Semantic Change and Cognition: How the Present Illuminates the Past and the Future

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1. Introduction

In recent decades, much work has been done in the field of Cognitive Linguistics to increase our understanding of how words change meaning, especially with the application of Prototype Theory (cf. Geeraerts 1997; Fernández Jaén 2007). According to the theory of prototypes as it applies to cognitive semantics, words are defined as lexical categories, each having a prototype structure comprised of all of its senses (Geeraerts 1997). The main (or centralized) meaning of a word is its prototypical meaning, which serves as the epicenter of the structure while its other senses are found in the periphery. From this perspective, a semantic change occurs when one of the peripheral meanings becomes the prototypical meaning of the word. From a slightly different perspective, semantic change also occurs when a centralized meaning is eliminated from the prototype structure. The application of Prototype Theory has increased our understanding of semantic change by highlighting the types of external concepts that are regularly linked together in the brain, and thus helped to explain why similar changes are found across languages. For example, the word for ‘heart’ has developed the meaning of ‘mind’ and also serves as the base for verbs meaning ‘to remember’ in many languages, such as Greek, Danish, Arabic, Latin, and many of the Romance languages; these include the Spanish word recordar ‘to remember’ containing the Latin root cor ‘heart/mind.’

The theory of prototypes, however, fails to fully explain how the meaning of a lexical category changes. In other words, it fails to explain how meanings become more or less prototypical. To this end, the addition of lexical field study (cf. Lehrer 1974; Koch 1999b; Rastier 1999) addresses two key questions not addressed in Prototype Theory: (1) What is the initial trigger that sets a change in motion?, and (2) What effect do words whose prototype structures share a particular meaning (near-synonyms) have on change?

This study is based on the assumption that change is provoked when cognitive mechanisms like metaphor and metonymy cause the prototype structures of two or more words to overlap, and that it is therefore more productive to study lexical fields, or groups of lexical items that share a particular meaning. It is important to note that it is possible for a lexical item to have more than one centralized meaning, in which case it is the main term used to name two separate concepts and thus plays a significant role in two different lexical fields. Including the study of lexical fields allows us to explore the effects of such a situation. For example, we may assume that a lexical item with more than one centralized meaning is likely to undergo a semantic change in which one of these is displaced to the periphery if there is already another lexical item available with the same prototypical meaning. Combining the theory of prototypes with the study of lexical fields allows us to test this hypothesis and to account for the principles and processes involved.

The present study is interested in the cognitive principles involved in this and other regular processes of semantic development found among words with the same sense of ‘to wake’ in the history of the Spanish language. It will be shown that the general principles of semantic change discussed here

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can be applied to illuminate the past by leading us to information about historical developments that may have otherwise remained hidden in the limited textual data, and illuminate the future by allowing us to anticipate or identify potential changes following the same developmental patterns in the lexical field in Spanish, and perhaps also in other languages.

2. Methods

To demonstrate the effectiveness of the proposed theoretical framework and methodology, this study analyzes four verbs whose prototype structures share the sense of ‘to wake’ (despertar, recordar, despabilar, and levantar) in a variety of Spanish spoken in the northwestern region of Argentina, and seeks to determine the cognitive principles at work in semantic changes currently in progress there, relying primarily on the analysis of near-synonyms. The present-day synchronic distribution of these four verbs across three generations will reveal parallel processes of semantic development, suggesting a universal cognitive structure for the conceptual field of ‘to wake.’ The data set will be used to address the following research questions:

1. What cognitive mechanisms are at work when a speaker employs a given lexical item (e.g., levantar ‘to lift, rise’) with the sense of ‘to wake,’ thus allowing it to enter into this lexical field?

2. What effects do near-synonyms have on changes in the lexical items used to express the meaning of ‘to wake’ in Spanish, and what do they reveal about regular patterns of semantic change from a cognitive perspective?

As this is part of a larger study, a full discussion of the cognitive mechanisms involved in the initial variation leading to semantic change in verbs meaning ‘to wake’ in Spanish will be reserved for a future publication, and more attention will be paid to the second research question.

2.1. The lexical field of ‘to wake’

This study defines lexical field as a set of lexical items that covers a given conceptual field, which is defined as the group of semantic functions and features involved in the expression of an external concept (Lyons 1977). The external concept under investigation here is ‘to wake’ and the lexical items in question are despertar, recordar, despabilar, and levantar. The verb despertar has maintained the sense of ‘to wake’ as its prototypical meaning since it was developed in Old Spanish from the past participle despierto (< Late Latin EXPERTUS ‘awake’ [Corominas & Pascual 1980-91: s.v. despierto]). Recordar (< Latin RECORDARI ‘to call to mind, remember’ [Corominas & Pascual 1980-91: s.v. recordar]) is attested with the sense of ‘to wake’ in modern varieties of Spanish on both sides of the Atlantic, e.g., Peninsular varieties of Asturias, Leon, and the Canary Islands, and many Latin-American varieties, including the Argentinean variety analyzed in this study (Corrales & Corbella 2010). The prototypical sense of recordar is ‘to call to mind, remember,’ as it was in Latin, but medieval textual data reveal that both this sense and the sense of ‘to wake’ were centralized in its early prototype structure. Because recordar is no longer used with the meaning of ‘to wake’ in standard Spanish, we know that it must have undergone a semantic change by which this sense was eliminated from its prototype structure, and recordar was thus eliminated from the lexical field of ‘to wake.’ The third verb, despabilar (< pabilo ‘candlewick’ < Late Latin PAPILUS, Cl. Latin PAPYRUS ‘papyrus’, ‘plant’ [Corominas & Pascual 1980-91: s.v. pabilo]) seems to vary considerably across many varieties of Spanish. It exists both with and without the initial /d-/; but espabilar is often the only form that appears in lexicographical resources. Additionally, espabilar appears to be primarily used in Peninsular varieties while despabilar is found in Latin-American varieties. The original prototypical sense of (d)espabilar was ‘to cut the burnt part of a candle’s wick (to revive its light).’ It later developed the sense of ‘to revive (a person)’ and then ‘to wake,’ mostly in the figurative sense but also as a synonym or very near-synonym for despertar for some speakers. The final verb in question, levantar ‘to rise, get up’ (< Latin LÈVIS ‘light’ [Corominas & Pascual 1980-91: s.v. leve]) was added as a result of the field research described below in section 2.2 because the data showed that for many
participants levantar had undergone a change by which it encroached upon the semantic domain of despertar with the sense of ‘to wake’ (as described in section 3).

2.2. Data collection
2.2.1. Search for semantic functions and features of the lexical field ‘to wake’

In order to shed light on the development of verbs that have acquired or lost the sense of ‘to wake’ in the Spanish language, it was necessary to determine the semantic functions and features that make up the structure of the conceptual field. To accomplish this, I first consulted numerous lexicographical resources. The overwhelming majority of resources offered only that recordar (and occasionally despabilar) could be used as a synonym for despertar in some areas. Some included ‘to get out of bed’ among the multiple senses of levantar, but none go so far as to include ‘to wake’ or to mention levantar as a synonym of despertar. A few sources provided information about how near-synonyms differ from despertar, but with very little agreement among them. One source (Richard 1997: s.v. recordar) states that in parts of Argentina and Mexico, while both mean ‘to wake,’ recordar and despertar function separately as a transitive and an intransitive verb, respectively (see example 1 below). Other sources address whether or not despertar or its near-synonyms can be used both literally and figuratively with the sense of ‘to wake.’ Whereas almost all lexicographical resources claim that despertar can be used both literally and figuratively, some indicate that near-synonyms recordar and despabilar refer only to the figurative sense of waking.

(1) Si por algo te estoy hablando es para que despierites. Me encomendaste que te recordara antes del amanecer (Juan Rulfo, Pedro Páramo, 51-52 - 1955 [Richard 1997])
‘If I am speaking to you for a reason it is so that you will awaken. You requested that I wake you before sunrise’

In light of the limited information provided by the lexicographical data, I did a preliminary search in Davies’ Corpus del Español and the CORDE for examples of how recordar was used in Medieval Spanish (see example 2) to better understand the sustained use of the verb with the meaning of ‘to wake’ and to search for possible semantic functions or features that distinguished it from its near-synonym at the time, despertar. I was able to find examples consistent with the stipulations noted above for the current use of recordar and despertar, but made very little progress toward pinpointing specific semantic features that might elucidate the process of divergence that led to the elimination of recordar from the field of ‘to wake’ in standard varieties of Spanish. The hope that speakers who have maintained this nonstandard linguistic feature would be the key to unlocking such information led to my field research, using the data collection tools described in the next section.

(2) Recordaron bien tarde […], Non vedien de los ojos todos escalabrados (Berceo, El duelo de la Virgen – 13th Century [Davies 2002])
‘They awoke quite late…, They could not see from their wounded eyes’

2.2.2. Questionnaire and interviews

I compiled a list of examples from the lexicographical data for each verb with the sense of ‘to wake’ and supplemented it with examples from historical texts; from this list I created a questionnaire to test how participants would perceive the various uses of the verbs. In addition, I conducted two interviews: (1) to elicit authentic use of the verbs in question, and (2) to discuss speaker perceptions of the semantic functions and possible distinctive semantic features between near-synonyms.

In the questionnaire participants were asked to read a series of prompt sentences containing three of the four verbs in question (despertar, recordar, and despabilar). The verbs were bolded and underlined and participants were instructed to focus on the use of these words in each sentence and decide whether or not they themselves would use them in such a way. To check for consistency, the survey included multiple sentences for each particular use of the verbs being tested. If they decided that a given sentence was not something they would say, participants were to rewrite the sentence as
they would say it. Examples 3 – 5 show one example for each verb from the survey. The fourth verb, *levantar*, entered into the data as a member of the lexical field of ‘to wake’ because many informants used it to replace one or more of the other three verbs in their rewrites.

(3) **Prompt (despertar):** El perro ladró hasta **despertarnos**

‘The dog barked until it **woke us**’

(4) **Prompt (recordar):** Me pediste que **te recordara** antes del amanecer

‘You asked me to **wake you** before dawn’

(5) **Prompt (despabilar):** **Me despabilé** esta mañana para ver la salida del sol

‘I **awoke** early this morning to see the sunrise’

Prior to completing the questionnaire, many of the informants participated in an interview designed to elicit the use of verbs pertaining to the lexical field of ‘to wake,’ which included questions about their sleep habits, daily routines, experiences with fainting, etc. This interview could not be conducted with all informants because some did not agree to participate in this particular part of the data collection process, and in the event that participants did not have time to complete all three parts, this was the first to be eliminated. Additionally, in an attempt to maximize the participant pool and keep the data as random as possible, multiple surveys were solicited from passers-by in town squares, shopping centers, and universities. The second type of interview was less formal, involving conversations with speakers about how they perceived the use of all four lexical items in question (*despertar, recordar, despabilar, levantar*). This interview was conducted wherever possible only after informants completed their questionnaires to avoid influencing their decisions on the questionnaire and to verify the information provided in the formal interview and the questionnaire.1

2.3. **Field research population**

Northwestern Argentina was selected for the present study because it is the region most often cited for maintaining the use of *recordar* with the meaning of ‘to wake.’ Additionally, this region has been the object of other studies treating the maintenance of linguistic features and constructions that have been eliminated from standard varieties (cf. Fernández Lávaque & Rodas 1998; Granda 2001; Martorell de Laconi 2006). The present study focuses specifically on middle- to upper-class adult speakers of the northwestern city of Salta (the capital of the Salta province). The reasons for focusing on this particular group are two-fold: use of *recordar* with the meaning of ‘to wake’ by this group shows that it is at least acceptable and not marginalized among its users, and, given that this is not a sociolinguistic study, it will be most productive to focus on informants of similar social class.

3. **Data analysis**

3.1. **Theoretical considerations**

3.1.1. **Prototype Theory**

Geeraerts (1997) presents Prototype Theory as paramount to the study of the cognitive semantic evolution of language, asserting that prototypes must occupy the most basic level of study. He explains that the analysis of the multiple senses of each semantic category according to their level of prototypicality helps to form a continuum that contributes to our understanding of how semantic categories are linked together in the human brain by way of universal cognitive mechanisms. Whereas

1 An anonymous reviewer expressed valid concern at the lack of quantitative information provided here about the informants involved in the study. As this is part of my ongoing doctoral dissertation project, the data is still being collected and processed and I have not included the quantitative information at this time. The main focus of this particular study is on the theoretical and methodological implications of patterns that are clearly visible in the preliminary data analysis.
the majority of studies using this framework have approached semantic change from a semasiological perspective, taking the lexical item as invariable and analyzing its various meanings, the present study takes an onomasiological perspective by taking a particular meaning as invariable and analyzing the different lexical items used to represent it.

As I mentioned in the introduction, based on the assumption that change is provoked when cognitive mechanisms, such as metaphor and metonymy, cause the prototype structures of two or more words to overlap, we will take the prototype structures of each lexical category in question as the most basic level of study, and focus on the theoretical space where they overlap in the lexical field of ‘to wake.’ The basic idea of prototypes as best-case or most salient examples and of the varying degrees of prototypicality (cf. Rosch 1973) also occupies the most basic level of cognitive analysis in the present study. The prototype is considered the most salient example of any category because it is the one that first comes to mind and is therefore found in the greatest number of contexts. So the prototypical meaning of a lexical category is likely to be the first or only meaning that a speaker will think of when hearing the word in isolation. This meaning is therefore centralized in its prototype structure while its other meanings carry varying degrees of centrality within the structure. Just as the most salient meaning of a lexical item is its prototypical meaning, the most salient member of a lexical field is the prototypical word used to express a particular meaning. Therefore, the same prototype effect applies: when presented with a concept, such as ‘to wake,’ the first word that is likely to enter a speaker’s mind is the prototypical word for the concept. However, to avoid confusion, I will refer to the main lexical item of a given lexical field as the “generic neutral term” (Rastier 1999: 112) and only refer to prototype structure when referring to the structure of a word and its meanings. In standard Spanish, the generic neutral term for the lexical field of ‘to wake’ is *despertar.*

In the following section, I further describe the benefits of combining the theory of prototypes with the study of lexical fields for the study of semantic change.

### 3.1.2. Lexical fields: an onomasiological perspective

As Blank (2003) points out, onomasiological inquiry reveals the most about the human mind and language processing by taking into account the various options or strategies available in a language for expressing a particular external concept. In response to the question of what triggers a given change in the first place, Koch (1999a: 296) asserts:

> If speakers affect semantic change (and they do), they affect it not by providing existing words with novel meanings (semasiological perspective), but instead indirectly by expressing things through other and/or new words (onomasiological perspective).

To determine the origin of a semantic change within the field of words meaning ‘to wake,’ for example, we must search for variation wherein a speaker chooses to express the concept of ‘to wake’ using a term whose prototype structure has this sense in its periphery instead of the term prototypically employed for the concept. Such a choice necessarily means that the sense of ‘to wake’ resides somewhere in the periphery of the prototype structure in the language of that particular individual, but we must also account for how the sense first entered into the prototype structure. It is my assumption that this is more likely to occur, and that the innovative use is more likely to be adopted by others and lead to semantic change when it involves concepts that are regularly connected in the minds of speakers by shared cognitive principles. By looking at the prototypical senses of multiple lexical categories being used to express ‘to wake,’ we are likely to find patterns in the associations of external concepts that will lead to the discovery of such cognitive principles, and thus a better understanding of regular patterns of semantic change. Although this has been done with some success in semasiological studies (cf. Sweetser 1990; Geeraerts 1997; Traugott & Dasher 2002; Fernández Jaén 2007), accounting for cognitive mechanisms that connect certain concepts, the onomasiological perspective offers a more complete picture from which to draw recurring cognitive principles because it takes into account the effects caused by the interaction of partial synonyms, or the various options available as Blank puts it, in the cognitive processing system. The analysis of the data in the present study will reveal that all of the changes occurring within the lexical field discussed here follow a regular progression of parallel steps, which is a positive indication of the possible universality of the cognitive
principles involved and of the value of studying multiple lexical items pertaining to a particular lexical field.

3.1.3. Cognitive structure for the conceptual field of ‘to wake’

As mentioned above, the lexicographical entries for despertar, recordar, (d)espabilar, and levantar offer very little clarity with regard to how these verbs interact as near-synonyms with the sense of ‘to wake.’ By historical convention, dictionaries typically follow a semasiological prototype model in an attempt to list all of the senses of a particular lexical category that their creators are aware of, in order from the most to the least prototypical sense. As Lakoff (1987) points out, dictionaries do not offer scientifically acceptable evidence of prototype structures, especially given the high occurrence of variation among them. However, they do document the occurrence of semantic variation and change over time. Taking the example of recordar in Spanish, one will usually find ‘to call to mind’ or something similar listed as its first sense and ‘to wake’ as its last with some lexicographic labeling, such as “archaic” or “colloquial.” Following the theoretical model of the present study, a more useful convention would be to list external concepts and provide the words and phrases used to represent them. Ideally, that would mean one could look up the concept of ‘to wake’ and find a list of words whose prototype structures contain that particular sense (i.e., all members of the lexical field: despertar, despabilar, recordar, levantar, etc.), along with information about the different contexts in which they are used.²

Lakoff developed an approach based on the Idealized Cognitive Model (ICM) to identify semantic features of word use that do not appear in the generally accepted definition(s) (cf. 1987). He used the classic example of the word bachelor (Fillmore 1982) to point out that the definition with only the features UNMARRIED, ADULT and MALE is an idealization because it paints an incomplete picture of reality. An analysis of how the word is actually used reveals the existence of additional semantic features that are difficult to delineate due to their dependence on abstract societal norms. The definition fails to exclude reference to men who are unable or unlikely to marry based on these norms (e.g., priests). In the present study, I will use a similar analysis, based on the theory of prototypes, to identify features belonging to the cognitive structure of the conceptualization of ‘to wake’ that are not found in dictionaries by studying the actual use of lexical items meaning ‘to wake’ among speakers in northwestern Argentina. The identification of these features will reveal parallel patterns of semantic change in the lexical items used to express ‘to wake’ over time and across dialectal boundaries in the Spanish language. Rather than looking at incomplete definitions as idealizations, I will use the theory of prototypes to focus on what the undocumented semantic features reveal about the processing of a given concept in the brain: the internal conceptual structure of the concept from a cognitive perspective. Whereas the concept of ‘bachelor’ is highly dependent on cultural norms, the concept of ‘to wake’ is one that is based on biological functions shared by all human beings, and is therefore more likely to reveal universal principles (Lehrer 1974: 170).

3.1.4. Cognitive mechanisms

There are two cognitive mechanisms that are usually identified in explaining semantic changes: metaphor and metonymy. Of particular importance in the present study will be the discussion in Goossens (1990, 1999) on the interaction between these two mechanisms. Goossens points out that although semantic changes have been attributed to either metaphorical shifts or to context-induced

² This is the goal of the University of Berkeley FrameNet project (Johnson et al. 2002; Ruppenhofer et al. 2006), which is being carried out by cognitive linguists following the theoretical concept of semantic frames (Fillmore 1982). Through the FrameNet project, information may be accessed starting with either a lexical category or a frame; when accessing a frame (e.g., WAKING UP), one is provided with a definition, a list of frame elements (e.g., SLEEP STATE, SLEEPER, etc.), lexical units associated with the frame including all parts of speech (e.g., awake, come back around, come to, get up, revive, wake), and examples of contexts in which the lexical units are used. The present study will be restricted to the verbal concept of ‘waking up’ rather than the entire frame, because we are likely to find more tangible patterns of reanalysis within the same syntactic category (Langacker 1977).
(metonymic) interpretations in recent cognitive studies, it is not necessary (and may be misleading) to separate the two. The following definition of metonymy from Radden & Kövecses (1999: 21) will be used in describing the conceptual metonymies at work in the semantic developments described below:

“Metonymy is a cognitive process in which one conceptual entity, the vehicle, provides mental access to another conceptual entity, the target [...].” This definition is intentionally broad and meant to include both metaphorical and context-based connections made between concepts in the minds of speakers. Both types commonly lead to the mental association of concepts, sometimes working together to facilitate semantic change. To illustrate this definition of metonymy, let us take the example of the two conceptual entities ‘get up’ and ‘wake up’ and their roles in the conceptualization of waking: The prototypical context for referring to the concept of waking up is after a night of sleeping, which additionally involves the sleeper getting up out of bed to start his/her day. If getting up out of bed is the prototypical context for the concept of ‘to get up’ in the mind of the speaker, it acts as a vehicle that provides access to the target concept of ‘to wake.’ Through this metonymical cognitive connection, it is not unlikely that the word for ‘get up’ in Spanish, levantar, would come to be used with the meaning of ‘wake up’ and encroach on the semantic domain of despertar.

3.2. Semantic functions and features of the lexical field ‘to wake’

The analysis of the collected data revealed a parallel pattern for distinguishing between two near-synonyms across generations of speakers in northwestern Argentina, which, in turn, revealed the same semantic functions belonging to the field of ‘to wake,’ regardless of variation in the words used to express them. The data showed that the conceptual field consists of four semantic functions: the two pairs of opposing functions listed below in Table 1. If speakers had two words for the concept available in their lexicon, they would distinguish between them by assigning functions 1 and 3 to the generic neutral term and functions 2 and 4 to the near-synonym, as illustrated by Table 2. The reader may think of this table as a template for the lexical structure of the concept ‘to wake’ when two lexical items are available. Consistent with the fact that the lexicographical data show that despertar has maintained the prototypical sense of ‘to wake’ throughout the history of the Spanish language, all three generations of speakers showed use of despertar as the generic neutral term for the lexical field of ‘to wake.’ Speakers varied by generation in their use of near-synonyms, recordar, despabilar, and levantar, as will be discussed in the next section (§3.3).

<table>
<thead>
<tr>
<th>Table 1. Semantic functions of the conceptual field ‘to wake’</th>
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</thead>
<tbody>
<tr>
<td>1. Literal sense of going from an unconscious to a conscious state vs. 2. Figurative sense of becoming more cognitively or actively productive</td>
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<tr>
<td>3. Natural, expected or planned vs. 4. Unnatural, unexpected or unwelcome</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Table 2. Lexical structure of ‘to wake’: Template for distinguishing semantic functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generic neutral term</td>
</tr>
<tr>
<td>1 (Literal)</td>
</tr>
<tr>
<td>2 (Figurative)</td>
</tr>
<tr>
<td>3 (Natural)</td>
</tr>
<tr>
<td>4 (Unnatural)</td>
</tr>
</tbody>
</table>

The opposing functions indicate prototype effects based on a shared understanding of the concept of ‘to wake.’ Functions 2 and 4 are less prototypical than 1 and 3 because they involve a divergence from the prototypical conception of waking. As mentioned in the previous section, the prototypical context for the concept of waking up is after a night of sleeping. This is because the prototypical conception of waking seems to be based on the human physiological need for sleep to replenish the body with the energy needed to carry out daily functions, and on the natural state of our bodies and minds upon waking. In the prototypical context for waking, the sleeper has slept through the night...
without interruptions and awakens at the appropriate time in order to start his day. Although physically conscious, he finds himself in a listless state while his body and mind transition from the sleep state to a rested, fully functioning state. Any divergence from this conception will then be processed in the mind with varying degrees of prototypicality. The data set revealed the occurrence of this phenomenon in the ways in which speakers tended to distinguish between near-synonyms, especially by way of semantic features involving non-prototypical causes and effects of waking. The use of the near-synonyms tended to involve an unexpected or unwelcome cause of waking, such as noise, movement, or physical discomfort, as well as effects like sudden regaining of consciousness, becoming fully awake, and being unable or not permitted to return to sleep. The non-prototypical causes of waking correspond to Function 4, causing sleepers to awake under unnatural, unexpected or unwelcome circumstances. The non-prototypical effects correspond to both Functions 2 and 4 because they describe a context for waking in which the person bypasses or accelerates the natural intermediate state between unconsciousness and awareness and becomes cognitively and/or actively alert in response to the unnatural circumstances. Table 3 contains examples of definitions for near-synonyms recordar and despabilar offered by informants that demonstrate parallel use of these distinguishing features.

### Table 3. Participants’ definitions for recordar(se) and despabilar(se)

<table>
<thead>
<tr>
<th>Recordar(se) – 1st generation speakers</th>
<th>Despabilar(se) – 2nd generation speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Ponerse lúcida, comenzar la jornada</td>
<td>• La persona se pone lúcida</td>
</tr>
<tr>
<td>‘Become lucid, start the workday’</td>
<td>‘The person becomes lucid’</td>
</tr>
<tr>
<td>• No poder volver a dormirse</td>
<td>• No puede volver a dormirse</td>
</tr>
<tr>
<td>‘Not being able to go back to sleep’</td>
<td>‘He/She cannot go back to sleep’</td>
</tr>
<tr>
<td>• Despertarme de golpe, si oigo algún</td>
<td>• Despertar de golpe, con un sonido</td>
</tr>
<tr>
<td>ruido o me duele algo</td>
<td>fuerte, un dolor de cabeza o algo por el</td>
</tr>
<tr>
<td>‘Wake up suddenly, if I hear some</td>
<td>estilo</td>
</tr>
<tr>
<td>noise or something hurts’</td>
<td>‘Wake up suddenly, from a loud sound,</td>
</tr>
<tr>
<td></td>
<td>a headache or something like that’</td>
</tr>
</tbody>
</table>

3.3. Lexical variation among participants

As mentioned above, while despertar is the generic neutral term for all generations, each generation has a different near-synonym that covers semantic functions 2 and 4. We will refer to the lexical items available in each generation as their lexical availability: these include both the items in active use and items that are recognized as having the meaning ‘to wake’ among speakers of older generations but not used by the speaker. Although it is not unlikely that informants recognize the use of newer lexical items with the meaning of ‘to wake’ among speakers of younger generations, I have chosen to leave those spaces blank because the focus here is on the elimination of a near-synonym from one generation to the next. Table 4 below shows the three different types of lexical availability found across the three generations’ in northwestern Argentina.

### Table 4. Basic types of lexical availability for ‘to wake’ among informants

<table>
<thead>
<tr>
<th>Type</th>
<th>Generation</th>
<th>Despertar(se)</th>
<th>Recordar(se)</th>
<th>Despabilar(se)</th>
<th>Levantar(se)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1st Generation (~70+)</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2nd Generation (~35-65)</td>
<td>X</td>
<td>(X)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>3rd Generation (~18-30)</td>
<td>X</td>
<td>(X)</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

( ) = passive knowledge of older use of the word with the meaning of ‘to wake’

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3 Only adults were included in the study and the generations were established from the trends found in the data.
3.3.1. Variation across generations as evidence of semantic change

The different lexical availabilities across generations are evidence of parallel semantic changes occurring from generation to generation within the lexical field. Variation found within each generation also provides evidence of the different stages involved in the parallel changes. That is, each generation showed evidence of speakers at each of the following three steps of the change process listed below:

Step 1: Synonym or near-synonym for ‘to wake,’ introduced by way of cognitive mechanisms, is adopted by a group of speakers; both words may cover all four semantic functions

Step 2: Divergence of near-synonyms as shown in Table 2

Step 3: Simplification – the more salient term covers all four functions and the near-synonym is displaced to no longer cover the conceptual field of ‘to wake’

Depending on the position of ‘to wake’ with regard to other senses in the prototype structure of the near-synonym, the process of displacement involved in Step 3 may vary. Recall that the prototype structure can contain multiple senses that vary in status from more to less centralized, or prototypical. The near-synonym may undergo a semantic change by which one of its peripheral senses becomes centralized and replaces ‘to wake’ as the prototypical sense of the word and it thus becomes the generic neutral term of a different lexical field; or the meaning of ‘to wake’ may simply be eliminated from its prototype structure in favor of another already centralized sense. This distinction will be important when we discuss the ways in which the effects of near-synonyms may vary based on their particular prototype structures in section 4. The end result in either case is that the word no longer belongs to the lexical field of ‘to wake’ and has therefore undergone semantic change, according to the definition used here.

Examples 6 – 8 demonstrate the cross-generation variation laid out in Table 4. The English translations are an attempt to capture the distinguishing semantic functions described above. In example 7, the English translation includes two possible interpretations of the prompt sentence. Depending on the speaker, near-synonyms recordar, despabilar, and levantar were sometimes used as synonyms for despertar, as in literally meaning ‘to wake,’ as evidence of Step 1 in the semantic change process. In 6c, for example, the third-generation speaker chose to replace both verbs with a single verb levantar. Most participants, however, consistently used their respective near-synonyms to cover semantic features 2 and 4 from Table 1.

Prompt 4: Despierta de ese sueño ya y recuerda de ese letargo perezoso
‘Wake from that slumber already and shake off that lazy lethargy’

(6a) Despertate 5 de ese sueño ya y recordá de ese letargo perezoso (Type 1, 1st Gen.)

(6b) Despertate de ese sueño ya y despabilate de ese letargo perezoso (Type 2, 2nd Gen.)

(6c) Levantate ya… (Type 3, 3rd Gen.)

Prompt: Me pediste que te recordara antes del amanecer
‘You asked me to get you up/wake you up before dawn’

(7a) Me pediste que te recordara… (Type 1, 1st Gen.)

(7b) Me pediste que te despertara… (Type 2, 2nd Gen.)

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4 When citing examples from the questionnaire data, the prompt sentence will be included as well. All other examples, unless otherwise specified, come from data collected in the interviews.

5 Informants tended to replace the tú form with the vos form because the use of the latter is much more widespread in Argentina. I do not expect that the verb form had any influence on the results.
Me pediste que te levantara antes del amanecer (Type 3, 3rd Gen.)

Prompt: Me despabilé esta mañana para ver la salida del sol
‘I got up and around early this morning to see the sunrise’

Me recordé temprano esta mañana para ver la salida del sol (Type 1, 1st Gen.)

Me despabilé temprano esta mañana para ver la salida del sol (Type 2, 2nd Gen.)

Me levanté temprano esta mañana para ver la salida del sol (Type 3, 3rd Gen.)

3.3.2. Structure of the lexical field ‘to wake’ based on lexical availability type

Tables 5 – 7 below show the three types of lexical availabilities that correspond to the three generations of speakers in northwestern Argentina in order from oldest to youngest, using the template for the lexical structure given in Table 2. Each table is followed by examples from the data that illustrate the use of near-synonyms belonging to the lexical field of ‘to wake.’ The reader should keep in mind the semantic functions (Table 1) and features involving the causes and effects of waking described above (§3.2) that separate the near-synonyms from the generic neutral term despertar, and recall that these distinguishing functions and features have in common the reference to less prototypical contexts, in accordance with the speakers’ shared conceptualization of the act of waking.

Table 5 shows the semantic use of despertar with literal and natural senses and of recordar to describe the figurative and unnatural action of ‘to wake’ in first-generation speakers, followed by examples of such uses in (9) – (11).

<table>
<thead>
<tr>
<th></th>
<th>Despertar</th>
<th>Recordar</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Literal)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>2 (Figurative)</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>3 (Natural)</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>4 (Unnatural)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(9) Me recordé a las cinco y no me podía volver a dormir
‘I awoke at five and could not fall back to sleep’

(10) Me recordé porque me pareció haber oído su voz
‘I awoke because I thought I had heard her voice’

(11) Su amigo debió haberlo recordado
‘His friend should have woken him up (by shaking/poking him)’

Examples 9 – 11 came from first- and second-generation speakers in the informal interviews, in which they gave examples of how they have either used or heard the word recordar used within the conceptual field of ‘to wake.’ Example 9 is from a first-generation speaker offering a possible use for recordar, in which she references the semantic feature of effect of not being able to fall back to sleep and therefore unnaturally/unexpectedly awake when she should be sleeping. In example 10, a second-generation speaker recalled having heard recordar with the meaning of ‘to wake’ in an interview from a news broadcast about a kidnapping, which clearly points to a non-prototypical context for waking. In

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6 Examples from second-generation informants are included as indirect representations of third-generation speech because they were in reference to the use of recordar as a form they understood to be used by their parents or other third-generation speakers that they have been in contact with.
example 11, another second-generation participant used this sentence as a good example for how recordar is used among first generation speakers, referring to a person who was snoring loudly on an overnight bus. She made a gesture to indicate waking the person by poking or shaking him.

In Table 6 and examples 12 – 14 we see a similar use of despertar among second-generation speakers, but for figurative and unnatural descriptions, they prefer despabilar.

Table 6. Second-generation speakers – Type 2 lexical availability

<table>
<thead>
<tr>
<th></th>
<th>Despertar</th>
<th>Despabilar</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Literal)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>2 (Figurative)</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>3 (Natural)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>4 (Unnatural)</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

(12) Me despabilé temprano…Lo diría yo si algo me molestó - un ruido, el tren, etc. y ya no puedo dormir

‘I awoke/got up and around early…I would say it if something bothered me – a noise, the train, etc. and I can no longer sleep’

(13) Al atardecer me despertaron de la siesta, me despabilé y salimos a pasear

‘At dusk they woke me up from my nap, I came to/snapped out of it and we went for a walk’

(Prompt: Al atardecer nos despabilaron de la siesta y salimos a pasear)

(14) Mi padre usaba recordar con un tono más serio para que nos levantemos rápido. Ahora mi hermana y yo lo usamos con un tono humorístico pero con el mismo sentido – cuando se tiene que despabilar

‘My father used recordar with a more serious tone so that we get up quickly. Now my sister and I use it with a humoristic tone but with the same sense – when one has to get up and get going’

Examples 12 – 14 are from second-generation speakers. Example 12 offers a token of the type of information gathered from the space for comments in the questionnaire and the follow-up interviews. In this particular case, the informant decided to qualify her acceptance of the sentence in the questionnaire, indicating that she would only use despabilar in such a way if something unexpected and uncomfortable interrupted her slumber and did not allow her to return to sleep. Example 13 also comes from the questionnaire and illustrates that for this participant, despabilar and despertar are not interchangeable, but rather distinguishable according to the semantic functions laid out in Table 1(6). That is, whereas despertar covers the functions of literal and physical waking at an appropriate time, in an appropriate way, in a listless state, according to the speaker’s conceptualization of the more prototypical contexts for waking (i.e., after taking a nap), despabilar is used to refer to a later step of recovering from the listless, although literally conscious, state. Example 14 comes from a second-generation speaker explaining how members of the previous generation used the word recordar, and shows how despabilar covers the same semantic function for her that recordar did for her father.

Table 7 shows a parallel distribution of near-synonyms with the meaning of ‘to wake’ among third-generation speakers, but with levantar, rather than recordar or despabilar, in figurative and unnatural contexts, as illustrated by examples 15 – 17 following the table.

Table 7. Third generation speakers – Type 3 lexical availability

<table>
<thead>
<tr>
<th></th>
<th>Despertar</th>
<th>Levantar</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Literal)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>2 (Figurative)</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>3 (Natural)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>4 (Unnatural)</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
4. Discussion and conclusions

At the beginning of this study we set out to address the following two research questions:

1. What cognitive mechanisms are at work when a speaker employs a given lexical item (e.g., \textit{levantar} ‘to lift, rise’) with the sense of ‘to wake,’ thus allowing it to enter into this lexical field?

2. What effects do near-synonyms have on changes in the lexical items used to express the meaning of ‘to wake’ in Spanish, and what do they reveal about regular patterns of semantic change from a cognitive perspective?

Sections 4.1 and 4.2 will offer an answer to these questions, with an emphasis on the second question.

4.1. Motivation and processes of semantic change

The semantic changes discussed here have included both the acquisition and loss of the sense of ‘to wake.’ As previously mentioned, I assume that the acquisition of meaning is initially motivated by cognitive mechanisms that lead speakers to alter prototype structures of words by relating two (or more) concepts. This initial motivation and the motivation that leads to the spread of such an innovation, as well as the processes involved, will be further explored in section 4.1.1. As for changes involving the loss of meaning, we have seen evidence here of multiple lexical items undergoing parallel processes of semantic divergence and leading to the eventual loss of the sense of ‘to wake.’ The changes within this lexical field indicate a tendency toward differentiation and simplification in the event that two words come to be used in the same contexts. In lieu of merely offering support for the common idea that synonymy itself is motivation for semantic divergence, this study offers a concrete explanation for this oft-cited phenomenon in section 4.1.2. I will include a brief exploration of the motivation behind both semantic divergence and simplification, or the elimination of the least salient near-synonym, involving cognitive mechanisms and other cognitive processes.
4.1.1. Cognitive mechanisms

The main cognitive mechanism to be discussed here is metonymy, employing the definition provided above that also includes metaphorical connections made between words and concepts. One conceptual entity acts as the vehicle providing mental access to another conceptual entity, the target, leading to a change in the naming of the target concept using the term generally employed to represent the vehicle concept. Above we saw the example of the concept ‘to rise (in the morning)’ as a vehicle for mental access to the target ‘to wake,’ which explains how levantar could have come to encroach upon the semantic domain of despertar among third-generation speakers in northwestern Argentina. It seems logical that levantar, as the generic neutral term for expressing the concept of ‘get up,’ prototypically associated with getting up out of bed, provided mental access to the concept of ‘wake up,’ allowing for the semantic convergence of levantar and despertar with the sense of ‘to wake.’ If the reader is not yet convinced, consider the context in example 18 where the decision to employ either levantar or despertar makes very little difference in the semantic interpretation of the sentence. I would argue that the change likely began in this type of context, in which speakers are likely to opt for the use levantar over despertar because it is the more cognitively salient action, given the understanding that attending to one’s daily responsibilities necessarily involves getting up out of bed.

Example 19 offers a helpful example to consider how the concept ‘despabilo’ (‘to cut the burnt part of a candle’s wick to revive its flame’), as a vehicle, could also provide mental access to the target ‘despertar’ (‘to wake’). Let us recall Goossens’ idea that metonymy and metaphor need not—and perhaps should not—be separated (cf. 1990, 1999). It seems unfitting, for example, to have to decide whether the extension of despabilo to ‘revive and/or wake a person’ is strictly either a metaphorical or a metonymical extension when they do not appear to be mutually exclusive. The metaphorical extension from revive a candle to revive a person is not difficult to grasp, but we cannot rule out the context-induced effects of associating the verb despabilo ‘to cut the burnt part of a candle’s wick’ with avivar ‘to revive.’ In either case, the association of the two concepts likely stems from the prototypical context of using candles to provide light during the night, which is the prototypical time of day for sleeping. The act of reviving the candle’s light during this time is likely associated with being awake at this time, and the revival of light could become associated with the revival of a sleepy person needing to stay awake.

Although our limited focus does not allow much detail here, it is clear that cognitive mechanisms are at work in the extension of levantar and despabilo into the lexical field of ‘to wake.’ Due to the fact that recordar was already a centralized member of the lexical field meaning ‘to wake’ at the beginning of written Hispano-Romance, we have a less clear picture of how it entered into the field. Further discussion on the cognitive mechanisms and general principles involved in the adoption of these and other lexical items into the field of ‘to wake’ will be taken up in a future publication. I assume that cognitive mechanisms are the driving force behind the innovative use of lexical items, as well as the spread of innovation. Recall that a new word may first enter into the lexical field in the vocabulary of one speaker who, having cognitively connected two concepts, decides to use that word with the meaning of ‘to wake.’ In doing so, the speaker officially alters its prototype structure to include ‘to wake’ in his own language, and, if he is understood, possibly in the language of his interlocutor(s). If understood, the new use may be cognitively acceptable enough to successfully spread among a group of speakers. The question of cognitive acceptability is one that requires more attention than can be paid in the present work, but the basic idea is that if the cognitive principles that lead to an innovation are universal, they are likely to be highly acceptable and therefore more likely to spread and/or to be spontaneously initiated among multiple individuals, even across various speech
communities. In the next section, we will focus on the second research question and discuss how the study of near-synonyms can lead to an understanding of the general processes of semantic change and the cognitive principles involved.

4.1.2. Lexical field structure and cognitive effects of near-synonyms

We saw in section 3.3.2 that the data show a parallel structure for the lexical field of ‘to wake’ in the parallel distribution of near-synonyms to cover semantic functions that appear to be cognitively shared by speakers of all generations due to a common agreement on the prototypical contexts for the act of waking. These data are evidence that the conceptual field of ‘to wake’ is universally defined in the cognition of these speakers, as indicated by common patterns of semantic variation and change. First, we have seen that when there are two verbs belonging to the lexical field, they tend to undergo a similar process of semantic divergence by which the near-synonyms are semantically split to cover the same semantic functions belonging to the universal conceptualization of ‘to wake.’ Differentiation between near-synonyms reveals a common cognitive structure for the conceptual field of ‘to wake,’ which points to the motivation for the recurrent phenomenon of semantic divergence: speakers make use of multiple words available for naming a particular concept to express the multiple functions assigned to it in the brain.

This semantic divergence has led to the elimination of the least salient near-synonym from one generation to the next, or simplification. The simplification of near-synonyms also requires a more convincing explanation than mere preference for economy of expression. Let us take up again the metonymical relationship between conceptual entities ‘wake up’ and ‘get up’ described above to account for a semantic change that appears to have converted levantar into a partial synonym of despertar with the meaning of ‘to wake.’ A similar phenomenon could also explain the simplification of such a pair after undergoing the semantic divergence described above. I will use the loss of the use of despabilar with the figurative sense of ‘to wake’ or ‘to come out of a listless state’ in the third-generation to illustrate this idea. If the prototypical context for coming out of a listless state is upon waking from sleep, the concept of ‘to wake’ could easily provide mental access to ‘come out of a listless state.’ Once this occurs, speakers have no use for a word like despabilar because in their minds despertar has become suitable for the expression of both the literal and figurative senses belonging to the conceptual structure of ‘to wake.’ It is possible that the elimination of recordar from the lexical field of ‘to wake’ can be explained in a similar way, but it is also the perfect example to illustrate an important aspect of semantic change that I first mentioned in section 3.3.1.

I suggested that varying prototype structures might lead to variation in semantic changes involving near-synonyms. Recall that in Medieval Spanish, recordar was commonly used with both the meaning of ‘to wake’ and ‘to remember,’ which indicates that both meanings were centralized members of its prototype structure and that it was a salient member of both lexical fields ‘to wake’ and ‘to remember.’ If the word recordar becomes more likely to conjure the mental image of remembering than waking, it is likely to stop providing mental access to the concept of ‘to wake,’ especially in light of the existence of despertar with ‘to wake’ as its prototypical meaning. This is in indication that whatever initiates or propels semantic change can vary due to variable circumstances; however, we have seen that the course of change seems to remain the same across multiple lexical items sharing the meaning of ‘to wake’ over time, which is a clear indication of the positive implications of studying lexical fields rather than individual lexical items.

The analysis of near-synonyms in the present study suggests that the concept of ‘to wake’ is universally defined across the three generations of speakers in northwestern Argentina. In section 4.2.1 evidence will be presented that demonstrates that the same patterns can also be found in the historical development of the Spanish language. Future studies will be required to test the applicability, or possible universality, of the conceptual field structure as a product of a shared cognitive conception of ‘to wake’ through the analysis of near-synonyms in other languages.

4.2. Implications for the study of semantic change in cognitive linguistics

4.2.1. Illuminating the past

One of the most challenging aspects of studying historical linguistics is the limited picture of linguistic behavior that we are able to construct in the absence of living speakers to observe. But what
if we could learn about past language developments by observing today’s speakers? The study of universals in cognitive linguistics gives us the opportunity to do so, and this project is evidence of its promise. Through the observation of the present-day use of despertar and its near-synonyms in northwestern Argentina, semantic features and functions belonging the conceptual field of ‘to wake’ were revealed that have not appeared in dictionaries. Perhaps these functions and features are so engrained in the speakers’ cognition for the concept of ‘to wake’ that they may not have ever been identified without the aid of a cognitive linguistic framework. And the discovery of these has helped to shed light on the historical data, revealing the same patterns of semantic divergence based on a shared cognitive structure for the concept of ‘to wake,’ as evidenced by familiar semantic cause and effect features present when recordar is used instead of despertar (see examples 20 and 21). It is clear in example 21 that the use of one or the other does not involve the syntactic redistribution (one transitive and the other intransitive) offered in some lexicographical resources mentioned above. Applying what we have learned from present-day users of recordar within the conceptual field of ‘to wake,’ we are able to recognize a semantic difference between intransitive uses of despertar and recordar, a subtle difference involving the effects of waking under such unexpected and unwelcome circumstances. The present-day analysis of these and other near-synonyms for ‘to wake’ has led to a more complete account of their development in standard Spanish. Even in the absence of a group of speakers who have preserved the use of recordar with the sense of ‘to wake,’ the patterns found in the changes of despabilan and levantar could still have provided sufficient information to lead to this discovery.

(20) Acaescíame muchas vezes, quando más la fuerça del sueño me vencia, recordar con un temblor súbito que hasta la mañana me durava (Cárcele de amor, 1492 [Davies 2002])

‘It was happening to me many times, when the force of the dream was defeating me more, I would awake with a sudden trembling that lasted until the morning’

(21) Y tenía el sueño tan pesado que aunque llegaron a él, no despertó hasta que Brandimardo le puso la lança en los pechos y le dio de cuento un pequeño golpe en ellos para despertarlo. El gran pagano recordó, y viendo que estavan allí sus contrarios, muy despavorido se levanta (Diana enamorada, 1562 [Davies 2002])

‘He was in such a deep sleep that even though they got to him, he did not awake until Brandimardo put a spear to his chest and gave him a little poke to wake him. The great heathen awoke (suddenly, quickly – snapped out of his slumber), and seeing that his enemies were there, arose quite terrified’

4.2.2. Illuminating the future

In the same way that the study of the present-day distribution of verbs meaning ‘to wake’ in northwestern Argentina helps to increase our understanding of past changes within the field, it is likely to shed light on future changes as well. In fact, we can say that it already has, given that the elimination of recordar meaning ‘to wake’ is still in progress there. Additionally, we can propose that levantar is likely to undergo similar changes in other Spanish-speaking communities. Furthermore, based on the pattern found here, we can expect that in this Argentinean community, levantar will be eliminated from the field in the same way as recordar and despabilan, and that it is not unlikely that a later generation will adopt a new near-synonym for despertar starting with a metonymical connection made between ‘to wake’ and another conceptual entity. We can also expect that in the event of such changes, the key to uncovering the cognitive mechanisms involved will be to consider the prototypical contexts for the concepts involved. The implications for the study of semantic change are extremely promising because the evidence here suggests the existence of regular cognitive patterns that reveal valuable information about the mind and how it processes language, which, in turn, will lead to a better understanding of parallel developments that linguists have been aware of but unable to explain for centuries.

7 I am fully aware that such a claim requires more (especially quantifiable) evidence than has been offered here, but wish to remind the reader that the focus of this particular paper is on the methodology and its implications. All evidence alluded to here is quantifiable and the quantitative results will be presented in a later volume.

8 The italics are in the original source cited.
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