

**Dialogue and epistemic stance:  
a diachronic analysis of cognitive verb constructions in Spanish**

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1. Introduction<sup>1</sup>

In dialogues, it is common to find constructions comprised of a verb of thought or belief expressing the cognitive attitude of the speaker towards the clausal content, as shown by the sequences in italics from examples (1)-(3):

1. Yo tengo - - otras miras y *pienso que algún día nos vamos a tener que ir*, más si tenemos chicos. (ARTHUS, BAI:130.28)  
'I have ... other goals and *I think that some day we are going to have to go*, especially if we have children'
2. [...] te piden también una altura establecida, que creo que son dos mil metros y luego te piden también una permanencia en el aire *que creo son tres horas*. (ARTHUS, MAD:010.21)  
'... they require also a specific altitude *that I think is two-thousand meters* and then they also require that you stay up in the air for something *that I believe is like three hours*'
3. Pero es que *tampoco se les puede negar*, creo yo, *la oportunidad que se les brinda a los otros*. (ARTHUS, SEV:285.07)  
'However, *it's not like you can deny them -I believe- the opportunity that is given to the others.*'

Structures comparable to (1)-(3) are common in several languages –English *I think (that)*, French *je pense / crois (que)*, Portuguese *(eu) acho (que)*, etc.–, and this has encouraged their study through different perspectives. Urmson and Benveniste drew attention to the special communicative value of the 'instructional' or performative uses having modal character of *I think / I suppose / je crois*, etc., in comparison with the lexical or descriptive contents of said verbs in other contexts. Later research has analyzed the formal functions and properties of these constructions from the point of view of syntax and discourse, and has studied their diachrony through the frameworks of grammaticalization, pragmaticalization, or discursivization (cf., among others, Thompson & Mulac 1991, Brinton 1996, 2008, Aijmer 1997, Schneider 2007, Kaltenböck 2013). In recent years, more research has been done on the functional differences that exist between the verbs that participate in structures like (1) - (3), not only within a given language but also comparing their uses in two or more languages (cf., for instance, Mullan 2010, Fetzer and Johansson 2010).

Works on constructions in Spanish have generally focused on current usages, although some recent studies have adopted a diachronic perspective (cf. Haßler, Posio). The present paper thus arises from the observation of the modern use of these structures and their contrast with equivalent constructions in languages such as English and

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French, but focuses the analysis through a historical perspective. It was originally intended to ascertain the factors causing the high frequency of *creo* compared to *pienso* in modern Spanish. Surprisingly, through the use of diachronic corpora, we found that, in a certain historical period, *pienso* surpassed *creo* in frequency of use. As a consequence, the core of interest of this study lies in the analysis of the constructions recorded in the texts of that period.

The article is constructed as follows: section 2 provides a general background on the use of equivalent constructions in English and French. Section 3 analyses data from modern Spanish by qualitative and quantitative means, which are at the basis also for section 4, devoted to the analysis of the data recorded in theater pieces from the XVI and XVII centuries, when the change favoring *pienso* took place. In section 5, certain aspects of the interactive function of said constructions are laid out, which according to our hypothesis, determines their distribution. In the final section, we summarize the main conclusions of the study.

## 2. Current state of affairs and general data on usage

Upon comparing those verbs used to express cognition in Spanish, one detects differences in the distribution and frequency of the syntagmatic contexts and the semantic-discursive values associated with each lexical form. In Spanish, researchers have mostly examined the constructions *creer* and *pensar*, using different frameworks and with differing degrees of granularity. These constructions possess similar formal and functional characteristics, but also differ in several aspects that merit further investigation.

Weber and Bentivoglio, and Travis analyzed oral data from Venezuelan and Colombian Spanish respectively, and found a preference for the usage of both verbs in 1st-person, present-tense constructions. This preference was less notable in the case of *pensar*, especially in the Colombian corpus. With respect to the differences, both studies highlighted the greater frequency of *creo* as opposed to *pienso* and the smaller proportion of *pienso* in the dominant syntactic pattern, exemplified in (1) and (2).

An analysis of the content of the constructions of *creer* and *pensar* will help to delineate these differences. De Saeger (2007) examines evidentiality and epistemic modality in the use of verbs of propositional attitude, and provides evidence for evidential lexical meaning in the verbs examined. To accomplish this the author adopts a broad interpretation of evidentiality, which includes opinion and belief as modes of acquisition of knowledge that do not require the direct identification of the source of information (Chafe, 262-265).

On the other hand, the epistemic evaluation of probability is viewed by De Saeger as an interpretation that is only possible under certain circumstances, namely “that the proposition must be a state of things without value judgment” (270), that is, a description of facts and not a personal opinion. With respect to the illocutionary value of constructions, epistemic uses alter the type of expressed content, which “is now no longer a reality, but rather a possible reality” (ibid., 273), while the evidential construction does not change the opinion status of that which is expressed, although - it is important to note - it does modulate the argumentative force, attenuating it and reinforcing it, depending on the context. Additionally, it indicates that only *creo* and *supongo* can function as epistemic modalizers, but not *pienso*, a result that contrasts with what occurs in English and French (ibid., 273). In practice, however, the

distinction that De Saeger proposes faces important difficulties that the author himself recognizes.<sup>2</sup>

In any case, both verbal uses of opinion and belief and uses of probability and uncertainty are basic methods of expressing the epistemic-evidential stance of speakers, especially within the frame of a conversational interaction, where partners construct their communication in real time collaboratively and intersubjectively.

The communicative productivity of this type of construction is reflected in its recurrence in texts. Data from a variety of oral corpora in various languages show its prevalence, although they also point out interlinguistic differences in both the relative frequency and in the particular lexical selection in every language.

Wierzbicka (37) interprets its recurrent use in oral English as proof of the conceptual relevance of the distinction between facts –not modalized– and opinions –expressed with *I think*–. Aijmer (9) contributes further data for spontaneous conversation, with 51 tokens of *I think* for every 10,000 words. The use of *I think* seems to be conditioned by the more or less interactive character of the speech event. In the *London-Lund* corpus, the relative frequency spans from 51 tokens per 10,000 words in conversation to 26 tokens in contexts of interview and debate. This frequency declines to 17 in radio broadcasts and prepared speeches (cf. Aijmer, 9). Fetzer contributes further data from political interviews, with a standardized frequency of 28.87 per 10,000 words, which contrasts with the 4.47 from a sample of speeches. On the other hand, the corpus of conversations of Australian English that is studied in Mullan presents a higher frequency of *I think*, 281 occurrences in 31,847 words, that is, 88.23 cases per 10,000 words (cf. Mullan, 68 and 143). Other lexical options, such as *I believe*, *I guess*, *I reckon*, *I suppose*, are far less frequent than *I think* (cf. Scheibman, 66; Kärkkäinen 2003, 36; 2007, 186-87; Kaltenböck; Rodríguez Louro & Harris, 433).

The tendency towards the lexical specialization of the verbal expression of epistemic attitudes (*I think* in English, *creo* in Spanish) has been investigated from the perspective of the grammaticalization of constructions. Indeed, a body of work has identified in *I think* and similar constructions some of the processes of change associated with this theory (cf. Thompson & Mulac; Traugott 1995; Brinton 1996, 2008; Fisher; Van Bogaert 2011; Kaltenböck). But independent of the diachronic development of the construction, its high frequency in modern usage is a characteristic that favors its crystallization as a unit with its own identity within the system (cf. Kärkkäinen 2003, 35). The main question could be, then, which properties determine that a particular construction, compared to others of the same class, becomes generalized as the preferred expression of epistemic stance.

One could consider the hypothesis that lexical meaning conditions the distribution of one form and not others. It would be necessary, in that case, to justify that the semantic content of *think* makes this verb preferable to alternatives like *believe* or *guess*, for example. Fetzer (68) suggests that, compared to *I think*, *I believe* has a more precise semantic content. For this reason, the variety of communicative functions is necessarily more limited than that of *I think* (“More determinate meanings generally contribute to more particularized functions,” *ibid.*). This explanation, however, is circular: the expansion of semantic values is parallel to the expansion of functional contexts, and both facets tend to be tied to the frequency of use of these constructions. The lexical content of *believe* does not, in itself, hinder its spread in frequency and function; in fact,

<sup>2</sup> De Saeger notes that “many performative forms are found in the divide between evidential and epistemic uses” (*ibid.*, 271). For further research on the difficulty of assigning conceptual values and formal properties characteristic of ‘strong’ or ‘weak’ readings of the verbs of opinion, see also Schneider, Willems & Blanche-Benveniste, and González Ruiz.

in other languages, verbs with similar semantics have developed communicative functions that are expressed in English as *I think*.<sup>3</sup>

In their analysis of constructions of cognitive verbs in English and French, Fetzer & Johansson compare the uses of *I think* with those of *je pense*, and those of *I believe* with those of *je crois*. Nevertheless, the higher frequency of use of *je crois* as opposed to *je pense* in their corpus indicates a greater functional similarity between *I think* and *je crois* than with *je pense*, a point noted by the authors (cf. *ibid.*, 247). Thus, in the sample of transcriptions of political interviews analyzed by Fetzer & Johansson, *je crois* is used significantly more often than *je pense*, which appears 8.58 times per 10,000 words (*ibid.*, 247). According to these results, French shares a similarity with Spanish, and not English, in its preference for a verb whose lexical base refers to ‘belief’ and not ‘thought’. Nevertheless, other corpora offer a different distribution. Blanche-Benveniste & Willems (236), who consult the corpus G.A.R.S of oral interactions, document 854 tokens of *je pense* compared to 720 of *je crois*. Additionally, in the corpus analyzed in Mullan (143-144), *je pense*, with an index of 32.41 tokens per 10,000 words greatly surpasses the frequency of *je crois*, which reaches only 8.77 tokens.

The distributional data for *je pense* and *je crois* seem to contradict arguments for a strictly lexical conditioning of the modalized uses or those with ‘weak government’ that characterize both verbs (Blanche-Benveniste & Willems, 236; Willems & Blanche-Benveniste). The very fact that French and Spanish turn to similar lexemes —*je pense/pienso*, *je crois/creo*— but display contrasting tendencies in their usage —French favors *je pense*, at least in some corpus, while Spanish opts for *creo*—forces us to examine other aspects of constructions and their use in discourse, both in their current synchronic form, and in earlier stages of the language.

### 3. *Creo* and *pienso* in modern Spanish

In order to obtain an overview of current uses of *creo* and *pienso*, I have turned to the databases BDS and ADESSE, which gather syntactic and semantic analyses of the 159,000 clauses in the ARTHUS corpus. This corpus consists of texts of different genres of American and Peninsular Spanish produced in the 1970s and 1980s.

The data from ARTHUS show that both *creer* and *pensar* are frequently used verbs: *creer* appears 1,912 times (13.2 per 10,000 words) and *pensar* 1,462 (10.1 per 10,000). Nevertheless, one observes a great disparity in frequency of usage when examining tokens in the first-person singular and present-indicative tense, with 1044 cases of *creo* (54.6% of the tokens of *creer*) compared to 157 cases of *pienso* (10.7% of *pensar*).

The high frequency of *creo* is tied to its function in oral discourse, as was observed in the case of *I think*. Table 1 offers, for the five textual genres in the ARTHUS corpus, the absolute frequencies of the constructions of the verbs *creer* and *pensar*, the number of tokens of *creo* and *pienso*, and the percentage of these same tokens within the total of the respective verbs. The shaded columns show the standardized frequencies, taking into account the total number of words in each genre.

<sup>3</sup> Verbs used in these constructions in Swedish / German, show a lexical contrast similar to Sp. *creer* and *pensar*: “Other than *jag tycker/ich finde/ich denke*, which can be used for evaluative stance marking, *jag tror* and *ich glaub(e)* mostly function as epistemic markers.” (Auer & Lindström, 18).

**Table 1.** Distribution of *creer*, *creo*, *pensar* and *pienso* by textual genre (source: ARTHUS)

	<i>creer</i> N=	<i>creo</i> N=	% <i>creo</i>	/ 10.000 words	<i>pensar</i> N=	<i>pienso</i> N=	% <i>pienso</i>	/ 10.000 words	Nº words
NEWS	42	22	52.38	1.32	34	1	2.94	0.06	166,804
ESSAYS	68	20	29.41	0.78	104	9	8.65	0.35	257,718
NOVELS	532	166	31.20	3.08	842	64	7.60	1.19	538,906
THEATRE	368	105	28.53	4.94	239	22	9.21	1.04	212,507
ORAL	902	731	81.04	26.77	243	61	25.10	2.23	273,070
Total	1912	1044	54.60	7.21	1462	157	10.74	1.08	1.449,005

*Creo* appears in the oral section of the corpus 26.77 times per 10,000 words, a frequency close to that of *I think* (28.87) in the data presented by Fetzer and Johansson. In other types of discourse, the use of *creer* is notably less frequent. Nevertheless, the standardized frequency of theatrical texts (4.94) compared to that of the essay genre (0.78) supports the association proposed in the previous section between the degree of interactivity of the communicative event and the manifestation of the epistemic stance of the speaker. In fact, previous research has demonstrated that the communicative function specific to each textual genre is manifested—along with other indicators—in the frequency and distribution of expressions of affective and epistemic stance (cf. Biber & Finegan). But if we apply the same criteria to the *pienso* data, we see that this verb's frequency of use in the five genres does not clearly depend on the more or less interactive or dialogic character of the texts; from this, we infer that the form *pienso*, although lexically similar to *creo*, fulfills pragmatic and discursive functions that are different than the latter in modern Spanish.

This idea is further reinforced upon observing the distribution of syntactic constructions of both forms in the corpus, paying specific attention to the categories of the Object.

**Table 2.** Distribution of the constructions *creo* and *pienso* across the corpus and in oral section (source: ARTHUS)

	TOTAL ARTHUS				ARTHUS ORAL			
	<i>creo</i>	%	<i>piens</i>		<i>creo</i>	%	<i>piens</i>	
			<i>o</i>	%			<i>o</i>	%
clause_que	902	86.40	87	55.41	648	88.65	42	68.85
clause_INF	8	0.77	18	11.46	0	0.00	8	13.11
fn / pron /clit	46	4.41	17	10.83	16	2.19	6	9.84
fprep (en)	18	1.72	24	15.29	13	1.78	4	6.56
Ø Obj	68	6.51	8	5.10	53	7.25	1	1.64
Others	2	0.19	3	1.91	1	0.14	0	0.00
	104							100.0
	4	100.00	157	100.00	731	100.00	61	0

Table 2 shows that the construction with the clause\_que is the most frequent for both verb forms. This construction, represented in (4) and (5), is a crucial part of assigning modal-epistemic value to the forms of the verbs of cognition here analyzed, as has previously been indicated by the early works of Urmson (481) and Benveniste.

4. No sé, *yo creo que, en fin, constantemente todos estamos cambiando un poco*  
I dunno, I think that, I mean, we're constantly changing a bit (ARTHUS, MAD:065.09)
5. Queriendo ser optimista, porque *yo creo que lo soy, pienso que el nivel científico va hacia arriba.*  
Wanting to be optimistic, because I think I am, I think the scientific standards are improving. (ARTHUS, SEV:268.10)

Along with the significant differences in frequency already mentioned, the fact that *creo* is present in a higher proportion of constructions with clause\_ *que* than *pienso* seems to suggest that *creo* is more closely associated with the expression of epistemic stance, in line with the processes of subjectivization that accompany the grammaticalization or pragmaticalization of this type of elements (cf. Traugott 1989, 1995).

Despite a smaller proportion of usages of *pienso* with clause\_ *que*, *pienso* occurs more frequently in other constructions. In combinations with infinitive clauses, such as (6), *pienso* is used with the sense of 'to have the intention of [doing something]':

6. Dentro de algunos días *pienso* ir al Louvre de nuevo  
In a few days *I'm thinking* of going to the Louvre again (ARTHUS, DIE:022.02)

Conversely, *creo* in constructions with clause\_INF maintains the evidential-epistemic meaning of the structures with clause\_ *que*, with which the former appears to alternate (cf. Buceta Lojo). For example, (7) could be formulated as [...] *el éxito que a estas alturas creo que me he merecido ya* ('the success that, by this point, I believe I have already deserved').

7. [...] el éxito que a estas alturas *creo* haberme merecido ya  
[...] the success that by this point *I believe* I would have deserved already (ARTHUS, LAB:146.29)
8. Y *creo* recordar otro cuento ruso donde un cocodrilo se traga a un funcionario...  
And *I seem to recall* another Russian story where a crocodile devours a functionary (ARTHUS, CAI:044.27)

Descriptive uses with prepositional objects are less frequent with *creo* than with *pienso*, consistent with the aforementioned specialization of the form *creo* as an epistemic modalizer. (9) and (10) are examples of prepositional constructions:

9. *creo* mucho en la labor de las revistas especializadas  
'I really *believe* in the labor of specialized journals' (ARTHUS, MAD:039.31)
10. yo más que idioma español, *pienso* en un idioma Hispanoamericano  
'for me, more than the Spanish language, *I think* in a Hispanic-American language' (ARTHUS, MAD:180.11)

Constructions with *creo* that appear in interior or final position indicate a tendency towards fixation or modalization.

11. No sé, media hora, *creo*, pero, no sé, no tengo ni idea el tiempo que llevaremos. I dunno, half an hour, *I believe*, but, I dunno, I have no idea how long we've been here already. (ARTHUS, MAD:390.07)

Among the uses of *pienso*, we also find two that are formally parenthetical, but none with the value of epistemic modalizer similar to that of *creo* in (11). The difference can be observed in that in (12) *pienso* is accompanied by the adverb *ahora*, which temporally locates the process. The contrast with *creo* in (11) is evident in the inability to include a similar adverb: \**No sé, media hora, creo ahora, pero no sé, no tengo ni idea del tiempo que llevaremos* ('I dunno, half an hour, I believe now, but I dunno, I have no idea how long we've been here').

12. En realidad, creo que ésta la ignoraba o, más bien, *pienso* ahora, fingía ignorarla. To tell you the truth, I think she ignored her, or, better yet, now that *I think about it*, she pretended to ignore her. [SUR:057.21]

It is thus evident that the uses of *creo* and *pienso* documented in ARTHUS differ in both distribution of use and in communicative function. Earlier we saw that in French, the frequency data point to a different distribution, since, at least in some corpora, the form *je pense* is more frequent than *je crois*. Faced with the question of why two neighboring languages have followed different trajectories in this regard, it becomes necessary to obtain data about the history of the uses of *creo* and *pienso* and investigate the diachronic development of these constructions.

#### 4. Aspects of the diachronic evolution of *creo* and *pienso*

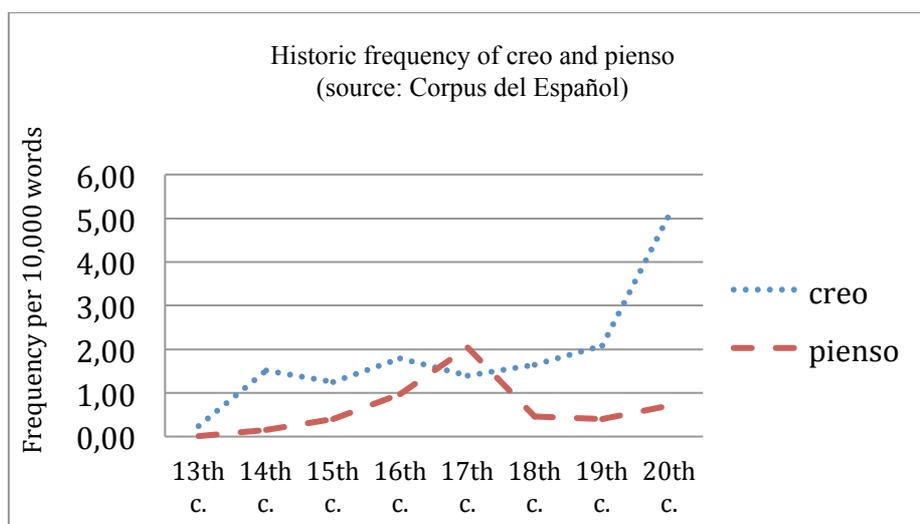
Table 3 shows information obtained in the *Corpus del Español* (CdE, Davies). The data from the columns headed by *creer*, *creo*, *pensar*, and *pienso* correspond to the standardized frequencies per million words. The columns of percentages of *creo* and *pienso* over the total of *creer* and *pensar* respectively and those of the standardized frequency per 10,000 words have been included to facilitate a comparison with the data offered in Table 1. Furthermore, Table 3 below indicates the total data from ARTHUS, standardized per million words.

According to data from the *Corpus del Español*, *creo* surpasses *pienso* in the number of registered tokens in all centuries except the 17th century. Moreover, the percentage of tokens of *creo* and *pienso* over the total tokens of each verb indicates a greater tendency for *creer* to be used in the first-person singular of the present indicative, although in the 17th century the proportion of *pienso* within *pensar* (30.01%) practically equals that of *creo* within *creer* (30.75%).

**Table 3.** Distribution of *creer*, *creo*, *pensar*, *pienso* in the 13th - 20th centuries (source: *CdE*)

	<i>creer</i>	<i>creo</i>	% <i>creo</i>	/ 10.000 words	<i>pensar</i>	<i>pienso</i>	% <i>pienso</i>	/ 10.000 words
s. XIII	227.82	23.68	10.39	0.24	139.08	1.04	0.75	0.01
s. XIV	404.19	152.08	37.63	1.52	343.5	15.73	4.58	0.16
s. XV	429.95	125.59	29.21	1.26	553.81	39.45	7.12	0.39
s. XVI	554.29	179.70	32.42	1.80	748.31	97.69	13.05	0.98
s. XVII	453.75	139.53	30.75	1.40	678.96	203.75	30.01	<b>2.04</b>
s. XVIII	621.19	164.31	26.45	1.64	332.09	45.43	13.68	0.45
s. XIX	883.80	207.75	23.51	2.08	627.65	40.58	6.47	0.41
s. XX	800.62	508.45	63.51	<b>5.08</b>	551.79	70.37	12.75	0.70
ARTHUS /1 million	1319.53	720.49	54.60	7.20	1008.97	108.35	10.74	1.08

One can deduce from the above data that the high frequency of *pienso* in the 17th century cannot be explained simply by the general increase in the use of *pensar* as opposed to *creer*, since in the 15th and 16th centuries the overall frequency of *pensar* also exceeds that of *creer*, and nevertheless the proportion of *pienso* over total usages of *pensar* is clearly less than that of *creo* over total usages of *creer*: 7.12% in the 15th century and 13.05% in the 16th century for *pienso*, compared to 29.21% in the 15th century and 32.42% in the 16th century for *creo*. Figure 1 shows the evolution of *creo* and *pienso* according to the data from Table 3.

**Figure 1.** Evolution of the frequency of *creo* & *pienso* in the 13th-20th centuries (source: *CdE*)

After confirming that in the 17th century *pienso* competed with *creo* in frequency of use, it becomes necessary to determine to what extent the two verbs, in that moment in history, shared constructions, semantic values, and discursive profiles. Therefore we will endeavor to identify the factors that played a role in their subsequent development after the 17th century which culminated in the present-day, unequal distribution.

With this goal in mind, the present study examined tokens from the second half of the 16th century and the first half of the 17th century in the *Corpus Diacrónico del Español* (CORDE). The selection of the works analyzed took into account the probability that these works resembled real conversation, although it is difficult to

calculate the extent of literary conventions used in even those texts that more clearly adopted a colloquial style. Texts of dramatic prose were chosen, following Taavitsainen and Jucker (213), who favor the selection of comedies in prose in order to observe structural and pragmatic aspects of communication in other historical periods. In the absence of texts of this genre dated between 1630 and 1700, the present selection was limited to two periods: 1551-1600 and 1601-1630. To complete the sample, the present study included texts of comedy (in verse) of Lope de Vega, that appear between 1579-1631.

Table 4 provides an overview of the distribution of both forms, including the standardized frequencies per 10,000 words. The sum of these frequencies (the column *creo* + *pienso*) allows us to observe that these verbs have a similar and relatively high representation in dramatic texts as a whole, though the distinction between prose and verse did not appear to be crucial. In contrast, both *creo* and *pienso* are used less frequently in the complete works of Lope de Vega; indeed, this decline would be much more pronounced if we were to eliminate those tokens from Lope de Vega's comedies in verse. The data makes evident that the theatrical genre favors the use of *creo* and *pienso*, as its frequency is significantly higher in dramatic texts than in samples comprising various genres, such as all of the texts of Lope de Vega in CORDE or the general frequency data extracted from *Corpus del Español* for the 16th and 17th centuries shown in Table 3 above.

**Table 4.** Distribution of *creo* and *pienso* in various 16th and 17th century samples (source: CORDE)

	<i>creo</i>		<i>pienso</i>		<i>creo</i> + <i>pienso</i>	Total words
	N=	10.000	N=	10.000		
Theatre prose 1551-1600	161	6.21	69	2.66	8,87	259,153
Theatre prose 1601-1630	48	5.41	50	5.63	11.27	88,795
Comedy (verse) Lope de Vega	185	3.31	325	5.82	9.16	558,748
Lope de Vega (all)	313	2.25	511	3.67	5.92	1.393,783

In order to extract data of interest for *creo* and *pienso*, the following search strings were used in CORDE: *Creo* / *creo* / *Pienso* / *pienso*<sup>4</sup>, type of text *13. Teatro* for years 1551-1600 and 1601-1630, and type of text *23121. Comedia* for the author *Vega Carpio, Lope de*. The results were screened in order to eliminate irrelevant occurrences (such as the noun *pienso*), and every case was manually analyzed to record its structural characteristics, such as its distribution in different transitive and intransitive schemes. Table 5 shows the percentages of use of each of the constructions and also included data from the oral portion of ARTHUS to facilitate comparison with the contemporary usage of these verbs.

<sup>4</sup> Including the only form with an enclitic pronoun found: *Piénsolo* ,I think-it'.

**Table 5.** Distribution of the constructions of *creo* and *pienso* in the text samples from the 16th, 17th, and 20th centuries (sources; CORDE & ARTHUS)

	Theatre prose 1551-1600		Theatre prose 1601-1630		Lope de Vega comedies (verse) 1579-1630		ARTHUS Oral (20th century)	
	% <i>creo</i>	% <i>pienso</i>	% <i>creo</i>	% <i>pienso</i>	% <i>creo</i>	% <i>pienso</i>	% <i>creo</i>	% <i>pienso</i>
clause <i>que</i> <sup>5</sup>	73.3	75.4	50.00	62	62.70	58.02	88.65	68.85
clause INF	0.62	17.4	2.08	34	0.00	36.73	0.00	13.11
fn / pron	9.94	5.8	20.83	0	15.14	3.09	1.37	8.20
clitic	13.66	0.0	16.67	0	15.14	0.31	0.82	1.64
fprep <i>en</i>	2.48	0.0	8.33	4	2.16	0.93	1.78	6.56
Ø Obj	0	0.0	2.08	0	2.16	0.00	7.25	1.64
Others	0	1.4	0	0	2.70	1.23	0.14	0.00
N=	161	69	48	50	185	325	731	61

In all cases the dominant syntactic pattern for both forms is the construction with clause *que*, associated with the modal-epistemic interpretation of the verbs of cognition. The following examples illustrate parallel uses of *creo* and *pienso*: in (13), both are uttered by the same person and in (14) and (15) one observes very similar configurations in works by the same author.

13. Ynesa: [...] Para mí *creo* que se inventó el fregar; para mí el barrer; para mí el lavar y cerner. Mi signo o planeta *pienso que lo causa*, pues otras ay que no son para descalçarme el çapato y biven más descansadamente que yo.  
For me I think scrubbing was invented, for me sweeping, for me washing and sifting. My sign or planet *I think are the cause*, since there are others that aren't around to take off my shoes and they live more restfully than myself. (CORDE, 1545-1565, Rueda, Lope de Pasos)
14. LEO. Celio tente. [...] *Creo que nos han de oyr.*  
LEO. Celio calm down. [...] *I think they must be hearing us.* (CORDE, 1595-1603, Vega, Lope de, Viuda, casada y doncella)
15. Espera, trompeta, aquí,  
*que pienso que me han oído* [...] *Wait, trompeta, here. / I think that they have heard me* [...] (CORDE, a 1606, Vega, Lope de, El asalto de Mastroque por el Príncipe de Parma)

<sup>5</sup> Flexional clauses that lacked conjunctions but appeared to maintain a syntactic relationship of dependency with the verbal form have been included in the category of clause *que*. This case is captured in the following example from the data: “Vn escribano \* de buen entendimiento, que bien *creo* bos avéys visto algunas vezes/An intelligent scribe, that I believe you have met a few times.” (CORDE, c 1565, Sepúlveda, Lorenzo, Comedia de Sepúlveda). In some cases it is unclear whether the verb functions as a predicate with an object in the form of a clause or whether we are observing a parenthetical use, since there are no syntactic connections in the statement.

In the 16th and 17th centuries, *creo* and *pienso* demonstrate comparable values in the construction with clause *que*. In some cases—(16) and (17)—they designate the mental process itself; in uses like (18) and (19) they introduce the content of the nominal clause as an option, judgment, or consideration of the speaker; in other contexts—(20) and (21)—they indicate the doubt or uncertainty of the speaker with regards to specific propositional content.

16. Tornáme âbraçar, hermano Octauio, que aún no *creo* que soys biuo.  
Turn to embrace me, brother Octavio. I still *can't believe* you are alive.  
(CORDE, a 1620, Quevedo y Villegas, Francisco de, Entremés de Bárbara)
  
17. aunque bien sé que no me alcançaron, aún *pienso* que me hirieron  
although I well know they did not reach me, I still *think* that they hurt me.  
(CORDE, 1554 Rodríguez Florián, Juan, Comedia llamada Florinea...)
  
18. Pero, con toda esta çeguedad, veo vna cosa y *creo* que es para mí mismo  
condenaçión; porque veo que é dejado el sagrado estudio, cuyos principios y  
medios míos eran por todos celebrados, y no buelbo a él.  
But, with all of this blindness, I see a thing and *I believe* that it is condemnation  
for myself; because I see that I have left the sacred study, whose principles, and  
the methods I applied to it, were celebrated by all, and I have not returned to it.  
(CORDE, c 1565, Sepúlveda, Lorenzo, Comedia de Sepúlveda)
  
19. Y tú cierra tu puerta, que a río buelto, habrá oy grandes desmanchos; que yo  
*pienso* que se ha de poner a cuchillo y saco medio pueblo si luego no hallo a  
Floriano.  
And you close the door, because troubled waters will bring great infamy today;  
and *I think* the town should be turned upside down if I don't find Floriano.  
(CORDE, 1554, Rodríguez Florián, Juan, Comedia llamada Florinea...)
  
20. BECERRICA: Abriéndose aquella arca salió de ella la señora Casandra.  
CERVINO: ¿Y quién abrió a Casandra?  
BECERRICA: No sé, señor, ella *creo* que venía abierta.  
BECERRICA: Opening that ark, Mrs. Cassandra came out. / CERVINO: ¿And  
who opened for Cassandra? / BECERRICA: I do not know, sir, *I believe* it was  
already open.  
(CORDE, 1602, Velásquez de Velasco, Diego Alfonso, El celoso)
  
21. Duró la fiesta la tarde  
y entró por remate della,  
Leonarda, el juego de las cañas,  
que de a cuatro *pienso* que eran.  
The celebrations lasted till the afternoon, / Leonarda, and towards the end, /  
there was jousting with *I think* four participants / (CORDE, 1613, Vega Carpio,  
Lope de, La burgalesa de Lerma)

If we compare the contexts of use and values of the construction V+clause *que* in the 16th and 17th centuries with those reported in ARTHUS, we observe that contemporary Spanish no longer observes a parallelism between constructions

containing *creo* and those containing *pienso*. For example, the phenomenon of *negative raising* was present in the 16th and 17th centuries in different conditions than those we find in the present day. It is known that the negative raising occurs with *weak assertive predicates*, which receive an epistemic interpretation (cf. Hooper; Bosque; Schneider, 46; Willems & Blanche-Benveniste, 115-116). In the classic period, both *creo* and *pienso* demonstrate epistemic uses—(20) and (21)—and for this reason we notice examples of negative raising with both, such as (22) and (23):

22. Fulminato Pues dime, ¿tienes de acá algún tercero?  
Felisino Porque no *creo* que tendrá allá compañía de plato, no le llevo.  
Fulminato So tell me, have you got a middleman?  
Felisino Because I don't *think* he will have company for the meal, I did not bring one.  
(CORDE, 1554, Rodríguez Florián, Juan, Comedia llamada Florinea)
23. ¡Ce, Diego Sánchez, Diego Sánchez! No, no *pienso* que responderá por más bozes que le den. (CORDE, 1545 – 1565, Rueda, Lope de, Pasos)  
Diego Sanchez, Diego Sanchez! No, I don't *think* he will respond no matter how much they yell at him.  
(CORDE, 1545 – 1565, Rueda, Lope de, Pasos)

In (22) and (23) the negation has no direct impact on *creo* and *pienso*, but rather on the propositions expressed by the integrated clauses: (22) '[*creo que*] no tendrá allá compañía de plato/I don't think he will have company for the meal', (23) '[*pienso que*] no responderá por más voces que le den/I think he won't respond no matter how much they yell at him'.

In the ARTHUS corpus, however, the mechanism of 'negative raising' applies to *creo* but is not found with *pienso*, probably due to the limitation of epistemic uses of these forms in modern Spanish.

A formal indication of a 'weak' reading of these verbs related to negative raising is the tendency towards the extraction or raising of constituents in the subordinate clause. This occurs in (20) with the pronoun *ella*, which is the subject of the clause *venía abierta* although sequentially it appears before *creo*, and also in (13) above, where *Mi signo o planeta* comes before *pienso* as the subject of *lo causa*. Both verbs were found with this constructional type in the ARTHUS corpus, although *pienso* appeared less frequently than *creo*.

Another syntactic property related to the processes of grammaticalization of these forms is the expansion—or reduction, from another point of view—of its scope (cf. Kaltenböck 2010 y 2013 regarding *I think*). *Pienso* and *creo*, as epistemic modalizers, not only admit clauses in their scope (typically a clause *que*), but also are occasionally found in lower-level constructs, such as words or phrases. There is evidence of this reduction of scope in the 16th and 17th century dramatic texts studied here:

24. Porque, como oý en este mesmo sermón que os dixen, que diz que dize *creo que un profeta*: "toda carne es heno y su hermosura como la flor del campo, que presto se alacia."  
Because supposedly, as I heard in this very sermon I told you about, I think a prophet says: "all flesh is like hay, whose beauty is like the flower of the field, that quickly wilts away."  
(CORDE, c 1565, Sepúlveda, Lorenzo, Comedia de Sepúlveda)

25. Yo vi en Sevilla una mujer, don Diego,  
 hija de un mercader, *pienso que indiano*,  
 que era rayo de amor, que es poco fuego,  
 con los ojos de un rostro soberano,  
 y amor por ella fue dos veces ciego  
 I saw in Seville a woman, don Diego,  
 daughter of a merchant, *I think Indian*,  
 that was a ray of love, but that is little fire,  
 through the eyes of a stern face,  
 and love for her was therefore twice blind.  
 (CORDE, a 1618, Vega Carpio, Lope de, Servir a señor discreto)

*Creo que*, with its reduced scope, is a commonly-used structure in modern Peninsular Spanish and this is found in the oral portion of the ARTHUS corpus:

26. El curso A duró cerca de... *creo que el mes*, no llegó al mes pero de unos veinticinco a treinta días.  
 Course A lasted almost... *I think* a month, it wasn't a whole month but probably around twenty-five to thirty days. (ARTHUS, MAD:007.04)
27. La he escrito algunas veces, pero no me ha contestado; en fin, se llamaba ...V... *creo que Mercedes*, pero no se lo puedo asegurar. (ARTHUS, MAD:013.34)  
 I have written to her a few times, but she did not answer; oh well, her name was ... V ... *I think Mercedes*, but I don't know for sure.

In contrast, similar constructions are not found with *pienso* in ARTHUS.

In short, during the 16th and 17th centuries, *creo* and *pienso* with clause *que* showed a parallel function. In comparison, by the end of the 20th century, *pienso* shows certain restrictions in what it can be combined with, restrictions that could be related to its decline in use as an epistemic modalizer. This functional limitation is also shown in the notable decline in frequency in the ARTHUS corpus in comparison to the frequency found in the data from the CORDE corpus from the 16th and 17th centuries.

Data from modern Spanish on the use of the different constructions of *creo* and *pienso* show a close association of *creo* with the distribution V+clause *que* (88.65% in the oral corpus of ARTHUS) and a high, though lower, degree of specialization of *pienso* in the same structure (68.85% in the same corpus). The 16th and 17th century texts that were studied here provide quantitative and qualitative support for the similarities between *creo* and *pienso* when appearing in constructions with clause *que*; yet important differences in their combinatorial syntax can also be observed. Thus, unlike *pienso*, *creo* is found with relative frequency with clitics, pronouns (stressed) and noun phrases. Together these categories account for 23.6%, 37.5% and 30.28% of the tokens of the form in the 16th and 17th century samples, compared to 5.8%, 0%, and 3.4% of the tokens of *pienso*. Conversely, in the very same texts *pienso* is found in combination with clause *INF* with frequencies of 17.4%, 34%, and 36.73% while *creo* is barely used in this construction (cf. Table 5). This distributional contrast thus guides the specific communicative functions of each form and should be considered when explaining the cause of their divergent paths in the following centuries.

In the samples from the classical period one observes numerous cases of *creo* in combination with the clitic *lo*, such as in (28):

28. DUQUESA ¿Es tu rostro este que veo?  
 CONDE Aunque con máscara vengo  
 de la harina que tengo,  
 Próspero soy.  
 DUQUESA Yo *lo creo*,  
 pues tus palabras süaves  
 a más que esto me han traído,  
 del dulce hechizo vencido  
 con que enamorarme sabes.  
 DUCHESS: Is that your face I see? / COUNT: Although I come wearing a mask, / made  
 of the flour on my face, / I am Próspero. / DUCHESS: I believe it, / As your soft words  
 / have driven me to more than this, / conquered by the sweet spell / that you use to make  
 me fall in love. (CORDE, a 1604, Vega Carpio, Lope de, El molino)

In (28) *creo* means ‘to be certain [about what one is reporting]’, a sense that is not shared with *pienso* (as demonstrated by the lack of examples of *pensar* with this construction). The use of *creo* shown in (28) establishes through *lo* an anaphoric relation with the propositional content produced by the previous speaker, such that the construction has a dialogic role tied to valences of the verb *creer*. In other cases, the clitic refers to the interlocutor, reinforcing the interactive nature of the utterance, as can be observed in (29):

29. Sebastiana La suzia, como te ve con esse becoquín de orejas y los lados rasos,  
 atrévese a hablar, diziendo que te las cortaron por ladrón.  
 Sigüença ¡A, pícara! ¿Por ladrón a mí? ¿No sabe Dios y todo el mundo que  
 nunca hombre ganó tanta honrra quedando sin orejas como quedé yo?  
 Sebastiana Yo *te creo*. Pero dime, señor Sigüença, ¿cómo te lisiaron d'ellas?  
 (CORDE, 1545 – 1565, Rueda, Lope de, Pasos)  
 Sebastiana: The dirty one, seeing you with that ear-cap and those flat sides,  
 dares to speak, and says that they cut them off because you are a thief. /  
 Sigüença: Swindler! They did it to me for being a thief? Doesn’t God and the  
 rest of the world know that no man gained so much honor as myself having my  
 ears removed? / Sebastiana: I *believe you*. But tell me, Mr. Sigüença, how did  
 they cut them off? (CORDE, 1545 – 1565, Rueda, Lope de, Pasos)

And in some cases both personal and propositional objects are mentioned.

30. [Teodoro.] [...] y así, a decir me resuelvo  
 que te quiero, y que es disculpa  
 que con respeto te quiero.  
 Temblando estoy, no te espantes.  
 Diana. Teodoro, yo *te lo creo*.  
 [Teodoro.][...] and thus, I have resolved to tell you / that I love you, and that it is  
 with my apologies / that I love you with respect. / Trembling as I am, fear not. /  
 Diana. Teodoro, I believe you. (CORDE, 1613, Vega Carpio, Lope de, El perro  
 del hortelano)

Additionally the stressed pronouns in constructions with *creo* frequently demonstrate an anaphoric function that binds them with the previous turn, reinforcing the interpersonal dynamic of dramatic dialogue:

31. Madrigalejo ¿Es bien, señor Molina, que digan de mí semejantes palabras? ¿Hombre era yo que le había d'escalfar \* su bolsa? ¿Faltávanme a mí dos pares de reales entre amigos?  
Molina ¡Por Dios, señor! Yo no creo *tal*, y pésame de que vi que os tratavan mal y acudían tantos contra vos.  
Madrigalejo: Is it alright, Mr. Molina, that they say such things about me? Was I the type of man that would have to squeeze his wallet? Would I lack two coins among friends?  
Molina ¡Good God, sir! I do not believe *such*, and I give my condolences that they treated you poorly and that so many joined against you.  
(CORDE, 1545 – 1565, Rueda, Lope de, Pasos)
32. RAMIRO: No dude vuesa merced, porque, cuando es menester, tengo menos lengua que un pescado.  
VIOLANTE: No creo yo *menos* de vuestra persona.  
RAMIRO: Have no doubt, Madam, since when it is called for, I speak less than a fish.  
VIOLANTE: I do not think less of your person.  
(CORDE, 1602, Velásquez de Velasco, Diego Alfonso, El celoso)
33. MENGO Esa hermosura,  
¿por qué el amor la procura?  
LAURENCIA Para gozarla.  
MENGO *Eso* creo.  
MENGO This beauty, / why does love seek it? / LAURENCIA In order to enjoy it. / MENGO That I do believe. (CORDE, 1612, Vega Carpio, Lope de, Fuente Ovejuna)

In comparison to this dialogic features of *creo*, our sample of classical Spanish only provides one token of *pienso* with the *lo* clitic.

On the other hand, the syntactic-semantic valency of *pensar* does not permit one to integrate a human agent in the represented state of affairs as the source of the ‘thought’ content, as opposed to what occurs in *creer*, as we have previously noted in (29) and (30).

##### 5. Constructions, epistemic stance and interaction

As previously explained, *creo* appears to make a greater contribution towards the construction of the dialogue than *pienso*. Therefore it can be hypothesized that the interactional dynamic itself, and particularly the alternation of turns in the sequence of adjacent pairs, could have favored the use of *creo* over that of *pienso*. *Pienso*, thus, appears to present lexical and syntactic conditions that are less adapted to conversational exchange.

On the other hand, the data in Table 5 show that in the 16th and 17th centuries *pienso* is found with greater frequency in constructions with the infinitive. Moreover, the percentage of tokens of this construction out of the total uses of *pienso* increases notably from the 16th century sample (17.4%) to the samples of theatre in prose of the 17th century (34%) and the comedy in verse of Lope de Vega (36.73%). In the ARTHUS corpus from the 20th century, the *pienso* + INF construction represents a drastically lower proportion (13.11%), forming part of a collection of tokens that is

much more limited than those of *creo* (cf. tablas 2 and 5). The current meaning of the construction, exemplified in (6) above (*Dentro de algunos días pienso ir al Louvre de nuevo/In a few days I'm planning on going to the Louvre again*), is generalmente that of 'to have the intention to do something'.

In the 16th and 17th centuries the semantic value of the construction alternated between the modern sense of 'purpose or intention to carry out a certain future action', such as in (34), and that of 'mental reflection, belief, or possibility regarding a situation', whether it be in the present (35)<sup>6</sup>, the future (36) or the past (37).

34. Berdugo.- ¿Qué'stáys hablando en secreto?  
 Justa.- Estáuale diçiendo a Gutiérrez que quemase luego las castañetas, sonaxas y pandero, porque *no pienso baylar más en mi uida*.  
 Berdugo.- What were you talking about in secret?  
 Justa.- I was telling Gutierrez to burn the *castañetas, sonaxas* and tambourines, because I didn't plan on ever dancing again. (CORDE, a 1620, Quevedo y Villegas, Francisco de, Entremés de Diego Moreno)
35. Fabricio ¡Passo, passo, señores, que *no pienso deberos nada!*  
 Fabricio ¡Out of the way, sirs, I do *not believe I owe you guys anything!*  
 (CORDE, 1545 – 1565, Rueda, Lope de, Comedia llamada de "Los engañados")
36. FEDERICO Yo, señora moriré;  
 que es lo más que haré por mí.  
 No quiero vida. Ya soy  
 cuerpo sin alma, y de suerte  
 a buscar mi muerte voy,  
 que *aun no pienso hallar mi muerte,*  
*por el placer que me doy.*  
 FEDERICO I, my lady, will die; / which is the most I will do for myself. / I don't want to live. I am already / a body without a soul, and fortunately / I am off in search of my death, / but *I don't think I will find death quite yet, / because that would be too pleasant for me.* (CORDE, 1631, Vega Carpio, Lope de, El castigo sin venganza)
37. Cas. No, porque si cuando yo te casé con Menemno no seguí el uso deste maldito tiempo, que primero se habla del hazienda y a la postre de la persona, fue la causa viendo las virtudes de mi criado y tu marido, que *pienso no haberle dado tanto cuanto* (f. 43 v.) *meresce.*  
 Cas. No, if -when I married you off to Menemno- I did not follow the custom of this accursed time, that one first speaks of the dowry and only later about the person, it was due to the virtues of my servant, your husband, because I think I did not give him as much as he deserves. (CORDE, 1559, Timoneda, Juan de, La comedia de los Menemnos. Traducción de Plauto)

In (35)-(37) the infinitives refer to the first-person subject of *pienso*, as occurs in constructions with intentional value (34). There are not, therefore, syntactic differences between the intentional and valorative uses, except in cases of the compound

<sup>6</sup> In (35) the general context of the scene indicates without a doubt that the character is saying that he owes nothing to those that are taking him away by force.

infinitive—which precludes the intentional meaning—such that the interpretation depends on contextual elements, among which one finds the type of process designated for the infinitive. Intentional meaning is associated with potentially controllable processes and the verb *pienso* loses part of its lexical-designative meaning in order to form part of a quasi-periphrastic structure with a temporal orientation towards the future. On the other hand, the valorative meaning is preferentially associated with simple stative infinitives, which exclude an intentional reading. But, on the other hand, this evaluative reading of epistemic type can also be expressed when the subject of *pienso* does not coincide with that of the infinitive.

38. Onbre so, *de las cosas humanas ninguna pienso ser agena de mí*  
I am a man, *of that which is human I think nothing is foreign to me*  
(CORDE, 1441 – 1486, Valera, Diego de, Tratado de las epístolas enviadas por mosén Diego de Valera...)
39. Los arietes (*que pienso ser los que agora llaman bayvenes*), según Plinio, en el cerco de Troya los inventó Epeo [...]  
Battering rams (*which I believe are what are today called “bayvenes”*), according to Pliny, were invented by Epeo during the siege of Troy (CORDE, 1540 - c 1550, Mejía, Pedro, Silva de varia lección)

The subjective evaluation introduced by constructions with *pienso* is modulated according to the type of illocutionary act that is represented: it indicates personal endorsement when found in valorative acts, as shown in (38), or it reduces the epistemic certainty of a statement if the act is informative, as in (39) (cf. Gachet 2009:17).

This evaluative-epistemic meaning of some uses of *pienso* + infinitive, such as (35) – (39), is also seen in the few instances of *creo* + infinitive found in the analyzed examples from the XVI and XVII centuries, (44) and (45):

40. Salazar.- ¡Ay, señor mío, que quien ama lo honesto haze fuerça al Amor!  
Alarcón.- *No creo yo ser cosa deshonesto amar yo a mi Violante.*  
Salazar.-Oh, my lord, he who loves that which is honest strengthens love!  
Alarcón.- I myself don't believe that loving my Violante, as I do, is a dishonorable thing. (CORDE, c 1565, Sepúlveda, Lorenzo, Comedia de Sepúlveda)
41. DAMASIO: Cierta que no es mi amor de menos quilates que el suyo, aunque no me encierro a llorar ni doy tantos suspiros como él, y *no creo poderse acabar no sólo tan presto como tú dices, mas en ningún tiempo.*  
DAMASIO: It is true that my love is not of fewer carats than his, although I do not shut myself away crying nor do I sigh as often as he does, and *I don't believe it can run out as quickly as you say, if it will ever at all.* (CORDE, 1602, Velásquez de Velasco, Diego Alfonso, El celoso).

Constructions with the infinitive thus constitute a differential element between the uses of *creo* and those of *pienso*, since only *pienso* participates in the periphrastic structure of the intentional meaning (doing so, in fact, with much higher frequency in the first few decades of the 17th century). On the other hand, the texts show that the intentional meaning was not the only meaning expressed by the construction *pienso* + INF, but rather, this structure was also employed with an evaluative-epistemic value

comparable to that of *creo* in similar constructions. It is possible that in both circumstances—the sharp rise in infinitive constructions with intentional value and the similarity with *creo* in its epistemic use—promoted the use of *pienso* as a whole at the end of the 16th and in the beginning of the 17th century. Moreover, it is important to keep in mind that the 16th century witnessed the semantic change of *cuidar* from its previous sense of ‘pensar’ to its current sense of ‘to pay attention to, to attend to’, which motivated the extension of *pensar* into contexts formerly occupied by the older form of *cuidar* (cf. Dworkin; Tejedó-Herrero).

The general quantitative data indicate that, after the striking advance of *pienso* in the 17th century, its relative frequency declines abruptly, a decline that continues until the present day. This evolution contrasts with the steep increase in the frequency of *creo* starting from the 18th century (see Table 3 and Figure 1). The causes of this change in tendency, which affected *pienso*, might be traced to its communicative function and the differences that exist between *pienso* and *creo* in similar contexts. Section 4 alluded to the different anaphoric function of the constructions of *creo* and *pienso*, which suggests differences in the dialogic function of both verbs. Moreover, various authors have stressed the interactive function of the cognitive verbs, especially in the conversational genre. Oral communication favors the expression of stances and assessments as opposed to the mere transmission of descriptive information; thus, it is the appropriate framework for the subjectivization of constructions that refer to the cognitive states of the speaker (cf. Thompson & Hopper; Scheibman; Kärkkäinen 2003, 2007). More specifically, several authors have noted the importance of epistemic verbal expressions in the modulation of the contrast of perspectives typical of argumentative speeches, whether in private or public (cf. Capelli, 235; Fetzer & Johansson). It is therefore worth examining the characteristics of the contexts of the use of *creo* and *pienso* to identify other possible differences in their contribution to dialog.

An aspect related with the anaphoric function of *creo* and *pienso* is the position in which they appear in the context of the turn or intervention. In the sample from the second half of the 16th century, 41% of the uses of *creo* correspond to the beginning of a turn, compared to only 15.9% of the uses of *pienso* in the same position. It seems that *creo* plays a more important role than *pienso* in turn-taking, while *pienso* tends to function turn-medially. Nevertheless, along with the increase in frequency of *pienso* in the 17th century, one observes that the distribution of both units with respect to turns tends to even out: *creo* declines from its initial position to 35.4% and *pienso* increases to 28%.

At the stage in which *pienso* becomes more frequent than *creo*, the contexts of use show greater similarities. In many cases, the forms appear to be interchangeable, yet it is still possible to detect some differences, which once again point to a greater interactivity of *creo* as opposed to *pienso*. In the comedies of Lope de Vega one finds tokens such as (42)-(44):

42. Esto al Duque le parece,  
 que *pienso que está enojado*,  
 pero mi esposa y yo iremos  
 y por ti le rogaremos.  
 To the Duke it may seem, / that *I think that he is angry*, / but my wife and I will  
 go / and beg on your behalf (CORDE, 1604, Vega Carpio, Lope de, Comedia  
 nueva del perseguido)

43. Casandra No quiero  
que me hagáis hechicerías.  
Grim (Pues a fe que si la tomo,  
que se la muerda).  
Casandra No más.  
Grim *Creo que enojada estás.*  
Casandra I don't want / you to cast spells on me / Grim (I am certain that if I  
take it, that she will bite it) / Cassandra No more. / Grim *I think you are angry.*  
(CORDE, 1604, Vega Carpio, Lope de, Comedia nueva del perseguido)
44. [...] ¿Quién es?, ¿quién va ahí?  
AYNORA: Un nuevo paje que tienes.  
DON LOPE: A muy buen tiempo has llegado.  
AYNORA: *Creo que estás enojado*  
[...] Who is it? Who is there? / AYNORA: A new page of yours / DON LOPE:  
You have arrived at a good time. / AYNORA: *I think you are angry.* (CORDE, a  
1606, Vega Carpio, Lope de, El asalto de Mastroque por el Príncipe de Parma)

In addition to the difference in position within the turn, we observe that the subject of the completive clause is in the third-person in (42) while in (43) and (44) the subject is in the second person, and is therefore addressing the interlocutor. Since there is no systematic study of these data, at present we can only state that these cases provide further evidence that *creo* and *pienso* realize different functional roles in the interactional dynamic.

Finally, we must not forget that the expression of epistemic stances in the dialog is subject to a constant negotiation between speakers. In this negotiation, speakers must take into account not only the knowledge possessed by each speech-act participant—their opinions, judgments, beliefs, and assumptions—but also their distinct rights and obligations with respect to this knowledge (cf. Sidnell 2014). The use of *creo* and *pienso* also appears to be modulated by this factor in contexts such as (45), where in two successive turns two characters use different epistemic expressions to introduce similar propositions. Mencieta acts as a healer that cures Guadalupe, applying an ointment. The sick Guadalupe employs the form *creo*, through which he demonstrates the impression or belief in his own lack of experience as a patient. By thus formulating his first turn, Guadalupe places himself in an epistemically asymmetric position with respect to Mencieta, appealing indirectly to Mencieta's medicinal expertise. Mencieta constructs her reactive intervention with *pienso*, thus demonstrating her expertise and her more advantageous epistemic position with respect to Guadalupe. It is therefore apparent that exchanging *creo* and *pienso* in this dialogue would result in an ineffective communicative outcome.

45. Guadalupe ¡No ay, Mencieta, no ay! ¿Está el mal en los ojos y enxálmame  
las espaldas?  
Mencieta Pues de ay te va la salud a los ojos.  
Guadalupe *Bueno creo que estaré ya,* Mencieta.  
Mencieta *Pienso que sí.*  
Guadalupe: There is none, Mencieta, none! The problem is in the eyes and you  
apply ointment to my back? / Mencieta: Well, from there, health shall go to your  
eyes. / Guadalupe: *Well, I think that I'll be alright,* Mencieta. / Mencieta: *I think  
so.* (CORDE, 1545-1565, Rueda, Lope de, Pasos)

## 6. Conclusions

The analysis of uses of *creo* and *pienso* from a diachronic perspective can help us gain some insight into the current functional distribution of both forms and identify factors that determined their dissimilar historical development.

Our detailed examination of the textual fragments corresponding to two distant historical periods, the end of the XX century and the XVI-XVII centuries, brings to light notable differences between them in terms of frequency, distribution, and construction of these units. Compared to the overwhelming dominance of *creo* in current oral exchanges, during the classical period *pienso* had surpassed it in frequency of use, even if it did not maintain its supremacy for long.

The expansion of *pienso* during the period mentioned above is linked to its frequent use in the sixteenth century in constructions V\_clause\_que, in which the verb tends to express the cognitive attitude of the speaker in relation with the propositional content. This context of use, shared with *creo*, allowed the identification of functions of both units and boosted the expansion of *pienso*, which had a much lower frequency of occurrence until the fifteenth century. During the period of expansion of *pienso*, both verbal forms shared, additionally, other options for their construction. This fact shows a considerably higher affinity of *pienso* and *creo* then, compared to modern usage. There were, however, also both quantitative and qualitative differences between the two verbs. The association of *creo* with objects of anaphoric reference and the growing use of *pienso* in constructions with infinitives and intentional value are areas in which they differ and that point to divergent developments.

The distribution of the verbal forms *creo* vs. *pienso* in dramatic dialogue similarly suggests differences in the pragmatic-discursive contribution of both units, although this is an empirical question that would require complementary research to be substantiated. For the time being, given the analyzed data, it seems that the use of *creo* to express epistemic attitude embodies a markedly cooperative function. This function simultaneously reinforces its association with the idea that the propositional content of the utterance is negotiable – in contrast with *pienso*.

On the other hand, the function of *pienso* in the examined dramatic plays has a less dialogic character. Even though it also implies a cognitive evaluation of the speaker, it takes less part in the interactive and negotiated construction of epistemic attitudes. The lexical-semantic meaning of the verbs contributes perhaps to this: *pensar* implies “mentally consider or weigh in a reflexive and reasoned manner” and it is associated with well-founded knowledge. Therefore, *pienso* provides an endorsement for the statement that also makes it less negotiable.

If the analyzed dramatic plays can be considered a snapshot of the oral uses of their time, with the necessary caveats, we conclude that the basically dialogic character of *creo* determined its progressive specialization and extension as epistemic modalizer, as well as the pronounced differences in use and frequency found between *creo* and *pienso* today.

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