2009

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Recommended Citation
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**NO SÉ AS A DISCOURSE MARKER IN SPANISH: A CORPUS BASED APPROACH TO A CROSS-DIALECTAL COMPARISON**

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*University of Colorado at Boulder*

**Abstract**

The purpose of this study is to determine the form(s) and function(s) of *no sé* through the analysis of 820 tokens that we extract from three corpora of spoken Spanish in New Mexico, Puerto Rico and Madrid, Spain. The results of our quantitative analysis suggest that, like *I don’t know* (Bybee & Scheibman 1999), *no sé* is stored in the lexicon as a chunk in these three dialects. This analysis is reinforced by rates of phonological reduction of word-initial /s/ in New Mexico. Our results also reveal that *no sé* has similar discourse functions in the three varieties. However, other factors such as frequency of occurrence and use of first-person *yo* show that there are important dialectal differences. As a discourse marker, *no sé* has a limited use in New Mexico, whereas Madrid is the most advanced variety. The Puerto Rican variety holds an intermediate position.

**Key words:** no sé, discourse marker, discourse frequency, cross-dialectal comparison, subjectivity.

1. **INTRODUCTION**

In the last decades, there has been a growing interest in academic research on discourse markers (also known as *muletillas*, *pragmatic markers*, *discourse connectives*, *discourse operators*, *discourse particles*, among others). Research on these items has been undertaken from different perspectives by scholars such as Cortés Rodríguez (1991), Fraser (1990, 1999), Martín Zorraquino (1992), Portolés (1998), and Schiffrin (1987). Although the nature and scope of the category of *discourse marker* is still a matter of debate between scholars, they all agree that these items connect portions of discourse by imposing some type of relationship between them concerning the speaker’s communicative intent.

The class of words that makes up discourse markers is heterogeneous. Markers include invariable classes such as adverbs (*bien*) prepositions (*hasta*) and conjunctions (*pero*), but they also derive from nouns (*¡hombre!* ) and verbs (*mira*). In their development, they lose morphological and syntactic autonomy, and typically behave as independent elements. Concurrently their word frequency increases and the meaning becomes more general without fully losing its original semantic content. In those cases in which discourse markers come from more than one word (*o sea*), they form lexically cohesive elements.

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An example of a discourse marker in English is *I don’t know*. Bybee and Scheibman (1999) and Scheibman (2000), find that when *I don’t know* behaves as a discourse marker, it undergoes phonological reduction of the vowel, the consonant, or both. They attribute this reduction to the status of the word-pair as a ‘chunk’ in lexical representation due to the frequent co-occurrence of the individual lexical items in the construction. In line with the Exemplar Model of Lexical Representation (Bybee 2001, Pierrehumbert 2001), these authors suggest that the three words that make up the discourse marker *I don’t know* are, in reality, stored in the lexicon as any morphologically complex word would be.

Although *no sé*, the translation equivalent of *I don’t know*, has been regarded as a discourse marker in the literature (see, for example, Bravo Cladera 2003, Cuenca and Marin, in press, and Davidson 1996), to the best of our knowledge there are no large-scale quantitative analyses on this item. The purpose of the present study is to determine the form(s) and function(s) of *no sé* through a quantitative analysis. We analyze 820 tokens that we extract from three corpora of spoken Spanish in New Mexico, Puerto Rico, and Madrid, Spain.

2. BACKGROUND

Discourse markers have been widely studied yielding great insight into language variation and use¹. They are considered to be “sequentially dependent elements which bracket units of talk” (Schiffrin 1987: 31). Fraser (1999: 938) elaborates that discourse markers “impose a relationship between some aspect of the discourse segment they are a part of […] and some aspect of a prior discourse segment […].” Typically, as noted by Portolés (1998: 26), the function of discourse markers is “guiar, de acuerdo con sus distintas propiedades morfosintácticas, semánticas y pragmáticas, las inferencias que se realizan en la comunicación [guide the inferences that take place in communication according to their different morphosyntactic, semantic, and pragmatic properties]”.

Particular discourse markers previously analyzed in Spanish include *bueno* (Serrano 1999), *o sea* (Schwenter 1996), *pues* (Garcés Gómez 1992), *entonces* (Travis 2005), to name a few. Examples of these discourse markers found in our corpus follow:

**Puerto Rico**

(1)  
I: Bueno hubo dos años que estuvo bajo el mandato del penepé.  
E: ¿Dos años? ¿Cómo que dos años?  
I: **O sea** dos, dos cuatrenios, me refiero.  
`I: Well there were two years under the rule of PNP.  
E: Two years? What do you mean two years?  
I: I mean two, two four-year periods, is what I mean’
Puerto Rico

(2) E: ¿Y qué, y qué ha hecho por Caguas?
I: Bueno, en, en Caguas se ha visto las avenidas más bonitas, ha arregla'o la entrada al pueblo está bien bonita ahí.
E: And what, and what has he done for Caguas?
I: Well, in Caguas the streets are prettier, he has fixed up the entrance to the city it is so pretty there.

Puerto Rico

(3) I: Está bien, yo lo sé. Porque cuando la economía de Estados Unidos está mala pues la de aquí se, este, cuando allá tiene gripe aquí tiene pulmonía.
I: It’s OK, I know. Because when the US economy is bad well the one here, uh, when they have the flu there, here they have pneumonia.

These and other discourse markers have been shown to possess certain linguistic characteristics which set them apart from other non discourse / pragmatic elements. In phonological terms, they are prosodically independent. That is to say, they tend to occur either between pauses or intonation breaks, though not exclusively. In terms of morphology, they are invariable elements. They display no inflectional or derivational variation. For instance, *bueno*, as a discourse marker never reflects gender or number as the adjectival counterpart would (*bueno, buena, buenos, buenas*). Another characteristic of discourse markers is, that in terms of syntax, they are outside the syntactic structure of the clause in that they are not part of the argument structure of the verb.

Much research has been conducted in English on the pragmatic functions of *I don’t know* (Bybee & Scheibman 1999, Pichler 2007, Scheibman 2000, Tsui 1991). As a discourse marker it has been shown to convey two main functions. These uses include a subjective function and a textual function (which we will discuss below). An analysis of *no sé*, however, the translation equivalent of English *I don’t know*, has not been, to our knowledge, the subject of any previous large-scale quantitative analysis.

3. DATA AND METHODS

In order to determine the extent to which *no sé* is used as a discourse marker in Spanish, we use three separate corpora for our quantitative analyses. We relied upon transcriptions of sociolinguistic interviews conducted with native speakers from three different varieties of Spanish; New Mexican Spanish, Puerto Rican Spanish, and the Spanish of Madrid. We chose New Mexican data in order to investigate the role phonological reduction has (if any) in the occurrence of *no sé* as a discourse marker. In the traditional Spanish spoken in New Mexico and
Southern Colorado, there is considerable phonological reduction of word and syllable initial /s/ (Brown 2005), making it possible to test for reduction within the no sé word pair. We also chose another American variety (the Puerto Rican data) and a European variety (Madrid, Spain) to enable cross-dialectal comparison.

The New Mexico data in this analysis comes from the New Mexico and Southern Colorado Linguistic Atlas Project (Bills & Vigil 1999). The NMC OSS project initiated in 1991, documents, via interviews with 350 native speakers, the traditional language spoken throughout the state of New Mexico and the sixteen counties of southern Colorado by descendents of the first settlers to the region (Bills & Vigil 1999). The NMC OSS data was collected by trained field workers who tape-recorded interviews involving both controlled elicitation and guided conversation (Vigil 1989). The data reported upon in this study are taken solely from the free conversation portion of interviews with 18 males and 6 females, ranging in age from 36-90 years old and residing predominantly in rural regions of New Mexico (with 2 speakers coming from Albuquerque). From New Mexico we analyze no sé tokens in approximately 97,000 words.

The Puerto Rican data are taken from transcriptions representing roughly 27 hours of conversation with eighteen native speakers. These conversations were collected and transcribed by a native speaker in Caguas, Cayey, and San Juan, Puerto Rico in 2000 (Cortés-Torres 2005). Speakers range in age from 24-90 years old. Interviews ranged in duration from one half hour to three hours in length. The corpus of Puerto Rican Spanish consists of approximately 370,000 words.

The analysis of no sé tokens in Madrid was conducted using a portion of the Corpus del Español (Davies 2002) online. We limit our coding to the first 194 occurrences of no sé in ‘Habla Culta de Madrid’. There are 487 number of tokens of no sé in the total 140,000 number of words in Habla Culta de Madrid. We do not control for cross-corpora differences of size or for topic of conversation or sociolinguistic factors.

In both the American varieties of Spanish, the frequency of occurrence of no sé overall is very similar. In New Mexico, no sé has a text frequency of approximately 1,371 per million, and in Puerto Rico, the word pair has a text frequency of approximately 1,354 per million. In contrast, in Madrid the text frequency for no sé is more than twice that of the non-European dialects (approximately 3,474 per million). Based on this word frequency, we could predict that the Spanish variety would be the one to be more likely to have more developed discourse / pragmatic uses.

In order to determine the discourse / pragmatic and referential functions of no sé in these varieties of Spanish we isolated all occurrences of the word pair. Across the three corpora of spontaneous conversational data this yielded 828 instances of no sé. We first identified referential uses of no sé, which are cases in which its use only indicates a lack of knowledge of something on the part of the speaker. To do this, we considered both grammatical and semantic content. For example, instances in which no sé takes either a nominal or a clausal direct object are coded as referential uses. Examples are found in (4) and (5).
New Mexico (no sé + NP)

(4) Sí. Leo pero no sé las puntuaciones, para escribir…
‘Yes. I can read but I don’t know punctuation, to write…’

Madrid (no sé + si – clause)

(5) yo no sé si eso hará gracia a los niños.
‘I don’t know if this will make the kids laugh’

Lack of a complement did not automatically lead to a token being considered as a discourse marker. We also regarded as referential those cases in which no sé only indicated lack of knowledge. This can be seen exemplified in (6).

Puerto Rico

(6) B: ¿A qué hora es?
J: No sé.
‘B: What time is it?
J: I don’t know’

Overall, these methods allowed us to identify 616 referential uses of no sé. The remaining 212 tokens were all coded as discourse markers.

Following Bybee and Scheibman (1999), Pichler (2007), Scheibman (2000), and Tsui (1991), we classified the discourse / pragmatic functions into three distinct categories: subjective, textual, or a combination of the two (both). Tokens were coded as ‘subjective’ when they were used by the speaker in order to soften the strength of their propositions, to avoid face-threatening acts, or attenuate disagreeing statements. In many cases the subjective uses of no sé co-occur with other discourse markers of epistemic stance like yo creo and pues in (7), or o sea and como, as in (8).

New Mexico

(7) yo creo que la mujer, pues no sé, se le fue con otro, pero yo creo que tenía problemas con el alcohol también.
‘I think that his wife, well I don’t know, he ran away with another man, but I think that she had alcohol problems too’

Madrid

(8) por esto, o sea, porque no sé, siempre estás como más acompañada.
‘for that reason, [I mean?], because I don’t know, you’re always like not alone’
Tokens were coded as ‘textual’ when they were used by the speaker for turn management and/or topical development. Textual functions also include cases of hesitation and repair. Examples are given in (9) and (10).

**Madrid**

(9) Es que a mí me da muchísimo miedo el... el no sé, el... por una tontería,
‘The thing is that I’m afraid of the…the I don’t know, the…from something silly’

(10) y después, novela, pues no sé y... ¡tú qué tal?
‘and after that, a whole store, well I don’t know and…. How are you?’

In number (9) there is clear hesitation and in example (10) there is an attempt to close a topic and leave the floor to the interlocutor.

Not all cases are either clearly subjective or textual, but rather seem to perform both functions simultaneously, as noted by Pichler (2007: 180). Examples are provided in (11) and (12).

**Puerto Rico**

(11) Bueno, no, eso es lo que dijeron ahora, porque ahora están hablando y no sé.
‘Well, no, that is what they just said, because now they are talking and I don’t know’

**Madrid**

(12) el progreso, pero creo que más fundamental todavía es el... no sé, las ideas,
‘progress, but I think that even more important yet is the…I don’t know, the ideology,’

In example (11) it appears the speaker would like to end her turn, but at the same time could wish to soften the disagreement in her previous negative statement. In example (12), there is repair, and at the same time the speaker seems to want to attenuate the previous utterance (which also includes the epistemic use of *yo creo*).
We acknowledge the inherent subjectivity involved with coding speaker intent. In all cases, tokens of *no sé* were coded to the best of our ability taking into the grammatical and semantic cues available from the context. The following section highlights the results of our quantitative analyses.

4. RESULTS

The results of our quantitative analyses reveal that *no sé* has discourse functions in the three varieties. This word pair is used 194 times in the Madrid data that we analyzed, with 60% of the uses being non-referential. This is summarized in Table 1. In Puerto Rico, of the 501 instances of *no sé*, 17% are used with a discourse / pragmatic function. In New Mexico, 10% of the tokens have a non-referential function.

<table>
<thead>
<tr>
<th>Discourse Marker</th>
<th>Referential Meaning</th>
<th>% Discourse Marker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Madrid 116</td>
<td>78</td>
<td>60%</td>
</tr>
<tr>
<td>Puerto Rico 83</td>
<td>418</td>
<td>17%</td>
</tr>
<tr>
<td>New Mexico 13</td>
<td>120</td>
<td>10%</td>
</tr>
</tbody>
</table>

Bybee and Scheibman (1999) and Scheibman (2000) discuss phonological reduction and frequency of co-occurrence of the individual lexical items that make up the construction *I don’t know*. They suggest this reduction is an indicator of its discourse marker status differentiating its use from other (non-pragmatic) uses of *I don’t know*. Results of our analyses suggest that *no sé* behaves significantly differently than the lexical combination of *no* + other 1st person singular high frequency verbs. This can be seen summarized in Table 2.

<table>
<thead>
<tr>
<th>Discourse Marker</th>
<th>Madrid</th>
<th>Puerto Rico</th>
<th>New Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>no sé</em></td>
<td>487</td>
<td>501</td>
<td>133</td>
</tr>
<tr>
<td><em>no puedo</em></td>
<td>25</td>
<td>83</td>
<td>17</td>
</tr>
<tr>
<td><em>no quiero</em></td>
<td>8</td>
<td>34</td>
<td>8</td>
</tr>
<tr>
<td><em>no tengo</em></td>
<td>52</td>
<td>70</td>
<td>12</td>
</tr>
<tr>
<td><em>no soy</em></td>
<td>15</td>
<td>13</td>
<td>1</td>
</tr>
<tr>
<td><em>no voy</em></td>
<td>15</td>
<td>42</td>
<td>4</td>
</tr>
<tr>
<td><em>no estoy</em></td>
<td>24</td>
<td>21</td>
<td>5</td>
</tr>
<tr>
<td><em>no creo</em></td>
<td>37</td>
<td>19</td>
<td>5</td>
</tr>
</tbody>
</table>

The tokens of use for *no sé* listed in Table 2 reflect an interesting fact. In all three varieties, the string frequency (the token frequency of a multiword combination) of *no + sé* is quite high. In Madrid, it occurs 487 times, in Puerto Rico 501, and in New Mexico 133 times. This word combination frequency can be compared to the other verbs of high frequency listed in
the Table. In Madrid ‘no + verb’ combination with the next highest text frequency is no tengo with 52 occurrences. In Puerto Rico it is no puedo with 83 occurrences, and in New Mexico it is also no puedo with 17 occurrences. These are all significant differences in string frequency (no sé vs. no tengo Madrid p = 0.0000, Chi-square = 4321.407, no sé vs. no puedo Puerto Rico p = 0.0000, Chi-square = 299.8766, no sé vs. no puedo New Mexico p = 0.0000, Chi-square = 89.90075).

Another difference to highlight between no sé and the other verb combinations is the strikingly high transitional probability (Jurafsky, Bell, Gregory & Raymond 2001) of the combination. That is to say, of all the examples of sé in the corpus (N = 565 in Madrid, for example), 86% appear after no. This can be seen summarized in Table 3. A similarly high transitional probability is found for no sé in the Puerto Rican and New Mexican data (64% and 88% respectively). The implication of such a high transitional probability, and high string frequency as discussed in the preceding paragraph, is the increased likelihood of lexical storage as a chunk in all three dialects (Bybee 2001:109, Bush 2001: 269).

Table 3: % of high frequency verbs (1st person singular indicative) directly preceded by lexical item no

<table>
<thead>
<tr>
<th></th>
<th>Madrid</th>
<th>Puerto Rico</th>
<th>New Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>no sé</td>
<td>487 / 565: 86%</td>
<td>501 / 776: 64%</td>
<td>133 / 151: 88%</td>
</tr>
<tr>
<td>no puedo</td>
<td>25 / 77: 32%</td>
<td>83 / 181: 46%</td>
<td>17 / 50: 34%</td>
</tr>
<tr>
<td>no quiero</td>
<td>8 / 44: 18%</td>
<td>34 / 173: 20%</td>
<td>8 / 41: 20%</td>
</tr>
<tr>
<td>no tengo</td>
<td>52 / 280: 19%</td>
<td>70 / 498: 14%</td>
<td>12 / 98: 12%</td>
</tr>
<tr>
<td>no soy</td>
<td>15 / 90: 17%</td>
<td>13 / 123: 11%</td>
<td>1 / 10: 10%</td>
</tr>
<tr>
<td>no voy</td>
<td>15 / 133: 11%</td>
<td>42 / 493: 9%</td>
<td>4 / 43: 1%</td>
</tr>
<tr>
<td>no estoy</td>
<td>24 / 157: 15%</td>
<td>21 / 318: 7%</td>
<td>5 / 23: 22%</td>
</tr>
<tr>
<td>no creo</td>
<td>37 / 512: 7%</td>
<td>19 / 358: 5%</td>
<td>5 / 127: 4%</td>
</tr>
</tbody>
</table>

As a chunk, does no sé exhibit phonological reduction as I don’t know was shown to do in Bybee and Scheibman (1999)? This is testable in the New Mexican data in which syllable and word-initial /s/ has been shown to variably aspirate or delete. Word-initial /s/ reduces in this variety at a rate of 16% overall and at a rate of 30% overall in word-medial, syllable-initial position (Brown 2005: 815). If no sé were stored as two distinct words, we might expect reduction of the /s/ in sé to reflect rates found for other word-initial /s/ tokens. However, reduction in the word-initial /s/ of the form sé in the combination no sé is 37% (N = 115). This reduction rate more closely reflects reduction of the word-medial, syllable-initial /s/ tokens. Further, reduction of the /s/ of sé outside the combination no sé (in combinations such as yo sé, sí sé, etc.) is significantly lower at 7% (N = 30, p = .0021, X² = 10.49417). This result is suggestive that no sé has lexical status as a chunk.

Interesting, however, is the result obtained by just examining the phonological reduction of the very few tokens of no sé as a discourse marker in New Mexico. Following Bybee and Scheibman (1999), we might predict higher reduction when used with a non-referential meaning.
as these authors find for I don’t know. However, our findings do not bear this out, as Table 4 summarizes. Initial /s/ reduction is greater (36%) in referential uses than in discourse / pragmatic uses (14%). This may suggest that phonological reduction is not characteristic of this particular discourse marker in Spanish (and/or may simply reflect the ‘weak’ status of no sé as a discourse marker in New Mexico which we outline in the discussion).

<table>
<thead>
<tr>
<th>Referential Uses</th>
<th>Discourse / Pragmatic Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-reduced (/[s]/)</td>
<td>75</td>
</tr>
<tr>
<td>Reduced ([h], [ø])</td>
<td>43</td>
</tr>
<tr>
<td>Percent reduction</td>
<td>36%</td>
</tr>
</tbody>
</table>

Table 4: Phonological reduction of no sé in New Mexican Spanish

The item no sé appears to have chunk status based upon its usage (Tables 2 and 3) and on the higher than average reduction rate in the word combination (37%). If no sé is stored as a single lexical unit, this implies it is not necessarily analyzed as a negative particle (no) + verb (sé), but rather is a prime candidate to be adopted as a discourse marker (with no morphological variation and lack of complementation).

As a discourse marker, we could predict that no sé would demonstrate different linguistic behavior from the referential uses (for example, regarding co-occurrence with subject pronouns) because it no longer performs true verbal functions. We analyze co-occurrence of no sé with the subject pronoun yo for both referential and non-referential uses (as summarized in Table 5). On the left we list uses of yo with the discourse / pragmatic function of no sé and on the right uses of the subject pronoun with the referential function of no sé.

Table 5: Use of subject pronoun yo with discourse/pragmatic vs. referential uses of no sé in three varieties of Spanish

<table>
<thead>
<tr>
<th>Discourse Markers</th>
<th>Verbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>yo no sé</td>
<td>no sé</td>
</tr>
<tr>
<td>Madrid</td>
<td>5</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>30</td>
</tr>
<tr>
<td>New Mexico</td>
<td>9</td>
</tr>
</tbody>
</table>

In Madrid, when used with a discourse function, the subject pronoun appears in just 4% of the cases. Conversely, when used with a referential function in Madrid, subject pronoun usage is significantly higher at 17% (p = .0036, X² = 8.459556). Puerto Rico is a variety of Spanish with high overt subject pronoun usage (Cameron 1993: 306, Hochberg 1986: 615, Morales 1997: 155), and rates of yo usage are, perhaps not surprisingly, higher. A similar pattern of no sé usage is found in this variety however. When no sé functions as a discourse marker, the subject pronoun co-occurs at a rate of 36%. With true verbal function, the subject pronoun is used significantly more, in 51% of the cases (p = .0161, X² = 5.792954).
In the New Mexican data, we see a different pattern of pronominal usage. Despite frequency per million of *yo* being lower in New Mexico (10,927) than in Puerto Rico (15,056), when *no sé* functions as a discourse marker, overt *yo* usage is quite high (69%). In fact, subject pronoun usage for the discourse marker is significantly higher than the usage with referential meaning ($p < .05, X^2 = 3.846318$). We will comment on this in our discussion below.

Further results of our quantitative analyses are summarized in Table 6. Through an analysis of *no sé* tokens that perform a non-referential function, it is apparent that it fulfills the same discourse functions in the three varieties of Spanish we analyze. This can be seen by the fact that in all three dialects, *no sé* performs the three functions that we examined; subjective, textual, and both. In all three varieties, the most frequent use of *no sé* is the subjective function (Madrid 59%, New Mexico 85%, Puerto Rico 76%). In both New Mexico and Puerto Rico, however, the number of textual uses (NM 8%, PR 6%) is considerably lower than that found in Madrid (28%). Subjective–textual uses are the least frequent in all three dialects as Table 6 makes evident.

| Table 6: Discourse / pragmatic functions of *no sé* in three varieties of Spanish |
|-----------------------------------------|----------------|----------------|
|                                       | Madrid         | New Mexico     | Puerto Rico   |
| Subjective                             | 69 (59 %)      | 11 (85%)       | 63 (76%)      |
| Textual                                | 32 (28 %)      | 1 (8%)         | 15 (18 %)     |
| Subjective~Textual                     | 15 (12%)       | 1 (8%)         | 5 (6%)        |
| N = 116                                | N = 13         | N = 83         |

% Subjective use Madrid vs. PR: $p < .05, X^2 = 5.841602$

5. DISCUSSION

The results of our large-scale quantitative analysis of usage of *no sé* in three varieties of Spanish has yielded interesting results. As a discourse marker, this construction has limited use in the New Mexican variety. This is evident in Table 1, where we can see that out of the 133 tokens of *no sé* we found in the corpus, only 10% ($N = 13$) are used discursively. Despite the low number of examples, we nevertheless see a similar pattern of usage to the other two dialects (Table 2, Table 3, Table 6). It appears, however, that when compared to the other varieties of Spanish, *no sé* is a less preferred discourse marker in New Mexico.

This lack of subjective strength of *no sé* as a discourse marker is perhaps reflected in the result we obtained regarding subject pronoun usage (Table 5). Contrary to the other varieties of Spanish, in New Mexico when *no sé* is used non-referentially, there is a strikingly high occurrence of *yo*. As has been noted by Davidson (1996: 551), the subject pronoun when used explicitly adds ‘pragmatic weight’ to an utterance, and specifically can trigger non-referential readings of certain verbs. We interpret this result in Table 5, therefore, as indicative of the fact...
that no sé does not have a strong subjective or textual use in this variety without the added weight of the subject pronoun.

The Puerto Rican variety of Spanish appears to hold an intermediary position between the other two varieties we study. As seen in Table 1, the number of uses as a discourse marker is higher than in New Mexico, at a rate of 17%, yet does not reach the high usage seen in Madrid. As in New Mexico, the preferred non-referential use of no sé is subjective (as seen in Table 6). The number of textual uses is higher than in New Mexico - 18%. It may be the case that the textual function is taken up by other discourse markers in Puerto Rico and New Mexico [e.g. so or entonces (Aaron 2004)].

The results of our analysis on the Madrid data reveal an important difference between the American dialects and the European variety. Firstly, in the Peninsular variety, the proportion of no sé tokens that are non-referential as opposed to referential is significantly higher. In Madrid, 60% of uses have a discourse / pragmatic function (Table 1). Further, just looking at non-referential uses of no sé, in Madrid it is used non-subjectively (with textual functions) significantly more than in the Puerto Rican variety (Table 6), revealing significant differences in usage between the varieties. The dialectal differences we find between America and Spain may reveal similar, but divergent, diachronic pathways.

Traugott and Dasher (2002) have argued that the development of discourse markers depends upon changes towards subjectivity. There is a pathway of change in which items that become discourse markers change from a more objective, referential use to a more subjective, pragmatic use. In the case of no sé, we have evidence of this subjective stance in cases in which no sé co-occurs with other epistemic markers such as yo creo, me parece, pues, bueno, o sea, etc. The function of these uses of no sé is to attenuate disagreeing statements, avoid face-threatening acts, and soften the propositional stance. In so doing it acquires intersubjective uses, not just subjective (Traugott & Dasher 2002: 155) in that they take into consideration the interlocutor.

Intersubjectivity is also a key element of textual uses in that these uses encompass issues such as turn management. As we mentioned previously, textual instances of no sé include functions such as closing of a topic and turn-closing. This seems to suggest that no sé could proceed along the following grammaticalization cline (adapted from Traugott & Dasher 2002: 187):

referential / propositional uses > epistemic / subjective uses > intersubjective uses

As we noted in our analyses, there are more textual uses in Madrid than in other the other varieties we analyze (Table 6) suggesting that this discourse marker has extended its use further in Spain than in America.

The dialectal division we find between America and Spain in the use of no sé may reflect a diachronic pathway, or, as was found in Company Company (2002), simply different grammaticalization pathways determined by the weight given to specific functions in the distinct
varieties of Spanish. We lack, in our current analysis, historical data that will help determine if the synchronic data we present, are in fact representative of a unified diachronic pathway of change, with Madrid leading the way, or rather whether each variety basically selects different discourse markers to perform these textual functions.

6. CONCLUSIONS

The analysis of 820 tokens that we extracted from three corpora of spoken Spanish in New Mexico, Puerto Rico, and Madrid, Spain allows us to arrive at the following conclusions regarding the form(s) and function(s) of no sé:

a) As is the case with I don’t know in English, the following evidence suggests that no sé has lexical status as a chunk, that is to say, the two words that make up the construction no sé are stored in the lexicon as any morphologically complex word would be:
   1. The significantly high string frequency of no + sé in the three corpora.
   2. The high transitional probability of no sé in the three corpora.
   3. In New Mexico, where syllable- and word-initial /s/ can be aspirated or deleted, phonological reduction of /s/ in no sé reduces at a similar rate to word-medial, syllable-initial /s/ tokens, and at a significantly higher rate than other combinations involving sé (for example, yo sé).

b) Although no sé has discourse functions in the three varieties of Spanish under analysis, frequency of occurrence and use of first-person yo show that there are important dialectal differences.

c) In New Mexico, the following evidence suggests that no sé has a ‘weak’ status as a discourse marker:
   1. The overall number of discourse tokens is very low.
   2. Phonological reduction of /s/ is greater in referential uses than in discourse uses.
   3. Non-referential uses of no sé are generally accompanied by the subject pronoun yo. This fact suggests that no sé does not have a strong discourse / pragmatic use in this variety without the added pragmatic weight of the subject pronoun.

d) Madrid is the variety in which no sé is more advanced as a discourse marker. This conclusion is based on the following evidence:
   1. The proportion of non-referential no sé tokens is significantly higher than in the non-European varieties.
   2. When no sé is used with a discourse function, the occurrence of the subject pronoun yo is significantly lower than when no sé is used referentially. This fact suggests that no sé may be undergoing decategorialization.
   3. As a discourse marker, the number of textual uses of no sé in Madrid is considerably higher than that found in Puerto Rico or New Mexico, possibly because in the non-European dialects the textual function is taken up by other discourse markers.
e) The Puerto Rican variety holds an intermediary position both in number of discourse tokens of *no sé*, and in co-occurrence of *yo* with non-referential uses of *no sé*.

Further research should determine whether the conclusions of this analysis reflect a unified grammaticalization pathway for *no sé* from more epistemic / subjective uses to more intersubjective uses, with Madrid leading the way, or whether the dialect division we find between America and Spain simply reflects different diachronic pathways of change.

Acknowledgements
We are indebted to the New Mexico and Southern Colorado Linguistic Atlas directors Neddy Vigil and Garland Bills for allowing us use of their data. We would also like to express our gratitude to Mayra Cortés-Torres for sharing with us the interviews that she transcribed and collected in Puerto Rico.

Notes
1 See Travis (2005: 27-61) for a useful summary.
2 Thompson (2002) argues against the subordinate status of so-called complement clauses such as “si eso hará gracia a los niños” in (5). Rather, examples such as (5) are “combinations of (i) CTP [Complement-Taking Predicate]-phrases, serving specific epistemic, evidential, and evaluative frames for the clauses they occur with, and (ii) finite indicative clauses, both declarative and interrogative” (Thompson 2002: 136). According to this analysis, *no sé* conveys similar semantic / pragmatic functions regardless of grammatical context. However, in line with Thompson (2002: 143), we have considered *no sé* as a discourse marker only in those contexts in which it does not occur with a so-called complement clause.
3 We have very low token numbers for this analysis and all conclusions are thus tentative.
4 This result is tentative owing to the low token number (N = 13).
5 It does not achieve statistical significance for the New Mexican variety perhaps as a result of the low token numbers we have for the New Mexico data.

REFERENCES


