Bridging synchronic and diachronic approaches to Spanish PPIs in negated clauses

Researchers at least as early as Jespersen (1909-1949) have discussed the appearance of Positive Polarity Items (PPIs) hosted in negated clauses, as exemplified in (1), where negation cannot scope over the PPI someone. Recent literature (Homer 2011, 2019; Larrivée 2012, 2017; Nicolae 2012; Szabolsci 2004) has shown how PPIs can be rescued from antilicensing by certain contexts, such as an embedded downward-entailing environment, as in (2).

    (1)   Harry didn't see someone.   *NEG > someone
    (2)   I don't believe that Harry didn't see someone.

Larrivée's (2012) pragmatic approach defends that "activation" contexts, or presupposed contexts in which information is shared by both speaker and hearer, allow PPIs to appear within negated clauses. Activation contexts can include interrogative negatives, embedded downward-entailing environments, and if-clauses. From a diachronic perspective, Martins (2000) observes that in Old Romance indefinites such as the Spanish *alg-* lexical items (*algo* 'something', *alguno* 'some', etc.) were less restricted by polarity and could be interpreted as semantically negative in the scope of negation, as in the Old Spanish example in (3).

    (3)   *No consientes algún consejo ni tienes reposo.*
              'You don't take any advice, nor have any rest.'
              (Keniston 1937: 615, from Martins (2000))

As shown in (3), the PPI *algún* 'some' appears in the scope of negation and is interpreted as negative, demonstrating how in Old Spanish, PPIs could freely appear in negative contexts without the need for activation contexts. Martins argues that over time, negated clauses became a less salient context in which PPIs could appear, thus making the configuration more difficult to acquire for child learners and resulting in a modern distribution in which Negative Concord Items (NCIs) (*nada* 'nothing', *ninguno* 'none', etc.) are preferably used in negated clauses.

The objective of the present study is to use corpus data to bridge Larrivée's synchronic approach to explaining PPIs hosted in negative clauses with Martins' diachronic approach to Spanish PPIs as having evolved from indefinites that could appear in either polarity context. The primary research question is as follows: do chronological date and activation contexts modulate the usage of [NEG V *alguno*] over [NEG V *ninguno*] in diachronic corpus data?

All instances of the Spanish PPI *alguno* and the NCI *ninguno* were extracted from the Spain subsection of the *Corpus Diacrónico del Español* (CORDE), a relatively large historical Spanish corpus. Tokens featuring simplex negative clauses where *alguno* or *ninguno* followed a single verb negated by the negative operator *no(n)* were identified. (4a) below shows a [NEG V *alguno*] token and (4b) shows a [NEG V *ninguno*] token.

    (4) a.   *Otrosi <u>non ay alguno</u> de ellos que solamente sea forma o solamente materia*
             'Furthermore there aren't any of them that are only form or only matter'
             Alonso Fernández de Madrigal, *Libro de las paradojas*, 1437
       b.   *pero fue la merced de Dios que <u>no murió ninguno</u> de ellos*
             'but it was the mercy of God that none of them died'
             Anonymous, *Primaleón*, 1512

This search yielded 4,006 total tokens, 3,090 of which were [NEG V *ninguno*] tokens and 916 of which were [NEG V *alguno*] tokens (22.9% of the dataset). Tokens were coded as being in an activation context if they formed part of a *si* 'if'-clause, or if they were found embedded within a negated clause or a question. A mixed-effects logistic regression analysis was conducted with the appearance of [NEG V *alguno*] as a dependent variable. Chronological date, the presence of an activation context, and register (organized into seven register categories) were independent variables, and the individual document in which the token was found was a random effect.

The results of this analysis indicate that chronological date significantly modulates the usage of [NEG V *alguno*] in the dataset (β = -1.1090, SE = 0.4289, z = -2.586, p = 0.0097). This effect is most prominently apparent within the registers of Verse Fiction, Religious Texts, and Non-Fiction (Other), as shown in Figure 1 where increasing chronological date predicts lower probabilities of [NEG V *alguno*].

Figure 1. Probability of [NEG V *alguno*] by date and register
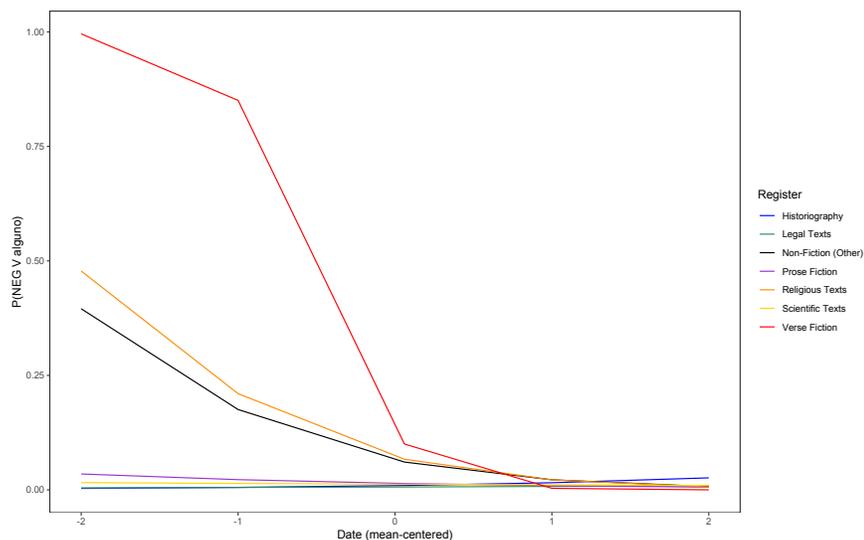
Activation contexts were also found to significantly modulate [NEG V *alguno*], positively predicting its usage (β = 1.9201, SE = 0.2788, z = 6.886, p < 0.001). An interaction between date and activation was not significant (p = 0.37). These results support the idea that PPIs hosted in negated clauses show a preference for activated contexts and were more frequent in Old Spanish than in Modern Spanish. In total, both Larrivée's and Martins' approaches are borne out and we can connect the two by describing Spanish PPIs as capable of polar ambiguity in Old Spanish, but gradually losing space to NCIs in negated clauses as Spanish entered its modern period, where they avoid antilicensing through activation contexts. In addition, a novel finding of the present study is that [NEG V *alguno*] shows a preference for registers of greater formality, as seen in Figure 1 where the configuration is more probable to appear in Religious Texts, for example, in Old Spanish. This also lends support to Martins' proposal that [NEG V *alguno*] was a less salient configuration in language acquisition and thus diminished in competition with [NEG V *ninguno*]; it may have been less salient to language learners in the sense that it was used primarily in relatively more formal registers of the language.