (Chierchia, 2003, p. 65, translated freely). Vagueness favors some precision in discourse as it allows us to be communicatively objective, even if we use (and regardless of whether we use) vague utterances or words, referring to objects and scenarios in the world that are not so delimited as to be apprehended by language without a certain degree of indeterminacy.

We can exemplify this issue with the vagueness of a word that designates color, such as *yellow*, which can have its vagueness neutralized thanks to its context of use: if someone needs a ripe orange and asks others to reach one of the yellow ones that are in a basket, but the basket contains some green oranges and others that are orange, it is unlikely that the selection of the right fruit would be harmed. The speaker does not need to ask for an *orange orange* to get a ripe fruit (a linguistic combination that even seems

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[2] The citations are translated freely from the Portuguese version.

[3] We could also add indexicality here. However, for reasons of scope, we will restrict the discussion to the approach of vagueness and ambiguity. The reader can find a sufficient presentation of the indexicality phenomenon (relating to deictic expressions) in Chierchia (2003).

[4] This perception is fundamented by many studies that preceded this one, such as Cruse (1986), Chierchia (2003), Ilari (1997) and others that approach the indeterminacy phenomena as effects of meaning production and not necessarily as defects.

to be less cooperative); they can use *yellow* and the context will tend to specify which object is closer to the color spectrum that corresponds to the referent being pointed out in the world. In this study, we will name such cases as *strategic vagueness*: when the speaker seems to intend to be vague because it can be assumed that they are facing a context capable of neutralizing the indeterminacy of meaning.

Differently from this, however, there are occurrences of vague words in which, even in more specialized contexts of use, a certain vagueness of meaning is preserved; therefore, the speaker is expected to achieve *relative determinacy*: if we assume that the body temperature recorded on a mercury thermometer cannot surpass the yellow stripe (which would be life-threatening), we need a clear notion of where the color yellow ends and where orange begins (and, in the next degree of the color scale, a notion of the boundary between orange and red). In these cases, if the speaker does not know how to describe the situation in the world, saying whether the mark on the thermometer is in the yellow or red range, they must use a relative assessment and consider the mark as *more orange* or *more yellow*. We describe cases such as this as *accommodation of vagueness with relative determinacy*, since the speaker's intentionality has not produced vagueness, but is a way of relating to it and its interpretation.

Another crucial difference we want to highlight between these two cases is that, in the first one, the context neutralizes vagueness, while in the second vagueness remains contextually accommodated. Furthermore, in the first case, the state of things in the world is vaguely described because the cost of linguistic determinacy would outweigh its benefits in a context where vagueness could be easily undone - maintaining indeterminacy seems to be more strategic. In the second case, however, using linguistic elements to operate a relative determinacy is necessary because the state of things in the world supports the situation.

The indeterminacy of meaning that we have been discussing so far has motivated a relevant body of research for the development of semantic studies[5] and led us to the realization that vagueness is not peripheral nor a problem in language. Far from being a problematic issue, vagueness is, as we have seen earlier, a valuable and frequent resource, since "[…] all expressions of our language contain an area of vagueness […]" (Chierchia, 2003, p. 224, translated freely). Contextual information helps to circumscribe the meaning of vague expressions insofar as these words do not have several meanings but a broad sense, whose delimitation occurs through the relationship of the word with other linguistic or extralinguistic elements.

As we analyze the semantic behavior of the lexical item "filter" in the context of cyberculture, we notice that there is an inherent vagueness to the word and that the specialization of the use of the linguistic expression has gradually increased its denotation. Initially, the word was used to designate a form of tool for image editing, but the resource has received features that expanded to the field of entertainment and, additionally, "filter" came to cover resources for the interactive modification of videos and images (which also includes editing).

> [SEQUENCE 1] **Behind filters**: Know the dangers that excessive use can **cause to self-image.**
>
> [SEQUENCE 2] **A social network tool** achieves even more popularity in the pandemic, becomes a business for many, but raises alert about the dangers that excessive use can **cause to self image**.
>
> [SEQUENCE 3] Dyed hair, long eyelashes, color palettes, fox eyes, humorous memes, general quizzes, poetic quotes and social demonstrations. The possibilities created by Instagram filters, **interaction tools in the platform**, are endless. Although launched in 2017, the popularity of such tools grew during the pandemic, as social life shifted more towards screens. But even if they are an important **form of entertainment**, on the other hand, experts warn that, if used excessively, **they can become a problem**.
> (Barbirato, 2020, unpaginated, our emphases)

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[5] Notably Kempson (1977), whose study suggests verification and distinction tests between the phenomena of ambiguity and vagueness. Also Cruse (1986), who problematizes and discusses different tests and other aspects concerning the indeterminacy of meaning in natural languages.

The expression "behind filters", which opens the title of Barbirato's (2020) report, encompasses the meanings of "filter" as an editing as well as an interaction resource, which allows us to infer that such usage is close to what we call *strategic vagueness,* considering that the report will, in fact, cover both issues. There are, however, references in the text that will be specific or at least more directed towards one of the aspects of meaning. The broad meaning of the linguistic expression "filter", therefore, is explored in the text and, whenever necessary, delimited by other elements in passages that become more specific. In the title itself, when the author refers to the "dangers to the self-image", the restriction of meaning operated delimits and guides the denotation of "filter" as an editing tool, focusing on alterations, manipulations, and distortions of reality resulting from image editing.

In sequence 1, vagueness is textually explored in the form of a *yo-yo effect* in which denotation movements are amplified and then specified, according to the progression of the theme (extension and retraction). These themes can be again examined in the lead, identified as sequence 2, where the author refers to "filter" as a social network tool (in a broad sense, therefore, vaguer) and finishes the passage highlighting that there is a connection between "filter" and self-image disturbances (in a specific sense). We can see that the semantic effect of this movement, from a broad conceptual reference to a delimited aspect of meaning, encompasses the manipulation of the vagueness of "filter" that we discuss in this work.

In sequence 3, the expression *interaction tools in the platform* does not exclude the related concepts of editing but neutralizes vagueness and forces the semantic limits of "filter" to adjust to the reference to interactive modifications, involving less the *virtual makeup* than the denotation of games, quizzes, and challenges. Such delimitation is reinforced by the following use of *form of entertainment*; however, the reference is expanded again at the end of sequence 3, when self-image is cited again and, consequently, the scope no longer covers the delimited aspect of the meaning of the word "filter" to return to the more general concept and alter the emphasized meaning. Yet, this movement is not present in sequences 4 and 5:

> [SEQUENCE 4] Another possibility were the **musical filters**, which show a word so the person sings a song containing the word.
>
> [SEQUENCE 5] "Our natural face becomes something so strange", claims Aimê, who spend the time during the quarantine to revisit old stories and realized how, at the time, she tried to lighten her face with effects. "There are filters that thin the nose, change the eye color, which come closer to the white European standard constructed as beautiful. After all, what is beautiful? I was bodily influenced by the universe of images that inhabited my story since the beginning", she adds. Nowadays, Aimê tries to use **filters that enhance earthy and strong tones**, without affecting the appearance.
> (Barbirato, 2020, unpaginated, our emphases)

The expression *musical filters* delimits the meaning of *entertainment filters* in sequence 4, while sequence 5 fully focuses on the meaning of *editing filter*. In both passages, vagueness is accommodated in the context of the word "filter" through a relative determinacy, the result of a modification operated by compositionality in both sequences. It can be exemplified, on the one hand, by *musical*, which covers the aspects of entertainment tools [musical filters], and, on the other hand, by *that enhance earthy and strong tones*, which covers the aspects of image editing. Although the scope of meaning is restricted in both passages (entertainment or editing), this definition is relative because, even with restriction, vagueness is not eliminated from the word - entertainment filters also edit, and editing filters, to some extent, involve entertainment. In line with our argument concerning the indeterminacy of the meaning of the word "filter", vagueness is one of its semantic properties which are extensively explored in Barbirato (2020). In the following section, we will discuss the lexical ambiguity that this case involves.

2.2 LEXICAL AMBIGUITY - THE POLYSEMY OF "FILTER"

The position of linguistic theory, as indicated by Trask (1993), has traditionally been to assume that languages are inherently ambiguous. Therefore, linguistic description (especially grammatical theory) contemplates such ambiguity and differentiates it from instances of vagueness within the field of linguistic indeterminacy. Unfortunately, Trask does not maintain theoretical lucidity

when he mistakenly considers that "the simplest type of ambiguity is the lexical, which merely results from the existence of two different meanings for a word" (Trask, 2007, p. 14).

First, it would be necessary to define the parameters by which ambiguity could be considered simpler than others; then, it would be necessary at least to try to argue that a linguistic form assuming different functions is something trivial. However, as this position is only declared without theoretical justification, it seems that lexical ambiguity is defined - among the linguistic concepts assumed by the author to be more relevant - as an elementary or primary type simply because it occurs at the word level. This position represents the outdated view that the lexicon is unstructured, only listed and less relevant compared to grammar.

In contrast to this perspective, Pustejovsky (1995) proposes a treatment for logic polysemy in natural languages, which stems from the premise that lexicon is highly structured, i.e., there is a set of rules underlying the organization of lexical items and, ultimately, underlying the very linguistic phenomena that can be observed at this level, such as lexical ambiguity, specifically polysemy. In general terms, the goal of

> [...] Pustejovsky's work is to account for the creative use of lexicon in new contexts. To this end, the author builds a study model aimed at the enriched lexical compositionality, intending to develop a formal representation of language that captures the generative nature of lexical creativity and the phenomenon of extension of meaning, in addition to offering a unified treatment for the phenomena of polyvalence, type-switching and regular polysemy. (Cambrussi, 2009, p. 37, translated freely).

Lexical ambiguity by regular polysemy, as argued by Pustejovsky, can be detailed from the lexical relationships that occur at the level of *qualia* of the lexical matrix, i.e., from one of the four relations (or *qualia* roles) of a lexical item: the **telic *quale*** refers to the purpose or function of a lexical item (flashlight → to illuminate, refrigerator → to refrigerate, book → to read); the **agentive *quale*** establishes the factors involved in the origins of the object, such as the relationship between creator and creation, whether it is an artifact or natural class and causal chain; the **formal *quale*** distinguishes a lexical item in a larger domain (as in hyperonymy and hyponymy), and involves properties such as color, form, dimension, position, magnitude etc.; finally, the **constitutive *quale*** deals with the relationship between an object and its parts (as in meronymy) and involves properties such as constituent parts, weight, material etc. (PUSTEJOVSKY, 1995).[6]

For the polysemy of *filter*, it is interesting to highlight the telic *quale*, which can be divided into subtypes, **direct** and **purpose.** The **direct telic** specifies a direct action that denotes an agent's purpose in performing it, such as the case of the direct telic *read* for *book*. However, in the category of artifacts that serve specific ends, the **purpose telic** seems to be prominent, responsible for specifying the mode in which the artifact can be used in order to facilitate an activity, as in *rake* for *raking* or in *inform* for *book.*

Assuming that the semantic information of *filter* is structured by logic polysemy, we must demonstrate how the different meanings involved in the use of *filter*, such as those illustrated in cases (1) to (4), can be related. In case (1), the telic purpose is evident in *to separate fluid elements from solid elements*, in which a water filter is used for purification. In case (2), there is also an emphasis on the purpose telic, which could be understood as *to separate virtual search results,* in which an information filter acts as a classifier.

(1) It is very likely that you have a water filter in your kitchen. Contrary to what happens in several parts of the world, in Brazil this device is common, which can be connected to the water distribution system only or to electric-powered. (Lara, 2020)

(2) By default, when performing your Google search, you will see different results. For the most part, the results are web pages, i.e., a link that will redirect you to other links. You can look for an image or a PDF file only, for example. In these cases, using a filter is ideal. The filter options appear just below the search bar and basically include images, news, videos, books, maps, shopping, flights, and finances. (Porto, 2020)

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[6] Due to the scope of this work, we will not delve into the presentation of Pustejovsky's proposal (1995). For more information and applications to Brazilian Portuguese, we recommend reading Cambrusi (2007; 2009) and Aragão Neto (2003).

The usage demonstrated in (1) and (2) involves different perspectives of a separation telic, i.e., *a filter serves to separate* and, for this reason, we mobilize the purpose telic, which specifies how the *filter* artifact can be used to favor the separation activity. As in example (3) and in sequence 5, reproduced in case (4), the direct telic of *filter* is activated. In these cases, the action of selecting performed by an agent is specified, as the purpose of using the *filter* artifact.

(3) The filter individual does not deal with gossip or defamation because they know that they will not benefit from it. They are alert to the bearer of the news because today it was about someone else, but tomorrow they can be the victim of "loose lips". (Vieira, 2017)

(4) Nowadays, Aimê tries to use filters that enhance earthy and strong tones, without affecting the appearance. (Barbirato, 2020).

In case (3), a *filter individual* is a person who has the ability of *selecting* information and useful or beneficial opinions and, thereby, *separating* them from others that are insignificant or harmful. Similarly, in case (4) the filters used are resources that *select* certain characteristics, which implies their *separation* in a larger range of possibilities.

Among all the uses of *filter* that we discussed from (1) to (4), therefore, there are common aspects of meaning that are even shared by the semantic structure. The telic *quale*, whether by direct or purpose telic, emphasizes aspects of finality that separate and/or select certain elements concerning others. In this sense, a basic and linguistically structured meaning allows us to argue that the lexical item *filter* is logically polysemic. In the next section, we will demonstrate how the semantic extension can also be approached from the perspective of metaphor.

3 METAPHOR AND NEW LEXICAL MEANINGS FOR "FILTER"

The concept of metaphor has always been related to a rhetoric and poetic effect, and therefore, to figurative language, without any commitment to reality and in opposition to literal language. Understood in this way, metaphor is a wordplay whose main goal is to embellish the text. Cognitive linguistics, more specifically George Lakoff and Mark Johnson's work *Metaphors We Live by* (1980), brought the question of metaphor to mind. These authors demonstrated that thought processes are naturally metaphorical and metaphors can be used as empirical tools to explain how people think and feel, creating the Conceptual Metaphor Theory.

According to Berber Sardinha (2007), investigating metaphors provides us with information to understand how people conceptualize the world through individual and socio-historical thinking. Thus, through the metaphors used in language, we can interpret the messages of social groups and ideologies, as well as understand the styles of different types of discourses.

Lakoff and Johnson (2002) argue that the concepts that structure our perception of the world, the way we behave and relate to each other, are largely metaphorical, based on our bodily, physical, and cultural experiences. Language, which is also based on this conceptual system, only expresses this organization of thoughts. Conceptual metaphors, therefore, are present in common language, even if we are not aware of them, and this observation has led to a new understanding. "Metaphor came to be considered as an important element in the comprehension of human understanding itself, no longer as a mere ornament of discourse" (Lima, 2003, p. 2, translated freely).

As already mentioned, experience data provide the basis for human conceptual systems. The position of our body in a physical environment, for example, leads us to the formation of concepts such as "up" and "down". These spatial notions, in turn, generate infinite oriented metaphors observed in sentences in which HAPPY is expressed in terms of UP and SAD in terms of DOWN (Lakoff; Johnson, 2002, p. 60).

I am feeling down.

My spirits sank.

I'm on cloud nine.

The walk gave me a lift.

This way, we describe non-physical experiences in terms of physical experiences and, similarly, we understand our abstract experiences better if we identify them with concrete practices. Thus, we speak of activities, events, emotions, and ideas as objects, substances, or physical entities. This also happens when we refer to emotions as plants.

Fear is rooted in society.

Love must be cultivated.

Hate is sown in social networks.

Examples such as these are not arbitrary. On the contrary, they are part of a conceptual system and our culture. They could not be considered metaphors in a strict sense, as they constitute daily linguistic choices, including non-literary discourses. In fact, these examples have become so conventional that they could be called dead metaphors, an expression used to designate metaphors that have lost their original image due to repetitive use. According to Kövecses (2002), the account of the "dead metaphor" misses an important point: the thing that it is deeply rooted, hardly noticed, and, therefore, used without effort, is more active in our thoughts. This cognitive linguistic view of metaphor can provide new insights into some linguistic phenomena, such as polysemy and the development of meaning.

3.1 THE METAPHORICAL EXPANSION IN "FILTER"

With the prominence of technology, new artifacts, tools and experiences have emerged, giving rise to their own communicative necessities. Consequently, many words have been created, but it would not be viable nor efficient, from a cognitive point of view, to have a new word for each new concept. Therefore, expanding the meaning of existing words is a common procedure, as it happened with the lexical item *net*. The word *net* appears for the first time in the French language, in the twelfth century, meaning intertwined threads and, thus, designating hunting or fishing nets and fabrics. From the seventeenth century, the term began to be used by doctors to refer to the blood system and the fibers that make up the human body, an extension of the original meaning of a textile fiber weave. The body, therefore, is made up of a net of imperceptible threads that forms, grows, and extends, where everything is interconnected. Continued circulation guarantees the functioning of the body and, therefore, life (Musso, 2004, p. 19). Over time, the word *net*, originally related to the notion of intertwining, connection, and circulation, has become increasingly polysemic and can even be used today as a synonym for the *internet*.

Metaphor is precisely one of the processes responsible for the change in meaning and the consequent polysemy of words, in general operating as a transfer of a basic and concrete concept to a more abstract one, as it happened with the lexical item *net*, which initially designated the intertwining of threads and nowadays refers to invisible connections. Thus, there are two domains in a metaphor: the target domain, constituted by the immediate subject, and the source domain, the starting point of metaphorical thinking, the domain that provides the source concepts used in that reasoning (Lakoff; Johnson, 2003, p. 266). Metaphor is, therefore, the correlation between different domains of experience, with the source domain having a more sensorial origin, based on bodily experiences, which are transmitted as a form of inheritance and shared by the same culture. These more concrete experiences constitute the source of inferences that we use to explain the target domain.

We believe that the extension of the meaning of the word "filter" and its use in the context of cyberculture can be explained in metaphorical terms through the conceptual link between different domains. The linguistic expression "filter" refers to a physical object whose purpose is to filter, i.e., to select what goes through it. We have experientially organized knowledge about passing something through a filter, which can be detailed as follows:

i. the filter selects what goes through it, retaining and separating solid bodies and impurities;
ii. the filter prevents the passage of what is not wanted, working as a barrier;
iii. the filter separates components;
iv. when going through a filter, an element has its characteristics or properties altered.

Now, let us observe the lexical item "filter" in the following contexts:

[SEQUENCE 6] In 2016, stories - publications of images or videos of up to 15 seconds, which remain available on the profile for 24 hours - were launched. **Filters emerged as a virtual makeup** for them.

[SEQUENCE 7] The singer Sam Smith **uses a dyed hair filter created** by Brazilian Igor Saringer. Users can try other strong colors on their hair.

[SEQUENCE 8] There are **filters that thin the nose, change the eye color,** which come closer to the white European standard constructed as beautiful.

[SEQUENCE 9] "When people put on a **filter to an image** and, for example, touch up their nose a little bit, remove a spot, change the lips, this makes them determine the new normal for the body", the doctor explains. "Our concern with the Instagram question, the image filters, is about that life which is not real", he adds.
(Barbirato, 2020, our emphases)

The sequences presented discuss digital effects applied by the uses of social media to modify their appearance. Therefore, they talk about image modification effects that range from simple virtual makeup (sequences 6 to 7) to the digital alteration of body parts (sequences 8 and 9). This resource is conceived as a "filter", which, in its most concrete nature, provides the necessary inferences for another element to be known, i.e., works as a source domain.

FILTER (source domain)	IMAGE EDITING (target domain)
we filter to remove impurities	it removes (hides) imperfection
we filter to improve the quality of the product	it works as a virtual makeup, corrects defects, embellishes, enhances the image
we filter to separate elements	it differentiates a real image from a virtual image
we filter to select, to get only what interests us, eliminating what is unwanted	the user manipulates and defines the digitally constructed image

Chart 1: Inferences from a source domain
Source: Own Authorship

The description of our experience with filters provides the basis for the metaphor that IMAGE EDITING IS FILTER. Thus, certain preexisting similarities can determine our limit to which linguistic expressions can be used to describe the world rather than others. In this way, the word filter is used as part of the process of conceptualizing and understanding one thing in terms of another.

However, we see in the analyzed news report that filters, as image editors, are not only used for aesthetic purposes or embellishment, as the following sequences demonstrate:

[SEQUENCE 10] Called "Gugu at your house", **the filter consists of saying a random object** and someone having to run to get it within a certain time.

[SEQUENCE 11] Actor Caio Castro **uses a quiz filter** for couples. From Brazilian history to biology, a lot of educative quizzes have emerged as an alternative in the pandemic.

[SEQUENCE 12] Another possibility were the **musical filters**, which show a word so the person sings a song containing the word.
(Barbirato, 2020, our emphases)

In these excerpts, the image editing resource used in social media, and understood in terms of filter, presents new functions that we do not see in the source domain. To understand this new meaning attributed to virtual filters, establishing links with another cognitive domain, that of the game, is necessary.

The game, as we know it, is an entertainment activity, with established rules, which in most cases provides interaction between participants. We argue that the word "filter" could be replaced by "game" in all its occurrences in sequences 10, 11, and 12. In these cases, the goal is to have fun, not to change the appearance. However, all these games add the user's face on the screen and, therefore, there is the manipulation of a real image. Hence, IMAGE EDITING IS GAME (also).

It is important to highlight that the text presents "filter" as a resource of image editing, whether with aesthetic motivations or as a joke among users, in terms of a deeper metaphor of FILTER IS PRODUCT, as we can see in the sequence below:

[SEQUENCE 13] With over one million followers on Instagram, the digital influencer and content creator Igor Saringer, 24, was the first Brazilian user **to have his own filter**. "In 2018, some very famous people had filters because Instagram invited them. I found it super interesting and I also wanted to have one".

[SEQUENCE 14] "I try to create something to release every week. **There is a new filter every two weeks at least**".

[SEQUENCE 15] In addition to his own use, **he began to produce filters for internet users** and helped to attract more followers to Instagram. "At the time, in order to have a filter, a person had to follow you", he explains.
(Barbirato, 2020, our emphases)

The use of filters in social media became so popular that the creation and subsequent release of this resource to users came to be seen as a business opportunity. Through the emerging structure evidenced in the sequences above, we can see how the rationale around the creation of filters has been constructed in terms of production. Filters, as products to be released, must be original, unique ("have their own filter"), and also bring novelty to the consumer ("a new filter every two weeks"). Besides that, good and successful products, attract new consumers who, in this case, are new followers ("he began to produce filters for internet users and helped to attract more followers to Instagram").

Such usage illustrates how metaphor permeates our conceptual system. New experiences, such as interactions on social media, are explained in terms of other, more familiar and concrete experiences. "Metaphors allow us to understand a domain of experience in terms of another. This suggests that comprehension happens in terms of entire domains of experience and not in terms of isolated concepts" (Lakoff; Johnson, 2002, p. 207).

3.2 A METAPHORICAL NETWORK AROUND THE CONCEPT OF "FILTER"

According to our analysis, the metaphorical extension of "filter" in the context of cyberculture can be described from the occurrence of two different conceptual metaphors (which are modes of thinking relations and entities in the world), performed through metaphorical linguistic expressions (which are resources for verbally expressing a/the metaphor/s). Figure 1 below represents a possibility of understanding the interrelationships that the domains of experience involved in the comprehension of editing "filter" seem to accumulate:

IMAGE EDITING

FILTER ⟵————⟶ GAME

Figure 1: metaphorical network for editing"filter" and game
Source: Own Authorship

In Figure 1, the metaphorical conceptualization of an editing "filter" encompasses the categorization of the activity of IMAGE EDITING either as FILTER or as GAME, these being source domains of experience. Through the exchange of domains, there are at least two possible vehicles for the understanding of the target domain, in which the inference network can even relate FILTER and GAME.

As it was already discussed in this study, metaphor acts as a cognition tool through which people understand and categorize reality, in addition to being a resource for them to relate to it, linking concepts. In this sense, Chart 2 highlights instantiations of the conceptual metaphors IMAGE EDITING IS FILTER and IMAGE EDITING IS GAME, as well as cases in which the source domain seems to merge up to the metaphor FILTER IS GAME.

	FILTER	GAME
IMAGE EDITING IS	"dangers that excessive use can cause to self-image"	"humorous memes, general quizzes, poetic quotes and social manifestations"
	"Dyed hair, long eyelashes, color palettes, fox eyes"	"the filter consists of saying a random object and someone having to run to get it within a certain time."
	"Filters emerged as a virtual makeup for them."	"From Brazilian history to biology, many educative quizzes emerged as an alternative in the pandemic."
	"Users can try other strong colors on their hair."	"The user must imitate the features of animals that show up in chosen photos."
	"There are filters that thin the nose, change the eye color, which come closer to the white European standard constructed as beautiful"	"Another possibility were the musical filters"

Chart 2: Instantiations of the metaphorical network of "editing filter"
Source: Own Authorship, with quotes from Barbirato (2020)

The inference rooted in the excerpts listed in Chart 2 is the alteration, modification, or adulteration of reality for the benefit of another way of being and interacting. Even when the focus is interaction, such as in the cases in the third column, when the source domain GAME is mobilized, image changes can happen, where GAME merges with the source domain FILTER. As Lakoff and Johnson (2002) indicate, essentially, metaphor is a way of cognitively comprehending and experiencing something in terms of something else. In the usage of "filter" analyzed here, understanding "image editing" in terms of "filter" seems to be the case, and, additionally, when there is entertainment, an editing "filter" can also be metaphorized and understood in terms of "game".

In addition, another point in the metaphorical network identified here is FILTER IS PRODUCT, which we can see in sequence 14,

repeated below, and inserted among the conceptual relations represented in Picture 2.

[SEQUENCE 14] "I try to create something to release every week. **There is a new filter every two weeks** at least".
(Barbirato, 2020, our emphasis)

```
                IMAGE EDITING
                     ↕
  FILTER   ◄──────────────►   GAME
                  PRODUCT
```

Picture 2: metaphorical network for editing, game, and product "filter"
Source: Own Authorship

In the metaphorical network illustrated in Picture 2, the metaphor FILTER IS PRODUCT also seems to connect with both inferences of image editing and inferences of game. At the same time that PRODUCT is a metaphor for editing resources, it is a metaphor for entertainment resources: "there is a new filter every two weeks" for image manipulation and, also, for games, fun, etc. - we need to imagine, through an ontological metaphor, that an object/product comes to the scene. In this *new product*, the features are not completely new, as it continues to be used for the same purposes, but there are different functions (image editing and/or manipulation), which allows us to think of a basis relationship that is not only metaphorical but metonymic. In this case, *new filter* is a form of conceptually taking the whole for the part: in the context of sequences 13 to 15, what is presented as new is not the object itself but some resource executable by it.

4 CONCLUSION

One of the inherent characteristics of languages is the asymmetry between form and function. Although it was believed for a long time that the nature of language was to preserve a form for each function, we now know that this relationship is not univocal. We call semantic indeterminacy the cases in which the meaning of a word is not clearly determined and, when this phenomenon occurs, linguistic mechanisms come into play to accommodate both ambiguity and vagueness in the contexts of language use.

In this study, we specifically analyzed the use of the lexical item "filter" in the cyberspace context from the observation that the word is used in that context with two possible meanings: either as an image editing or manipulation resource or as an entertainment resource. From our analysis, it was possible to reach some conclusions.

We identified that the relatively new meaning of the word "filter" can be explained in terms of metaphorical relationships. Knowledge about the conventional use of the word "filter" as an object used to prevent the passage of what is unwanted, working as a physical barrier (source domain), allows us to infer the metaphorical meaning of a new use for this item (target domain): an image editing resource used by social media users to modify their appearance, working as a virtual barrier to characteristics socially classified as imperfections.

We concluded that, for this image manipulation resource, we can also infer specificities from the source domain "game" in usage that focuses on interaction and entertainment. Thus, as the conceptual system operates with domains in general, it is possible to project elements from one domain to another, merging different domains and promoting the extension of meaning, even though the central meaning of the word remains - in the analyzed case, the manipulation of images. Additionally, in this metaphorical network, we find elements of the source domain "product", since the word "filter" is ontologically referenced in the analyzed text in terms of something manufactured by human activity for consumption.

Regarding the indeterminacy of meaning, we argued for the polysemic character of the word "filter", corroborated by the different domains of experience mobilized by the metaphorical network. We observed that the limits of meaning are not always well defined, i.e., in some situations, more than one interpretation can be attributed to the same item. However, cases of vagueness, which leads to the indeterminacy of meaning, do not constitute a problem in the textual construction. In the news report analyzed, vagueness is a resource used by the author to refer to filters in general, both concerning its aspect of image manipulation for aesthetic purposes and its use for entertainment. In the cases in which the author aims to delimit the intended meaning, the context controls indeterminacy.

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