Examining the Locality of Polarity Subjunctive in Peninsular Spanish

(to be considered for the main session: oral presentation or poster)

Ever since the seminal work by Quer (2000), there is agreement in the literature that there are two types of subjunctive: intensional subjunctive triggered by lexical predicates, and polarity subjunctive triggered by operators such as negation. One of the defining characteristics of polarity subjunctive is that it can be triggered in multiple embedded clauses provided that the verb at the intervening level of embedding is in subjunctive too. An example of this phenomenon, known as the domino effect (Quer 2000), is given in (1).

(1) No creuen [que pensi   /*pensa   [que li   convingui   ]]
     not believe that think.SUB /think.IND that him be-convenient.SUB
     'They don't believe s/he thinks it's convenient for him/her.'

However, we provide evidence from an online experiment showing that there are cases in which the domino effect can be skipped. To account for these counterexamples, we propose to extend the analysis of long distance anaphors as D-type pronouns to polarity subjunctive.

Experimental Work. We ran an experiment with 111 native speakers of Peninsular Spanish using the PennController platform (Zehr and Schwarz 2018) and tested constructions consisting of a negated matrix verb followed by the verb *think* in indicative, and a subjunctive verb in the third level of embedding, see (2a). We also tested whether there was any significant difference between using the third verb in indicative or subjunctive, as in the examples (2a)-(2b):

(2) a. No sabía que creías   que fuera   verdad
         not know that thought.IND that was.SUB true

     b. No sabía que creías   que era   verdad
         not knew that thought.IND that was.IND true
         'S/he didn't know you thought it was true.'

Based on the generalisations in the literature, the use of subjunctive should be rated as unacceptable, and there should be a difference between using the indicative or the subjunctive. However, our results show that there are constructions in subjunctive whose acceptability is too high (mean acceptability 3.96 out of 5) to be considered ungrammatical, see left figure below. In addition, there are some constructions for which there is no significant difference between using the indicative or the subjunctive (p=0.67), as shown in the graph on the right.
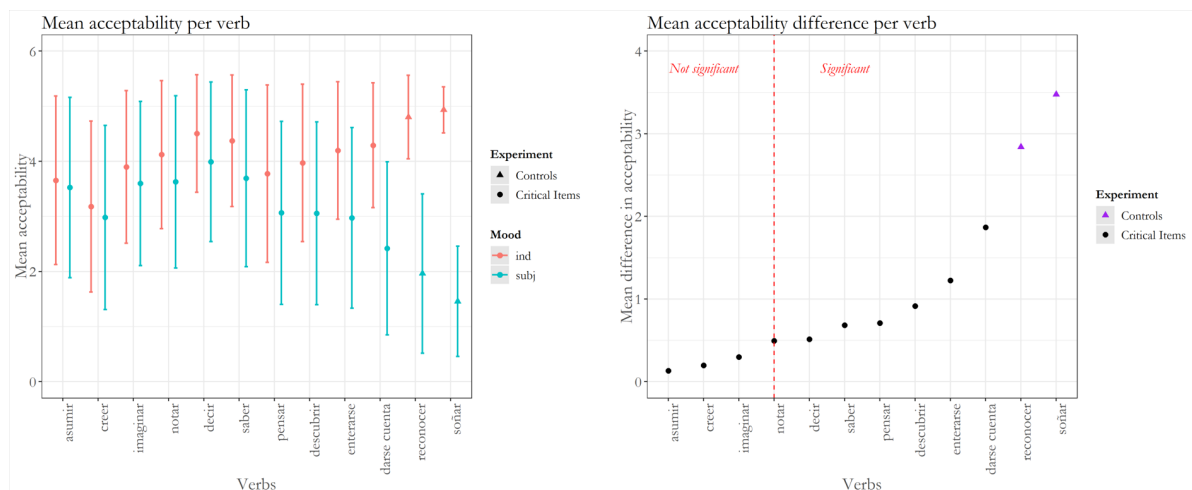
Towards an Analysis. Although in the Standard Binding Theory anaphors should be bounded in their local domain, further research has shown that in a wide variety of languages there are instances in which anaphors seem to violate this locality constraint. This section discusses some of the analyses that have been proposed to account for long distance anaphors, and tests to what extent these accounts could be extended to explain the behaviour of polarity subjunctive.

Syntactic analyses based on features: amongst the works that provide an explanation of long distance anaphora in terms of feature checking/copying are the works by Kauf and Zeijlstra (2018) for Sequence of Tense and Kratzer (2009) for fake indexicals. Given that agreement is subject to locality and cannot apply across phases, these proposals rely on chains of agreement to reach the lower clauses as in (3):

(3) [Op-PAST$_{[iPAST]}$ [John [say-ed$_{[uPAST]}$ [Mary [be-ed$_{[uPAST]}$ ill.]]]]]

However, given that in the case of mood it is possible to skip the domino effect, an extension of these proposals to the realm of mood morphology is not straight-forward, as the phenomenon would violate locality, would cross several phases and the embedded subjunctive would have no other interpretable subjunctive operator/pronoun with which to agree.

Semantic analyses: Kratzer (2009) also proposes that some long distance anaphors can't be explained through binding and agreement, but rather should be analysed as D-type pronouns (the work also proposes context-shifting operators as an another mechanism, but we leave this proposal out of the debate for the moment). D-type pronouns are anaphors which are analysed as definite articles whose complements are subject to NP-deletion. They were originally introduced to account for what is known in the literature as donkey sentences, where an anaphor is bound by a non-local or non c-commanding element. In (4), 'it' would mean something like 'the donkey':

(4) If John meets a donkey, he beats it

(5) D-type analysis: Every minimal situation in which John meets a donkey can be extended to a situation s' in which John beats the donkey in s.

Our proposal is that in polarity contexts, mood morphology behaves as a D-type pronoun. Indicative would be similar to having a definite article and NP ellipsis (Ind $\simeq [it_{the}\text{NP}]_{DP}$), and the subjunctive to having an indefinite article with an elided NP (Subj $\simeq [one_a\text{NP}]_{DP}$). The pronoun comes with its features fully specified into the derivation and thus can be non-local, as it does not depend on other elements to acquire its features. Moreover, given that the definite article presupposes existence and uniqueness, if polarity subjunctive were to be analysed as a D-type pronoun, we would expect that this would also trigger an existence presupposition of some kind. This is precisely what has been reported for certain predicates such as *know*, *notice* etc. (Borgonovo 2003). When these predicates are negated the use of the indicative presupposes commitment on the part of the speaker, whereas the use of subjunctive does not trigger such presupossition:

(6) a. No sabían que Pedro se había   ido de viaje $\rightsquigarrow$ Pedro had gone on a trip
        not knew that Pedro SE had.IND gone of trip

     b. No sabían que Pedro se hubiera ido de viaje $\not\rightsquigarrow$ Pedro had gone on a trip
        not knew that Pedro SE had.SUB gone of trip
        'They din't know that Pedro had gone on a trip.'

In conclusion, our work provides new empirical data proving that the domino effect (at least in Peninsular Spanish) can be skipped. This means that some forms of subjunctive can be triggered truly at a distance without syntax transmitting those features. Based on this, we propose that an analysis of polarity subjunctive as a D-type pronoun could explain why it can be long distance, and why speaker commitment emerges when using the indicative.

[1] Borgonovo, Claudia. 2003. Mood and focus. *Romance Languages and Linguistic Theory 2001: Selected Papers from 'Going Romance'*, Amsterdam, 6-8 December 2001 245:17. [2] Kauf, Carina, and Hedde Zeijlstra. 2018. Towards a new explanation of sequence of tense. In SALT, volume 28, 59–77. [3] Kratzer, Angelika. 2009. Making a pronoun: Fake indexicals as windows into the properties of pronouns. *Linguistic Inquiry* 40:187–237. [4] Quer, Josep. 2000. Mood at the interface. Doctoral Dissertation, Universiteit Utrecht [5] Zehr, Jeremy, and Florian Schwarz. 2018. Penncontroller for internet based experiments (ibex). DOI: https://doi. org/10.17605/OSF. IO/MD832