Discourse Relations and the Null/Overt Contrast in Mexican Spanish

The availability of both overt and null pronouns in pro-drop languages raises the question of their interpretational differences, especially in structures where both are licensed. Among the myriad approaches to this question, (Montalbetti 1984, Luján 1986, Rigau 1988, Ariel 1988, Carminati 2002, Alonso-Ovalle et al. 2010, Blackwell & Quesada 2012, and many others) a common observation is that they tend to select different antecedents, but accounts disagree as to whether this is due to an underlying grammatical difference. That is, do null and overt pronouns have different interpretations because they differ in their semantic features, such as focus?

Here, I present two experiments showing that pronoun reference in Spanish is affected not only by pronominal form but also by discourse relations—the semantic relationship between the clause containing the pronoun and that containing its potential antecedent(s) (Asher & Lascarides 2003). The crucial contribution has to do with the way pronominal form and discourse relations interact. Discourse relations have been argued to manipulate the focus/background partition (Kehler 2005), and therefore if the difference between null and overt lies in their focus status, we would expect them to react in opposite ways to discourse relations. However, we find that discourse relations affect both forms in the *same* direction, the only difference being that the null pronoun shows a stronger bias for subject antecedents, throughout. A second experiment shows that discourse markers guide the interpretation of both subject and object pronouns, but that pronominal form itself cannot serve as a cue to discourse relation, in contrast to English. Together, the two experiments support the structurally based processing preference proposed by Carminati (2002) and show that this preference works *alongside* discourse relations, in contrast to languages like English, where pronoun realization is *directly* manipulated by such relations.

Experiment 1: Kehler (2005) shows that the discourse relation between two clauses influences pronoun resolution in English, as seen in the contrast between (1), where clauses are temporally connected (via the OCCASION relation), versus (2), where the clauses have a cause-effect relationship (related via RESULT). He argues, specifically, that these relations background different constituents. For example, RESULT in (2) introduces the backgrounding presupposition that, as a result of being hit, George will react in some way. Pronouns referring to backgrounded constituents are defocalized, hence *he = George* is unstressed, and conversely focused pronouns must refer to non-backgrounded antecedents (hence *HE = Doug*).

(1) $Doug_2$ hit $George_1$ and then he_2 left.
(2) $Doug_2$ hit $George_1$ and therefore he_1/HE_2 left.

Figure 1: proportion of subject antecedent responses
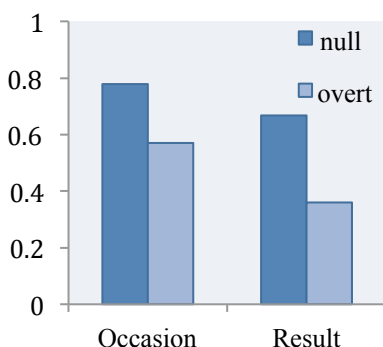
We used a forced-choice picture selection task to examine Mexican Spanish speakers' interpretations of sentences like (1)-(2), manipulating both pronominal form (null, overt), and discourse relation (OCCASION, RESULT). If the null/overt contrast encodes a focus contrast, then we predict an interaction between pronominal form and discourse relation such that, the stronger the subject preference for null pronouns, the stronger the object preference for overt pronouns. We observed main effects for form ($F1(1,16)=9.2$, $p < 0.008$; $F2(1,5)=36.2$, $p < 0.001$) and relation ($F1(1,16)=6.5$, $p = 0.021$; $F2(1,5)=6.7$, $p = 0.047$) but no interaction ($Fs<1.6$). The proportion of subject responses for null subjects was marginally lower in the Result condition ($t(139.1)=1.49$, $p=0.069$), and significantly so for overt subjects ($t(141.8)=2.54$, $p=0.012$). In other words, decreasing the subject preference of the null pronoun

clearly did *not* produce a corresponding increase for the overt pronoun, but instead a decrease. The results are consistent with Carminati's (2002) structurally determined processing account, on which null/overt pronouns are biased towards antecedents in subject/non-subject position, respecitvely, but both biases can ultimately be influenced by pragmatic factors (like discourse relations).

    Experiment 2 looks at the interaction between pronominal form and PARALLEL and CONTRAST relations, which encourage selection of antecedents in the same/opposite grammatical roles, respectively. In English, the stressed/unstressed pronoun distinction is a direct result of focus structure and can therefore serve as a cue to discourse relation, as in (3)-(4). But the same is not necessarily true for their Spanish counterparts in (5)-(6) unless discourse relations are explicitly marked with *también* ('also') and *pero* ('but').

(3) Maria$_1$ hugs Sara$_2$ and she$_1$/SHE$_2$ hugs Pedro. (5) Maria abraza a Sara y ø/ella abraza a Pedro.
(4) Maria$_1$ hugs Sara$_2$ and Pedro hugs her$_2$/HER$_1$. (6) Maria abraza a Sara y Pedro la abraza a ella

unstressed → PARALLEL → parallel antecedent   ø, *la* → ?
stressed → CONTRAST → non-parallel antecedent   *ella*, *la…ella* → ?

Figure 2: proportion of subject antecedents with (left) and without (right) discourse cues
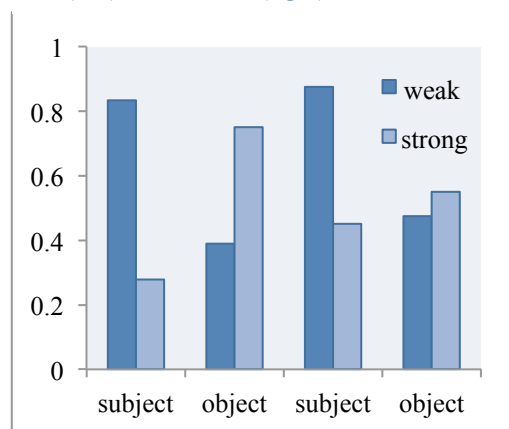
The same speakers were tested with a picture selection task; half were given explicit cues to discourse relation. If weak pronouns (ø, *la*) are unfocused and strong ones (*ella*, *la…ella*) are focused, as in English, then we expect a crossover interaction between pronominal form and pronominal position in both versions.

    The crossover was found only in the version with explicit discourse cues. Without them, only null subjects showed any preference ($t(39)=7.08$, $p<0.001$), again consistent with Carminati's processing approach. This shows that pronominal form by itself is not enough to indicate discourse relations.

    Together, the two experiments show that, to the extent that null and overt pronouns differ in their semantics, it not due to a simple focus/non-focus distinction. The difference must be based, either on a more subtle notion of focus, or on a subject/non-subject processing preference like thoe one proposed by Carminati (2002).

References:
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