Lexical Polysemy: Lexicographic Implications*

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Abstract

This paper intends to show the importance of having linguistic instruments, principally semantic ones, for determining the meaning of words with the greatest precision and, consequently, managing to meticulously establish the different meanings of a dictionary's entry words. As an example, a new definition of the Spanish verb *mezclar* ('to mix') will be proposed.

1 The Negation of Meaning

Some authors, in the domain of semantics or lexicography, maintain that it is impossible to determine lexical meaning and that, as a consequence, the attempt by some researchers to establish a relationship between different word meanings and the lexicographic concept of "sense" is vain because it is unattainable. This drives them, in general, to renounce the search for objective criteria (linguistic tests) for separating sense from subsense and to justify intuition in lexicographic work, so in the end, the classification of word usage is arbitrary, and becomes a question of personal taste. While some prefer the reduction of the number of meanings in dictionaries, others feel a special predilection for increasing them, making subtle distinctions according to context.¹ Now then, although the result is the same (the rejection of the possibility of taking into account different word meanings), their positions do not always emerge from the same assumption nor turn out to be constructive to the same extent. In general, these positions can be grouped into two large blocks.

The first, probably the most radical block, considers the lexical meaning to be unique and, therefore, only one generic meaning would correspond to each word, and from that meaning, a series of uses conventionally established by the speakers would be derived. This is the theory advocated, for example, by Trujillo (1988: 77–90), who, after affirming its intuitive-ness, reasoned that lexicographers and certain semanticists were confusing meaning with use. What normally are considered senses or meanings are no more than a part of the uses of one invariable meaning. This way the meaning of a word is, rather, a sort of "semantic orientation" that encompasses not only established (both literal and figurative) and unestablished (individual literary or scholastic creations) uses existing currently, but also those that can be generated in the future. What Trujillo proposes then is a complete meaning that adopts

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¹ Kilgarriff (2008: 143), for example, says: "Firstly, any working lexicographer is well aware that, every day, they are making decisions on whether to 'lump' or 'split' senses that are inevitably subjective: frequently, the alternative decision would have been equally valid." Also Hanks (2008: 127), indicates: "There is no single correct answer to such questions. The answer is determined rather by the user's intended application, or is a matter of taste. Theoretical semanticists may be more troubled than language users by a desire for clear semantic hierarchies. For such reasons, lexicographers are sometimes classified into 'lumpers' and 'splitters': those who prefer – or rather, who are constrained by marketing considerations – to lump uses together in a single sense, and those who isolate fine distinctions."

different contents depending on the context. The word *dulce* 'sweet', for example, means the same thing in the following sentences:

Juan es muy dulce.	'John is very sweet.'
El café está muy dulce.	'The coffee is very sweet.'
Una dulce tarde de melancolía.	'A sweet evening of melancholy.'
Oyeron unos dulces cañonazos.	'They heard some sweet cannon fire.'

According to him, this does not imply that the dictionary should not record different uses of words; on the contrary, it should record all of them as "particular applications" of the generic semantic orientation that unites them. From a practical standpoint, this led him to propose a new dictionary model that first gives an "intuitive brush stroke" of the actual meaning of the word, in order to then explain, splitting from it, the different established and unestablished uses. So, the word *sangre* 'blood' can be defined, according to Trujillo (1994), as "life essence and key to its greatness, strength, vigor, intensity, etc.", accompanied by examples from general language and from literary language; then established uses are collected (that, according to him, are the traditional senses from the dictionaries):

1. Se aplica comúnmente al humor que circula por ciertos vasos del cuerpo de los animales vertebrados, porque su existencia es esencial para la vida. [...] 2. Se ha hablado de "limpieza de sangre" dándole el sentido de "esencia limpia o legítima" en oposición a lo que se suponía que era religiosamente espurio. [...]² 4. Linaje o parentesco. [...] 5. Y, de igual manera, se refieren al mismo significado las muchas expresiones fijadas, como "arderle a uno la sangre" o "tener la sangre fría" [...].

'1. Commonly applied to the bodily fluid that circulates through certain vessels of the bodies of vertebrate animals, because its existence is essential to life. [...] 2. "purity of blood" has been spoken of in the sense of "pure or true essence" as opposed to what was assumed to be religiously spurious. [...] 4. Heritage or kinship. [...] 5. And, in the same way, many figures of speech refer to the same meaning, like "to make one's blood boil" or "to be cold-blooded" [...].

We should break from the idea that a semantic orientation which supposedly explains the different uses of the word assumes an abstraction not very different from the one undertaken by lexicographers; like these, this kind of semantic orientation splits from the occurrences of a corpus, although it deals with a much broader corpus: a corpus that everything fits into, from the established uses to the more ephemeral creations. The meaning would be formed by common features of all the occurrences, as scarce as these may be.³ This idea, that can seem attractive at first glance, poses various problems.

From a purely synchronic point of view, the case of homonymy shows us the difficulty in maintaining only one meaning against all odds, especially in languages in which the etymologies are unknown. In Sm'algyax the sign *lbuun*, for example, has two interpretations: 'whale' and 'quantity', for which, using a strong imagination, it is possible to establish a hypothetical semantic relationship, based on the fact that whales are used for food for the Tsimshian people. But as such a relationship cannot be tested and speakers do not report any sense that the words are related, it is impossible to determine if, in reality, we are faced with only one polysemous linguistic sign or with two different ones.⁴ Even in those languages in which word origin is traceable, the peculiarities of certain meanings make the connection seem too

² Meaning number 3 also lacks in the original text from Trujillo (1994).

³ Expanding the degree of abstraction to which I am referring, the old Historical Dictionary of the Spanish Language (DH), had already created the so-called "semantic branches" to deal with grouping the senses of some broad spectrum verbs, like *aderezar*, into more manageable blocks. See Rafael García Pérez (2003–2004) on interest in this issue.

⁴ I take the example from Stebbins (2004), that translated the term as 'whale' and 'plenty'.

subtle and even irrelevant. If the dictionaries are right and at least two "uses" of the Spanish noun *banco* 'bank' coexist in the present-day language, defined as 'seat, with or without a back, on which many people can sit' and 'public establishment of credit, set up as a corporation'⁵, no one will doubt that two different uses are involved (two antagonistic meanings), but it will be more difficult to accept a common semantic orientation even if it exists.⁶

From a diachronic point of view, this exercise of looking for a single semantic basis for each term distorts the real relationship between form and content and, especially, the process of logic that the speakers have followed to formulate word meanings. Do we call "blood" 'the bodily fluid that circulates through certain body vessels of vertebrates' because this word truly means, ex origine, 'life essence and key to greatness, etc.'? It seems, at least, surprising. This reverse vision of the history of words, that Trujillo recognized (1994: 90), ends up being forced and carries some excesses that, paradoxically, contradict even the very idea that such a "source-meaning" exists. Can a resort to the metaphorical use *luna de sangre* 'blood moon', in a markedly literary text, as in this paragraph from the novel, *Hijo del hombre* 'Son of Man' by Augusto Roa Bastos, be explained in a convincing way thanks to the generic meaning 'life essence and the key to its greatness, strength, vigor, intensity, etc.'? Wouldn't it simply be more related to the color red, typical of the 'bodily fluid that circulates through vessels in the bodies of vertebrates'?

Lo cierto era que la guerra al fin le había mudado de piel como el verano a las víboras, justo cuando la luna de sangre se levantaba cachorra sobre el horizonte del Chaco.

'The truth was that the war finally had shed his skin like summer to snakes, just when the moon of blood was rising "like a young cub" over the horizon of Chaco.'

On the other hand, one should ask, in that idea of joining "all the uses of one sign" (Trujillo 1994: 76), whether past uses would have to be included, especially those that have already disappeared. Does a unique meaning exist for verbs that have suffered profound semantic changes, like *aburrir* 'bore', that until the fifteenth century, at least, was a synonym of *aborrecer* 'loathe' – so it behaved like a loyal heir of its Latin root *abhorrere* – and later, breaking with its origins, has come to be used with the idea of 'to bother, to tire or make tired'⁷?

The excessive nature of the proposal is also evident in the impossibility of establishing general semantic orientations for certain words of recent creation that still have not abandoned the purely referential state and have not evolved in any direction. This is the case with the noun *ipod*, used more and more by some of us in our everyday lives. What would the semantic orientation capable of generating its current "use" as 'digital music player with a color screen and hard disc' and other supposed "uses", not yet in existence but possible, be? In reality, there is no such semantic orientation. The theory of radical monosemy like the one proposed by Ramón Trujillo, implicitly comes from an erroneous idea: that words represent a hidden, generic, and, above all, invariable meaning.

The second theory is, perhaps, the least extravagant. It is based on the idea that meaning becomes specified by use and that words, therefore, only have meaning in a definite context. As in the case of the theory that I have dubbed "radical monosemy," its supporters seem obliged to uphold the intuitive nature of meaning that, according to them, as also claimed by the previous ones, does not permit delimitation nor description in an objective fashion. Some works, like that of Hanks (2008), despite their recentness and more or less flashy titles,

⁵ Senses 1 and 6 from the DRAE (2001).

⁶ In fact, if the connection exists, it has, curiously, a historical explanation. Except for those interested in etymology and semantic issues, very few current speakers are conscious of it.

⁷ Corominas/Pascual (1980–1991).

continue to completely ignore linguistic tests that semanticists have been proposing to try and establish more objective criteria for determining meaning (see, for example, Cruse 2004: 103– 120 on this issue⁸). In that sense, it cannot be said that they constitute a true threat to the defenders of the idea that meaning exists and can be described.

Other authors, on the contrary, have had to bear in mind the difficulty of presuming to defend pure intuition while their detractors continued to arm themselves with linguistic arguments. Consequently, they have tried to deny the validity of the tests as a preliminary step toward the ratification of their position. This is the case, for example, with Kilgarriff (2008), who asserted that there is no well-established set of lexical meanings that is appropriate for all cases, but instead there are different meanings for different bodies and different objects. The critiques of the semantic tests, nevertheless, are not new and, in general, come from misapplication or from an abusive generalization of certain restrictions.

Geeraerts (1993) had already tried to plant seeds of doubt with respect to some of them. His examples "to the contrary" tried to demonstrate that the tests could not help us in determining meaning, because they often result in contradictions. That is what happens, according to him, with the noun *olive*, when the logic and linguistic tests are applied.⁹

- 1) Daddy, is an olive a fruit? –Well it is and it is not.
- 2) An orange is a fruit and so is an olive.

Upon posing this example, Geeraerts commits a base error, since he confuses the meaning of the noun *olive* with the fact that its concrete reference, an entity of the physical world, belongs

⁸ As Cruse has stated, there are four direct tests for discreteness and another one for ambiguity, as the readings of an indisputably ambiguous word must display another property besides discreteness. The four criteria for discreteness we should take into account are the following: a) The identity test, which is based on the so called identity constraint. This means that once we have decided on a reading for an ambiguous word, we must stick with it, at least with subsequent anaphoric back-references. In the sentence John is wearing a light coat; so is Jane, the same reading of light must be selected in each part: either both ladies are wearing "undark" coats, or both are wearing "unheavy" coats. This does not happen when we deal with a non ambiguous word, like, for example, child in Mary has adopted a child; so has Sue. In this sentence, there is no requirement that the two children should be of the same sex. b) Independent truth conditions. Two readings have independent truth conditional properties if we can imagine a context in which a yes/no question containing the relevant word can be answered truthfully with both yes and no. For instance: Were you wearing a light coat? -Yes I was wearing my pale green winter coat/No I was wearing my thick winter coat. Again there are no conceivable circumstances in which someone could truthfully answer both yes and no to a question like Is it true that you have adopted a child? c) Independent sense relations. Two readings of an ambiguous word have genuinely independent sets of sense relations: light has distinct opposites, dark and heavy. d) Autonomy. This refers to the possibility of using a word form in one of the senses when the other is explicitly denied or ruled out by reason of anomaly, or some such. The word dog has the readings 'canine species' and 'male of canine species'. In the sentence I prefer dogs to bitches, the general sense is ruled out on the grounds of semantic anomaly. Finally, we must consider the last test, the test for ambiguity. This test is antagonism. A sentence which calls for two discrete and antagonistic readings to be activated at the same time will give rise to the phenomenon of zeugma or punning, as in John and his driving licence expired last Thursday.

⁹ The logic test had been defined by Quine (1960) and is based on the idea that the affirmation and negation of a word can only be done if two different meanings are opposed. A sentence like *It's a bank* (land at river edge) *but it's not a bank* (financial institution) is not semantically unacceptable, but this sentence is: *I have an aunt* (father's sister) *but I do not have an aunt* (mother's sister). *Bank*, in English would be a polysemic word, but not *aunt*. The linguistic test the author deals with here is based on the idea that anaphoric structures can only reference a meaning that has been used previously with the word in a way that doesn't allow cross-reading, as I have summarized in footnote 9. Therefore, in the sentence *John went to the bank; so did Bill*, the second part is interpreted in the same sense as the first. It would be acceptable as *John went to the bank* (financial institution); *so did Bill* (financial institution), but not as *John went to the bank* (financial institution); *so did Bill* (land at river edge). Compare with *I have an aunt* (father's sister); *so has Jane* (mother's sister), where the cross-reading is possible since it does not deal with a polysemic unit. For a complete analysis of the most useful tests from the semantic point of view, cf. Cruse (1982 and 2004).

to a specific class. If the result is unsatisfactory, it is due to the fact that the tests, applied in this way, are not acting semantically (that is, the meaning of the word is not in cause here).

The attempt to find contexts in which the distinct meanings of words can be interpreted jointly (to negate their antagonism precisely) also leads to excesses in the manipulation of the tests. Geeraerts deduces in the following example that the tests do not always justify the polysemy of the noun *bank* in English:

Daddy, what exactly do you call a bank: the place where we moor the boat or the place where I bring my savings? –Well, son, the place where we moor the boat is a bank, but so is the place where you bring your savings.

The example breaks the opposition between the supposed meanings of the noun by dealing, in the background, with a purely metalinguistic reference. What it is really saying (and this is derived from the initial question, that directs the whole meaning of the paragraph) is that the lexical form *bank* designates as much a type of land at the edge of a river as a financial institution; that is to say, that as a sign it has two meanings in the abstract, which implies that, in the background, these have not been activated.

More ingenious, though equally unfortunate, is the attempt to create a situation in which, at the simultaneous occurrence of the references in one unit, the negation of the noun does not assume the obligatory selection of one meaning over another.¹⁰ This is the case, in the following example when, as the author points out, the financial institution is on the land situated at the edge of the river:

They did not reach the bank in time.

The abusiveness of these examples only proves the rule. But, if I am interested in highlighting them here, it is because it helps us to put forth a fundamental fact for understanding the criteria for determining meaning: to be applied effectively the tests require the acceptance of some premises. In general, there are some limits, that is to say, certain rather systematic restrictions. Deane (1988), for example, has pointed out that comparative contexts distort linguistic tests, because it forces the search for elements that permit that comparison and considers all the differences irrelevant.¹¹ This alerts us against the use of the test in that particular context, but it doesn't invalidate it. If the wheels of a car don't guaranty good traction in rainy or snowy weather, they don't stop being useful for that reason in dry weather. Reason tells us that knowing all the restrictions and how to get around them avoids, precisely, risks of error and allows us to not totally give up the voyage.

Like Geeraerts, Kilgariff (2008) uses some restrictions, that in many cases he doesn't thoroughly examine, in order to attack the suitability of these tests in their totality. The fact that some syntax restrictions exist, for example, serves to negate the possibility of determining objectively if there are two meanings or only one of the verb *eat*, understood in its intransitive or transitive variant. Therefore, the result is an application of the linguistic tests that is so exaggerated that it is almost aberrant:

*Mary ate, and John, the apple.

Posed in that way, of course, it seems evident that the syntactical differences between the two variants prevent all logical construction. Nevertheless, what a normal speaker would have constructed, at least in Spanish, would be a sentence like the following, that demonstrates that, in spite of syntactical differences, the variants share the same meaning (using the Spanish verb *beber* 'drink' in this case):

¹⁰ In this manner one tries to attack the logic test for which an example like *They did not reach the bank* would be true and false at the same time (depending on the meaning that we give the noun).

¹¹ Think, for example, about Spanish jokes of the type ¿En qué se parece...?

¿Qué está haciendo Juan? – Tiene calor y está bebiendo; María, en la cocina, también: un vaso de leche.

lit.: 'What is John doing? -He's hot so he's drinking; Mary, too, a glass of milk, in the kitchen.'

As I have pointed out above, the existence of restrictions should make us simply avoid inappropriate contexts, not simply reject the validity of the tests. In Spanish, for example, we know that the existence of the preposition a before a human direct object can produce interferences and block the coordination test. This happens if we coordinate a human object and a thing with the verb *derribar*¹² 'knock down':

**El viento derribó a Juan y el árbol.* lit.: 'The wind knocked down John and the tree.'

However, since we know that the problem is syntax and not semantics, it seems reasonable to search for a context in which such interference is not produced, instead of happily announcing the idea that, when in doubt about possible meanings connected to human objects and things, the tests are inapplicable:

Aquel viento tan fuerte derribó personas, árboles e incluso tapias. lit.: 'That strong wind knocked down people, trees and even walls.'

Kilgarriff also abuses the aspectual restriction which makes the coordination between two distinct uses of a verb when its aspectual interpretations are not identical confusing. To show its generic character, he uses an example with two different verbs interpreted as an achievement and a state:

?? I evicted and knew her.

Again the author rushes to extend the restriction to all variants of linguistic tests and to all predicative forms. In fact, a more carefully thought-out application shows us that the tests can help us enormously in distinguishing those predicates that present a single meaning and permit aspectual modulations in context from those with two meanings that correspond to two different aspectual uses simultaneously. In Spanish, for example, a predicate noun like *cerco* 'circle' has two aspectual interpretations¹³: one as action (*En un instante, formaron un cerco en torno al Rey* 'In an instant, they formed a circle around the king' and another as a state (*César mantuvo el cerco durante tres largos años* 'Cesar maintained the circle for three long years'). In this case, we find ourselves faced with the same meaning ('position around something'), that is contextually modulated thanks to the supporting verbs – *formar* 'form' (action) and *mantener* 'maintain' (state) – and to the adverbials of time, as it shows the possibility that a relative pronoun anaphorically references that meaning even when the aspectual differences are explicitly defined:

Durante quince minutos mantuvieron el cerco que habían formado en torno a ella. 'For fifteen minutes they maintained the circle that they had formed around her.'

It is not surprising that for a verb like *cercar* 'circle', that also has two aspectual interpretations: action (*En un instante, César cercó la ciudad* 'In an instant, Cesar circled the city') and state (*La verja/César cercaba la ciudad* 'The gate/Cesar was circling the city' and also *La verja/César cercó la ciudad durante muchos años* 'The gate/Cesar circled the city for many years'), the anaphoric reference to the unique meaning by the verb *hacer* 'do' in spite of the aspectual change is acceptable or, at least, not impossible:

¹² See García Pérez (2007–2008).

¹³ For these questions about aspect, see De Miguel (1999).

En un instante, César cercó la ciudad, y lo hizo durante tres largos años, hasta que los defensores recibieron el auxilio de sus aliados y rompieron el cerco.¹⁴

'In an instant, Cesar circled the city, and he did it for three long years, until the defenders received the help of their allies and broke the circle.'

These anaphoric references, nevertheless, remain completely blocked when the difference is more than purely aspectual. The two interpretations of the Spanish noun *experiencia* entail a change of the meaning that prevents reference to the lexical form if both are activated in the same sentence (the variant of the state would carry the idea of 'experience' and that of action, the idea of 'experiment'):

Juan hizo una experiencia con los animales. lit. 'John did an experience with animals', (i. e. John did an experiment with animals).

Juan tiene experiencia con los animales. lit. 'John has experience with animals', (i. e. John has some experience with animals).

**Juan tuvo la experiencia que había hecho con los animals.* lit. 'John had the experience that he had done with the animals'.

**Juan hizo la experiencia que había tenido con los animales.* lit. 'John did the experience that he had had with the animals'; etc.

From a verbal perspective, compare the Spanish verb *cercar* 'circle' with the Spanish verb *amar* 'love', that has a stative interpretation ('have love') and another of action ('to perform a sexual act') which are contradictory in speech; that is to say, it deals with real differences in meaning, not simply contextual modulations.

???? En aquel momento, Juan y María se amaron [to perform a sexual act]¹⁵ como locos en el piso del corredor. Lo hicieron [idea of 'have love'] durante muchos años, hasta que un día se sintieron lejos el uno del otro.

As we see here, as opposed to what happened above, where the anaphoric reference of *cerco* 'circle' with the verb *hacer* 'do' allows a cross-reading of the proposed meanings 'to go around something' and 'to surround something', in this last example a cross-reading is impossible.

To finish with respect to the linguistic tests, it is worth pointing out that Kilgarriff's last charge against them suffers from the same problems of the previous ones, although it ends up being less interesting for its rather arbitrary generalizations. This author maintains that the linguistic tests do not provide stable results, since many speakers can have divergent opinions with respect to their relevance. What is certain is that the existence of words for which the

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¹⁴ On the Internet, mainly in specific blogs, that are a source of living language, I find quite a few examples. The following phrases present two aspectual variants of the verb desaparacer: Terminó la canción y Kotipelto dio las gracias al público, recibiendo una ovación con gritos a coro de "¡Kotipelto, Kotipelto!" De repente... ¿Dónde está el jefe Tolkki? Había desaparecido de escena, y lo hizo durante unos tres minutos; lit. 'The song ended and Kotipelto thanked the audience, receiving an ovation with shouts in chorus of "Kotipelto, Kotipelto!" Suddenly [...] Where is Chief Tolkki? He had disappeared from the scene, and he did it for three minutes' (http://www.rafabasa.com/modules.php?name=News&file=print&sid=1359). This other one, taken from the digital press, turns out to be of special interest: Los comisarios ondearon la bandera roja indicando que la sesión se paraba, y lo hizo durante 17 minutos; lit. 'The officials waved the red flag indicating that the session was over, and it did it for 17 minutes' (http://www.hoy.es/prensa/20070610/deportes/optimista-caralograr-victoria_20070610.html). The purely aspectual nature of the difference allows for even more extreme cases, like the anaphoric reference of the meaning of the predicate structure en pie (stand up): El animal, agonizando, intentó ponerse en pie. Y lo hizo durante unos instantes; lit. 'The animal, agonizing, tried to stand up. And he did it for some moments' (http://www.geocities.com/gazapon/pages/pedro.htm). That it involves mostly informal or colloquial texts doesn't change anything: the interesting thing is confirming that for the speakers the aspectual differences are not on the same level as the semantic differences.

¹⁵ In the examples that illustrate the application of the tests, I use brackets to make the semantic interpretations clear.

informants show a very high degree of agreement, separating some supposed meanings, while uniting others, seems to be enough to question this statement unequivocally. Naturally, I would be the last to say that there are no difficulties when trying to discern between polysemy and monosemy: if there are it's because the lexicon is not a bipolar reality. Cruse (2004: 112– 118) has already shown how between these two concepts, in the strictest sense, an intermediate series of cases occur that should be taken into account. The discovery of these cases is not, therefore, necessarily a negative fact. Thanks to the distinct degrees to which the linguistic tests can diverge when applied to certain problematic words, it has been possible to make a semantic classification with important reercussions, we hope, for lexicography.

At this point it seems clear that the theory of the intuitive nature of semantic description does not hold up. If linguistics provides us with the keys for discovering lexical meaning, this is not, after all, as dependent on lexicographic objectives nor on the corpus as the defenders of the "the meaning is the use" theory believe. From this perspective, it remains perfectly clear that the supposed meaning 'handbag as weapon' of the noun (*handbag*), to which Kilgarriff refers in his article (for criticizing the habitual decision of lexicographers to exclude it from dictionaries), is not autonomous, even when it forms part of the connotations of the general meaning of the word. It seems logical, contrarily to what he implies, that it is not entered as a meaning in a dictionary. To the contrary, *handbag* as the name of a new type of music – especially from the moment it acquires a significant degree of lexicalization – constitutes a new meaning (as the linguistic tests demonstrate, which I don't think it is necessary to apply here), that is independent of what a lexicographer decides to include or not include for editorial reasons, space, profile of the potential user of the work, etc., in a new dictionary. In that sense, it's best to not confuse semantics with specific lexicographic decisions.

2 Meaning Distinction: Lexicographic Application

If lexical semantics helps us to distinguish meanings, as I will have the opportunity to prove shortly, that is due to the speakers of the language. Although they are not always conscious of it to the same extent, they have integrated them in their mental lexicon and, in one way or another, end up showing it in the relationships that they establish with words.¹⁶ But, in order for the speakers to integrate these prototypical meanings – together with the rules that permit the creation of other new ones, more related to context and, therefore, not always expected – these meanings must satisfy at least three conditions: a) be autonomous; b) be antagonistic and c) be truly established¹⁷. The combination of the three – and only the three jointly – will allow us to decide that the Spanish noun *banco*, for example, has two meanings, 'seat' and 'financial institution', but not *pizza*, at least in b) in the following cases¹⁸, where the word is used with a meaning other than its default reading (Cruse 2004: 106):

- a) *Juan comió una pizza*. 'John ate the pizza.'
- b) La pizza se ha ido sin pagar (entre camareros, en un restaurante). 'The pizza has left without paying (between waiters in a restaurant).'

Precisely, the semantic tests try to determine when these three requirements are met and when they are not. Therefore, they take into account the normal and anomalous relationships, that

¹⁶ Cruse (1986: 16).

¹⁷ Cruse (2004: 104–112). In Croft/Cruse (2004: 109) the possibility of separating the different meanings of a word is also defended, but from a new semantic perspective: the so-called "dynamic construction of meaning" that implies accepting some premises, like the fact that those meanings are not considered a property of the lexical signs so much as an object of a definite construction in speech.

¹⁸ Naturally, the first two are satisfied, but not the third. The idea of "establishment" is fundamental for Lexicography.

can be established among words. As already shown above, these tests are not as confusing as some think, and it has also been mentioned that, thanks to them, we can distinguish with a high degree of reliability what the speakers have been storing, often without being conscious of it, in their mental lexicon.

In this sense, the application of the semantic tests to lexicography becomes fundamental for stopping incoherences¹⁹ in the presentation of meanings, as much from an internal point of view (words that are found in identical situations) as external (the same word in distinct dictionaries). Next, then, I will try to show how we can make use of them for establishing, in a more objective and reliable way, senses and subsenses in dictionary entries²⁰. I will especially focus on verbs, one of the most complex grammatical categories, and, therefore, I'm using the Spanish verb *mezclar* 'mix' as a model.

2.1 *Mezclar* in some Spanish dictionaries

For this study I have selected three dictionaries that are very similar with respect to size and objectives: The *Diccionario Salamanca de la lengua española* (DiSal); The *Diccionario esencial Santillana de la lengua española* (DES) and The *Diccionario de la lengua española* (*secundaria*) (DLES)²¹.

The first defines *mezclar* in the following way:

mezclar v. tr. **1** Juntar «una persona» [varias cosas] para que sus partes queden unas entre otras: No mezcles el vino, que se estropea. **2** Revolver «una persona» [cosas que estaban ordenadas]: No mezcles las fichas porque están por orden alfabético. // v. tr. prnl. **3** Juntar «una persona» [personas o cosas] de forma que no puedan distinguirse unas de otras: En el recreo se mezclan los alumnos de varios cursos. // **4** Comprometer «una persona» [a otra persona] en [un asunto]: Me mezclé en su negocio al principio, pero no sabía que era ilegal. // v. prnl. **5** Relacionarse «una persona» con [determinadas personas]: Es peligroso mezclarse con tipos como esos. **6** Juntarse «personas o cosas» de forma que no puedan distinguirse entre [otras personas o cosas]: Nos mezclamos con la muchedumbre en la manifestación. Se han caído y se han mezclado todos los sellos. **7** Enlazarse «familias o linajes» unos con otros: Los aristócratas no se mezclan con cualquiera. FR. Y LOC. – churras con merinas.

The Diccionario esencial Santillana does it like this:

mezclar (del lat.vulg, misculare, y éste del lat. miscere) v tr. 1. Juntar varias cosas para que sus partes queden unas entre otras. También v. prnl. 2. Juntar, confundir: mezclar intereses. También v. prnl: En el recreo se mezclan los alumnos de varios cursos. 3. Desordenar lo que estaba ordenado: Ha mezclado los libros de la estantería y ahora no se puede encontrar ninguno. 4. Meter a alguien en algún asunto que no le importa o que puede traerle malas consecuencias: Deseo que no me mezcléis en vuestra discusión. También v. prnl. // mezclarse v prnl. 5. Relacionarse con determinada clase de gente: Le gusta mezclarse con los artistas. 6. Confundirse entre la gente: Se mezcló con la muchedumbre en la manifestación. 7. Referido a familias o linajes, enlazarse unos con otros. SIN. 1. Combinar. 1. y 2. Entremezclar. 3. Embarullar, liar. 4. Involucrar(se). ANT. 1. y 2. Separar(se), desunir(se). FAM. Mezcla, mezclamente, mezclador, mezcolanza / Entremezclar, mescolanza, miscible, mixto.

¹⁹ Coherence has already been referred to, a while ago, as the beginning minimum rule of lexicography. Pascual (1996).

²⁰ These issues, although applied to a historical dictionary, have also been dealt with by García Pérez (2007a, 2007–2008 and in press).

²¹ All are scholastic dictionaries or, at least, are geared toward junior high school students or students of Spanish as a foreign language.

On its behalf, the Diccionario de la lengua española (secundaria) Vox, offers us the following definitions:

mezclar v tr. / prnl. **1** Juntar o unir varias cosas distintas para que formen un todo: bata los huevos y mézclelos con la harina; el bodeguero mezclaba vino y agua; el pintor no ha mezclado bien los colores. **2** Alterar mediante su manipulación el orden de algo que estaba ordenado: deja de tocar mis papeles, los estás mezclando; no me mezcles las fotos. **3** Juntar o reunir personas o cosas distintas: en su fiesta mezcló a intelectuales y artistas. **4** En cinematografía, unir varias imágenes, sonidos y música: en el laboratorio se mezclan los fotogramas de la película con los efectos especiales. **5** Meter a una persona en un asunto que no le incumbe o que puede traerle problemas: mezcló a su familia en sus negocios sucios y ahora están todos en la cárcel; no te mezcles en este asunto si quieres evitarte problemas. **SIN.** involucrar. // v. pronl. **6 mezclarse** Introducirse o meterse entre la gente: el cantante se mezcló entre el público para pasar desapercibido. **7** Tener relación o trato: sus padres le prohibieron mezclarse con los otros chicos del barrio.

DER mezcla, entremezclar.

ETIM. *Mezclar* procede del latín *miscere*, que tenía el mismo significado, voz con la que también está relacionada *promiscuo*.

Our first impression of this is, without a doubt, surprise. How is it possible that the same word can be defined in ways so different depending on the dictionary that assigns it? We have already seen that the answer is simple, though not glorious: the lexicographers act according to their personal intuition. But the intuition gets carried away with aspects that do not always have anything to do with the real meaning of the words. One of them (García 2007b) is the influence of the purely contextual. That is the way, for example, the DiSal separates meanings 1 and 2 because, for the lexicographer, the fact that a physical object is organized according to a predetermined order (like reference cards, photos, letters, etc.) or has a more chaotic distribution (particles of wine) is enough to alter the meaning of the verb that selects the corresponding nouns. But curiously, for speakers, an accessory element is involved, since they could coordinate the two types of nouns without any problem, and make one cross-reading for the two supposed meanings:

1) *¡Este chico! Primero mezcló el vino de las dos botellas que nos regalaron; ahora, las fotos de nuestra boda. ¿Te parece normal?*

'This boy! First he mixed the wine from the two bottles that they gave us; now, the photos of our wedding. Does that seem normal to you?'

It's evident that in the mind of the lexicographer the grammatical difference between continuous and discontinuous nouns was also present. Specifically, grammar is a mechanism that is used a lot in the separation of meanings, but can turn out to be enormously tricky. Meanings 2 and 3 of the DLES are differentiated by the presence or absence of the preposition and multiple objects. An example like *El profesor mezcló a los alumnos* 'The teacher mixed the pupils'²² can be coordinated as much with the examples from supposed meaning 2 as from 3, but for the differentiation we stop interpreting the sentence in the same way, which demonstrates that there is no antagonism between them:

2) Juan mezcló a los alumnos y alumnas de su grupo; en la fiesta, a intelectuales y artistas.

'John mixed up the male and female pupils from his group, and at the party, intellectuals and artists.'

No mezcles las fotos. –Tampoco tú a los alumnos.
'Don't mix the photos. –The pupils neither.'

²² As I have demonstrated in XXX, El profesor mezcló a los alumnos y Los alumnos se mezclaron form part of the same meaning. I will not detail, then, this issue in this work.

It is also understood, then, that meanings 2 and 3 of the DiSal and the DES are, in reality, the same. However, upon seeing the definitions and corresponding examples of meanings 1 and 2 of the DLES, one should ask if we can interpret that there are two distinct meanings taking into account the idea that things that are joined can or cannot form a homogeneous whole.²³ The response is negative, as deduced from the absence of zeugma in a sentence like 4 or from the possibility of creating cross-readings with the two supposed meanings in 5 and 6. Both meanings, then, would not be antagonistic:

4) Juan mezcló el vino; Pedro, el agua con el aceite; María, los manuales y las enciclopedias; Luisa, los papeles de su madre.

'John mixed the wine; Peter, the water with the oil; Maria, manuals and encyclopedias; Louisa, her mother's papers.'

5) Si quieres, yo mezclo los colores en la paleta; tú, las naranjas y las manzanas en el frutero. Así empezaré antes el bodegón.

'If you want, I'll mix the colors on the pallet; you, the oranges and apples in the fruit bowl. That's how I will start painting the still-life sooner.'

6) ¿Te sientes mal? Es por haber mezclado la cerveza con esa gaseosa tan mala o el vino con el champán?

'Do you feel bad? Is it for having mixed the beer with that really bad soda or the wine with the champagne?'

Meaning 6 from the three dictionaries splits from a pronominal use that is not such;²⁴ in reality, it could involve a pronominal agentive variant of the basic transitive form of the Spanish verb *mezclar*, that can also select the prepositions *con* 'with' and *entre* 'in with' + plural or collective human object, although the first is, without a doubt, more frequent. Thus it can be noted, for example, in the following sentences²⁵:

7) Por la noche los mezclaron con otros rehenes en la cuadra de la Capaniera (\rightarrow Estas personas se mezclaron con otros rehenes en la cuadra de la Capaniera).

'During the night they mixed them with other hostages in the stable of the Capaniera (\rightarrow These people were mixed with other hostages in the stable of the Capaniera).'

8) Son gente especial, de otra pasta. Creo que unos extratarrestes llegaron, y los mezclaron entre nosotros como experimento (→ Estas personas se mezclaron entre nosotros como experimento).

'They are special people, cut from a different cloth. I think some extraterrestrials arrived and mixed them in with us as an experiment. (\rightarrow These people were mixed in with us as an experiment).'

The idea of being in a group of people does not change the meaning of the verb. If we study the issue a little deeper, we realize that, despite the examples from the dictionary, the Spanish preposition *entre* ('in with') is not only used with plural or collective human objects, but also a broader group of things in the plural form or of collective nouns. Nor is it necessary, on the other hand, for an agentive subject to be present (*Juan mezcló las fotos entre los papeles* \rightarrow *Las fotos se mezclaron entre los papeles o Juan mezcló la foto entre los papeles* \rightarrow *La foto se mezcló entre los papeles*; 'John mixed the photos in with the papers' \rightarrow 'The photos were

²³ With an express definition in this sense, is the solution arrived at by, for example, the Diccionario del estudiante. See Real Academia Española (2005).

²⁴ In the case of DiSal the second example of this meaning makes the separation with respect to number 2 incomprehensible.

²⁵ The two sentences are real. The first comes from the web page www.mamamargarita2006.com/Comini and the second from the blog www.fotolog.com/eis_eis_baby/33805238. The transformations in parenthesis are mine.

mixed in with the papers or John mixed the photo in with the papers' \rightarrow 'The photo was mixed in with the papers'). In that sense, it appears logical, that there are no problems of coordination between the previous supposed meanings and this last one:

- 9) Las fotos se mezclaron entre los papeles; tus monedas, entre la ropa. 'The photos were mixed in with the papers; your coins, in with the clothes.'
- 10) Las monedas rodaron y se mezclaron entre los juguetes; mis hijos, entre los invitados.²⁶ 'The coins rolled and mixed in with the toys; my children, with the guests.'

The equivalence between the prepositions con ('with') and $entre^{27}$ (in with) can be noted in the sentences 11 and 12. In the first, both are interchangeable without changing the orientation of the verb; in the second, it is confirmed that one preposition cannot be rejected and the other affirmed, because there is no semantic difference that justifies such an operation:

- 11) Los alumnos de primero se mezclaron entre el gentío, no con los manifestantes. 'The first grade students mixed in with the crowd, and not with the demonstrators.'
- 12) ¿Se mezcló Juan con la muchedumbre?
 - a) Sí, se mezcló con la muchedumbre.
 - b) *No, se mezcló entre la muchedumbre.

'Did John mix with the crowd?'

- a) 'Yes, he mixed with the crowd.'
- b) 'No, he mixed in with the crowd.'

The example of supposed meaning 4 of the DLES is very poorly selected, since with that composition it is no more than a variant of the basic meaning:

13) Juan mezcló el vino con el agua; Pedro, los fotogramas de la película con los efectos especiales.

'John mixed the wine with the water; Peter, the film clips with the special effects.'

The meaning of 'to have a relationship or dealings with someone', with which the three works are in agreement, is different, once evaluated by examples like the following:

14) (¿?) El preso huyó y se mezcló con el gentío; mi hija, con gente poco recomendable. // (¿?) Los alumnos de primero se mezclaron con los de segundo en un aula; mi hija, con los asesinos de su hermano.

'The prisoner fled and mixed with the crowd; my daughter, with questionable people. // The first grade students mixed with the second grade ones in a classroom; my daughter with her brother's killers.

15) **El preso huyó y se mezcló entre el gentío; mi hija, con gente poco recomendable.* 'The prisoner fled and mixed in with the crowd; my daughter, with questionable people.'

The surprising impression of 14) comes from the fact that in the second part of the sentences the verb *mezclar* ('mix') is clearly interpreted in the sense of 'having a relationship with', while

²⁶ The agentive character of the sentences with human subjects can make the coordination with clearly non-agentive subjects difficult. Since a generic restriction, that can function to a greater or lesser extent, is involved, it would be good to avoid the examples in which the distance is the greatest: Las hojas de los árboles se mezclaron (con, entre) los papeles; los prisioneros, (con, entre) la muchedumbre. 'The leaves of the trees got mixed (with, in with) the papers; the prisoners, (with, in with) the crowd.' As we see here, the use of the noun monedas (coins) (for the movement it implies) reduces the incompatibility generated by the agentive subjects issue and acts very well as a bridge between the two extremes.

²⁷ It is important to know that, if the preposition of the compound phrases can also provoke interferences, according to context, these can be less than those that we have seen above for certain argument objects ("complementos argumentales") like the direct object in Spanish. See, for example, the difference in acceptability between the following sentences: (??) Juan vio un árbol y a María 'John saw a tree and Mary' // Juan estuvo en casa y por el parque 'John was at home and in the park'.

in the first it has the meaning of 'uniting a person or thing to another person or thing'. Since both are rather far apart, a cross-reading is difficult. That would also explain why the change of preposition is unacceptable in 15), faced with this occurrence, next, in 16), where only the interpretation of the second sentence in the sense of the first makes, even when certain syntactical interferences survive, the acceptability a lot greater:

- 16) *El preso huyó y se mezcló entre el gentío; mi hija, con los manifestantes.* 'The prisoner fled and mixed in with the crowd; my daughter, with the demonstrators.'
- 17) (¿?) El preso huyó y se mezcló [unirse] entre el gentío; mi hija, con los manifestantes [tener relación].

'The prisoner fled and mixed [to unite] in with the crowd; my daughter, with the demonstrators [form a relationship with].'

With respect to the supposed meaning of *comprometerse* ('to engage in'), despite all the dictionaries seeming to agree in considering it a meaning, perhaps for the exclusivity in the prepositional use and for the specific lexical selection, it appears to involve, in reality, a variant of 'to form a relationship'. For the speakers a broader meaning ('to have a relationship'), that is manifested in two different ways from the syntactic point of view, exists. The possibility of coordinating the two prepositions ends up being very relevant in this respect²⁸:

- 18) No me mezcles en esos asuntos y menos con esa gente.'Don't get me mixed up in those affairs, no less with those people.'
- 19) *No solo se había mezclado con los criminales, sino también en el crimen mismo.* 'Not only had he gotten mixed up with criminals, but also in the crime itself.'

The meaning 'to link by marriage' is a different case. All the tests indicate that, from the existence of this use, we find ourselves facing a new meaning:

20) Mi hijo nunca se mezcló con delincuentes; mi familia tampoco con familias de distinta clase social.

'My daughter never mixed with delinquents; nor my family with families of a different social class.'

Sentence 20 is only acceptable if we interpret the second part in the sense of 'form a relationship' not ' link by marriage'. Also, the impossibility of 21, where *mezclar* ('mix') is referenced with the verb *hacer* ('do'), proceeds from the fact that the two alternative meanings are not natural, that is to say, an interpretation of the verb *mezclar* in the first segment of the sentence with the idea of 'to have a definite link or relationship' and, in the second, with that of 'to link by marriage':

21) (¿?) Hoy esos aristócratas no se mezclan con el pueblo, aunque lo hayan hecho durante generaciones.

'Today those aristocrats do not mix with the people, although they have done it for generations.'

²⁸ In the CREA we also find the following example: Se negó a comunicar los nombres de sus contactos, si es que los conocía, pero juró y perjuró que él jamás se mezclaría en asuntos políticos, y menos con los maquis. 'He refused to communicate the names of his contacts, assuming he knew them, but he swore and committed perjury saying that he never got mixed up in political affairs, no less with the Maquis.'

2.2 A new proposal for separating meanings

Taking into account the analysis above –and without intending to be exhaustive – I will dare to regroup the examples from the three dictionaries that were examined in groups more in accordance with the real meanings of the verb *mezclar*.²⁹

mezclar.

1. Juntar unas cosas con otras, alterando o sin alterar el orden en que se encontraban previamente.

Variantes sintácticas: mezclar una cosa; mezclar una cosa con otra; mezclar una cosa entre otras; mezclar una cosa y otra.

No mezcles el vino, que se estropea.

Bata los huevos y mézclelos con la harina. El bodeguero mezclaba vino y agua. El pintor no ha mezclado bien los colores.

No mezcles las fichas porque están por orden alfabético.

Ha mezclado los libros de la estantería y ahora no se puede encontrar ninguno.

Deja de tocar mis papeles, los estás mezclando. No me mezcles las fotos.

En su fiesta mezcló a intelectuales y artistas.

mezclarse: con sentido agentivo o inacusativo.

Variantes sintácticas: mezclarse con una cosa; mezclarse entre varias cosas.

En el recreo se mezclan los alumnos de varios cursos. Se han caído y se han mezclado todos los sellos.

Nos mezclamos con la muchedumbre en la manifestación. Se mezcló con la muchedumbre en la manifestación. El cantante se mezcló entre el público para pasar desapercibido.

2. Tener un determinado vínculo o relación.

Variantes sintácticas: mezclarse en una cosa; mezclarse con una persona.

Me mezclé en su negocio al principio, pero no sabía que era ilegal. Deseo que no me mezcléis en vuestra discusión. Mezcló a su familia en sus negocios sucios y ahora están todos en la cárcel; no te mezcles en este asunto si quieres evitarte problemas.

Es peligroso mezclarse con tipos como esos. Le gusta mezclarse con los artistas. Sus padres le prohibieron mezclarse con los otros chicos del barrio.

3. Enlazarse por matrimonio.

Los aristócratas solo se han mezclado entre sí durante generaciones.

'mix.

1. To join some things with others, altering or without altering the order in which it was previously found. Syntactical variants: ...'

'**mix**: in the agentive or unaccusative sense.

Syntactical variants: ...'

'2. To have a definite link or relationship. Syntactical variants: ...'

'3. To link by marriage. ...'

3 Conclusion

The present paper shows the importance of having linguistic instruments, principally semantic ones, for determining the meaning of words with the greatest precision and, consequently,

²⁹ The definitions appear by way of indicative. They are only intended to be close semantic orientations.

managing to meticulously establish the different meanings of a dictionary's key words. Of course, linguistics is not an exact science, and I am aware that we will not always be able to offer, with the same amount of ease, satisfactory solutions to all the problems that the lexicon of a language can present us. The idea that we are cultivating, those of us who are embarked upon the great task of making the *New Historical Dictionary of the Spanish Language*³⁰, nevertheless, is that it's possible to find some objective criteria that, besides allowing us to get much closer to the mental lexicon of the speaker, contributes to guaranteeing the general coherence of these types of works. With all probability, we will not get to deal, in a reliable and definitive way, with 100% of the entry words in the macrostructure of our dictionary; but, if we can achieve, as we hope, the homogeneous and reliable treatment of at least 80% of them, we will have taken an important step in that process of improvement that lexicography is constantly undergoing.

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