

Animacy as a driving cue in change and acquisition in Brazilian Portuguese

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1 Brazilian Portuguese null object

Brazilian Portuguese (BP) has syntactically unrestricted null objects, but they are mainly used for [-animate] antecedents (1a vs. 1b), and also for [-specific] antecedents (2):

- (1) a. O Emilio perdeu [a carteira] e não consegue achar \emptyset ?/ela em lugar nenhum.
The Emilio loose_past_3sg the wallet and not can_pres_3sg find_inf (it) in place none
'Emilio lost his wallet and can't find it anywhere'
- b. A Clara não quer que [o filho] veja TV, então ela sempre
The Clara not want_pres_3sg that the son watch_subj_3sg TV, so she always
leva \emptyset /ele no parquinho.
take_pres_3sg (him) in_the park_little
'Clara doesn't want her son to watch TV, so she always takes him to the
playground'
- (2) a. O policial insultou [o preso] antes de torturar \emptyset /ele.
The policeman insult_past_3sg the prisoner before of torture_inf (him)
'The policeman insulted the prisoner before torturing him'
- b. O policial insulta [presos] antes de torturar \emptyset ?/eles.
The policeman insult_pres_3sg prisoners before of torture_inf (them)
'The policeman insults prisoners before torturing them'

Cyrino (1994/1997) proposes that the null object is the result of ellipsis, assuming the theory in Fiengo & May (1994), and proposes that there has been a diachronic change in which the child extended the possibility for the ellipsis of the structures with the neuter clitics to other structures that were similar to them – the structures in which the clitic also had the [-animate] features – , and then extended this analysis to the clitic with [-specific] features. Below are the relevant figures:

a) the first null object to appear is the “propositional”, i.e., the null form of the clitic *o*:

Century	[+specific] NP	[-specific] NP	Propositional	Generic
XVI	3 % (4/139)	9% (3/34)	23% (23/99)	50% (1/2)
XVII	4% (4/100)	18% (16/90)	21% (14/68)	33% (3/12)
XVIII	8% (9/120)	6% (2/33)	45% (41/90)	25% (1/4)
XIX	31% (38/121)	4% (1/24)	83% (81/98)	33% (1/3)
XX	67% (64/95)	86% (31/36)	91% (97/107)	0

Table 1. Null objects according to type of antecedent, adapted from (Cyrino (1994/1997)¹, - excluded: VP ellipsis and *exopro*. (Numerator = null; Denominator = null + overt objects)

b) there is an increase in the occurrences of the null objects with antecedents which are NPs [+specific, - animate] in the XIXth century:

Century	[+spec, +ani] NP	[+spec, -ani] NP	[-spec, +ani] NP	[-spec, -ani] NP
XVI	1% (1/78)	5% (3/61)	3% (1/8)	8% (2/26)
XVII	7% (2/31)	3% (2/69)	4% (1/24)	23% (15/61)
XVIII	5% (1/21)	8% (8/99)	0	6% (2/32)
XIX	2% (1/46)	49% (37/75)	0	8% (1/12)
XX	0	87% (64/74)	57% (4/7)	93% (27/29)

Table 2. Null objects according to specificity and animacy features in the antecedent. (Numerator = null; Denominator = null + overt objects)

If the animacy feature was relevant for syntactic change in BP, we should see it still at play in the acquisition of the null object in BP. We assume Cyrino, Duarte & Kato (2000), who propose the REFERENTIALITY HIERARCHY (RH) below:

REFERENTIALITY HIERARCHY

non-arguments	propositions	[-animate]	[+animate]
			[-human] [+human]
3 rd person	3 rd person	3 rd person	3 rd 3 rd - 2 nd - 1 st
[- specific]	←-----→		[+ specific]
[- referential]	←-----→		[+ referential]

¹ Data from comedies and light plays.

According to the RH, languages will vary in the spell out of pronouns. If the input exhibits a pronoun (or a clitic) in a lower position of the hierarchy, the child in the acquisition process will consider it a weak pronoun, and, therefore, all the higher positions will also be lexical pronouns or clitics. However, if the input shows a null object for a referential entity, say, for an [-animate] entity as in BP, the child assumes that all lower positions can be null.

For a language that has the internal option for full or empty categories, one of the factors that can influence the choice is the animacy status of the antecedent.

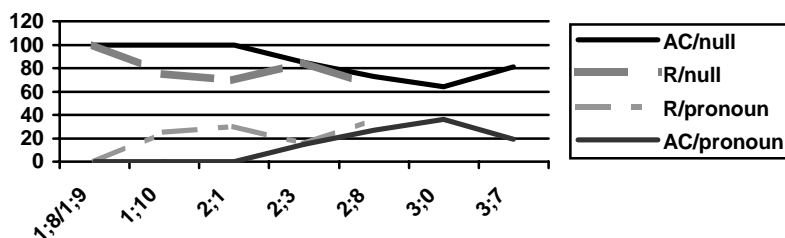
2 The acquisition of the null object

The spontaneous speech production of two children was examined. One of them, R., was recorded from 1;9 to 2;8 years of age and the other, AC, from 1;8 to 3;7 years of age. Only transitive, ditransitive and ECM verbs were considered, those that in other Romance languages would require a clitic in anaphoric complements.

The mean general results found for both children reveal that they use 29.2% (275/943) of null objects, 9.8% (93/943) for strong pronouns, and 61% (575/943) for bare Ns and DPs in object position.²

Considering only the null and pronominal realizations of the object, we found a mean percentage of 74.7% of null objects and 25.3% of strong pronouns when both children are considered. The behavior of null and pronominal elements during development is in Figure 1:

Figure 1: Production of null and pronominal objects over time



Although both children use null objects, they are still quantitatively far from the adult expected grammar, where null objects reach around 60% and strong pronouns, 15%, according to Duarte (1986). Figure 1 clearly shows an increasing pattern of the use of pronouns over time, while a decrease on the use of nulls is observed. Both children start out with 100% of nulls, but such figure decreases when pronouns kick in. For R. that happens when she is 1;10 and for AC, when she is 2;3. The acquisition

² For a discussion about the high percentages of anaphoric DPs in early child language, see Lopes (2003). We will not explore these findings here.

pattern seems to be the same for both of them. Looking at the data, we see that the initial null objects are instances of deictic-like elements, but when pronouns start to be produced in object position, the null category becomes anaphoric. This should be clearer when we cross such results with the animacy feature of the antecedent. For now, let us look at some examples, comparing (3) – a deictic use of null – to (4), an anaphoric null:

(3) a. *Garda (= guarda) aqui.* (R., 1;9)

‘Keep [] here’ (= “Keep it here”. The child says the sentence while holding her pacifier, obviously referring to it)

(4) *Não vou guardar.* (AC, 3;7)

‘not will_{1sg} keep []’ (= “I won’t put them away”, referring to her toys.)

Considering only the null objects, the results for the [\pm animate] and [\pm specific] features of the antecedent are:

Child	[-anim/+spec]	[+anim/+spec]	[-anim/-spec]	[+anim/-spec]
AC	66.6% (70/105)	33.4% (8/22)	100% (30/30)	0
R	83.6% (117/140)	47.6% (10/21)	41.2% (7/17)	0
XX	87% (64/74)	0	93% (27/29)	57% (4/7)

Table 3: Mean percentages of null for each child and results for XXth century

The clearest result involves [-animate, +specific] features. Undoubtedly those are the most relevant features and the first ones to be manifested in acquisition, probably due to their cuing effect. It should be noted that the deictic-like nulls found in initial production fall into this category. However, the problem lies with the [+animate] feature. Children still use null categories for the [+animate, +specific] ones whereas adults would probably prefer a pronoun, although the percentages are not very high. The unexpected results have to do with R.’s low production of null with [-animate/-specific] antecedents.

As for the [+animate/-specific] antecedents, there are few instances of them even in the historical data; therefore it doesn’t seem to be a productive scenario for nulls, which should explain their absence in the children’s data. Apart from the [+animate] feature, specificity also seems to be a problem for acquisition. This should explain why the child’s grammar is still quantitatively far from the adult one. It also points to a piecemeal process involving semantic interpretation and the referentiality hierarchy – fine-grained subtle differences for the child to grasp.

As for the use of pronouns, on the other hand, we get a neater picture. The [+animate] feature on the antecedent was divided into human and nonhuman. All the human cases are realized as a strong pronoun, although their production is delayed.

3 Conclusion

By hypothesis, the RH would be operative during language acquisition and, according to the data the child has access to, she will presume the pronouns are null or overt. In fact, we saw that the animacy feature was important in the diachronic change in BP null object. Moreover, the acquisition data have shown a clear-cut tendency to associate the [- animate] feature with null object, as expected due to the input, as well as to associate the [+ animate] one with pronouns. These results seem to support the RH, since the child seems to assume BP allows null elements when they are low in the hierarchy.

These results suggest the relevance of cue-based theories and show how a cue can be operative after a change occurred in a language. They also place some questions for acquisition within the generative framework - if semantic features are interpretable at LF, then LF should be taken seriously as input to language acquisition together with its possible correlation with PF, LF being taken as universal.

References

- Cyrino, S.M.L. (1994/1997) *O objeto nulo no português do Brasil - um estudo sintático-diacrônico*. Londrina, Editora da UEL.
- Cyrino, S.M.L., Duarte, M.E.L. & Kato, M. (2000) "Visible subjects and invisible clitics in Brazilian Portuguese" in Kato, M. & Negrão, E. (eds) *Brazilian Portuguese and the Null Subject Parameter*, Frankfurt am Main, Vervuert.
- Duarte, M.E.L.(1986). *Variação e sintaxe: clítico acusativo, pronome lexical e categoria vazia no Português do Brasil*. MA Thesis: PUC, São Paulo.
- Fiengo, R. & May, R. (1994) *Indices and identity* Cambridge, MIT Press.
- Lopes, R.E.V. (2003) The production of subject and object in Brazilian Portuguese by a young child. *Probus* 15: 123-146.