

Remarks on the Acquisition of Intensified Proforms in Brazilian Portuguese*

Abstract

We discuss the main syntactic, semantic and pragmatic properties of complex proform *ele mesmo* in Brazilian Portuguese and bring results of an acquisition experiment with 4-year-olds. We show that in the adult language this form can be (non)-locally bound or free in its sentence. Thus, it cannot be classified as an anaphor regulated by Principle A of Binding Theory. Instead, pragmatic principles dealing with prominence and contrast are responsible for its distribution. The difficulty 4-year-olds found in the experiment can be explained by children's lack of some pragmatic knowledge, which is independently known in the literature to develop late.

Key words: Brazilian Portuguese, anaphors, intensifiers, reflexives, contrast, prominence

1 Introduction

In this article I discuss the main characteristics of the intensified proform *ele mesmo*, in contexts where it marks reflexivity, as illustrated in (1) below¹:

- (1) A Maria_i beliscou ela_i mesma.
The Maria pinched her_i self.
'Maria pinched herself.'

This morphologically complex form involves a non-reflexive proform *ele* ('he') plus the focalizing form *mesmo*, which can be translated by *self*. This form exhibits gender and number agreement with the pronoun: *ela mesma* (her-self), *eles mesmos* ('them-masc-selves'), *elas mesmas* ('them-fem-selves').² Numerous languages display similar expressions, like *lui-même* (French), *hemzelf* (Dutch), *himself* and *his own* (English), *il proprio* (Italian), among others.

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¹ In this study, I will leave aside cases where *ele mesmo* is adjoined to proper nouns, as in (i):

- (i) O João, ele mesmo, arrumou a cama.
The John he self made the bed
'John himself made the bed'.

Also, I will not deal with cases where *ele mesmo* is the subject of the sentence, as in (ii):

- (ii) O João não reclama quando os filhos dormem tarde: ele mesmo fazia isso na idade deles.
The John not complain when the sons sleep late: he self made it in their age
'John doesn't complain when his sons go to bed late: he himself used to do it when he was their age'.

² The sequence *ele mesmo* is ambiguous between the one that exhibits (singular, masculine) agreement and the one that doesn't. The form without agreement is shown below [boldface = accent]:

- (i) O João_i criticou ele_k **mesmo**.
The John_i criticized him_k mesmo
'John really criticized him'.

In this case, *mesmo* indicates emphasis on the verb, as the translation suggests. I will not deal with this construction in this paper. In what follows, the form used in the examples will be *ela mesma*, with feminine agreement, in order to assure that we are dealing with the agreeing form and not the verbal emphatic form like in (i) above.

The expression *ele mesmo* shares some characteristics with the reflexive pronoun *se* ('himself'). For instance, both forms are anaphoric, in the sense of not being able to be used deictically. They contrast with the proform *ele*, which can be used deictically, as illustrated below:

- (2) a. Eu dei um livro para ele_i, ele_k e ele_m. [with pointing]
I gave a book to him_i, him_k and him_m
- b. * Eu dei um livro para ele_i, ele_k e ele_m mesmo. [with pointing]
I gave a book to him_i, him_k and him_m-self.

Additionally, *se* and *ele mesmo* present bound readings in ellipsis contexts, differently from *ele*, which, besides the bound reading, can also have the referential reading:

- (3) a. A Maria_i se_{i/*k/*g} admira e a Joana_k também [se_{k/*i/*g} admira].
The Maria se admire and the Joana too [se admire]
'Maria admires herself and Joana too'.
- b. A Maria_i conversa com ela_{i/*k/*g} mesma e a Joana_k também [conversa com ela_{k/*i/*g} mesma].
The Maria talks with her self and the Joana too [talks with her self]
'Maria talks with herself and Joana too'.
- c. A Maria_i tem vergonha dela_{i/g} e a Joana_k também [tem vergonha dela_{k/g}].
The Maria has shame of her and the Joana too [has shame of her]
'Maria is ashamed of her and Joana too'.

The reflexive *se* is traditionally analyzed as an anaphor, whose distribution is regulated by Principle A of Binding Theory (Chomsky 1981), stated below:

- (4) An anaphor must be bound in its governing category.

Principle A requires the anaphor to have a local, c-commanding, co-indexed antecedent. *Se* is clearly an anaphor, as the examples below show: (5)a shows that *se* must have a c-commanding antecedent and (5)b shows that this antecedent must be local:

- (5) a. [A mãe d[o João]_i]_k se_{k/*i} machucou.
[The mother of[the John]_i]_k se_{k/*i} hurt. ('John's mother hurt herself'.)
- b. A Maria_i disse que o João_k se_{k/*i} machucou.
The Mary_i said that the John_k se_{k/*i} hurt. ('Mary said that John hurt himself'.)

Although *ele mesmo* shares these characteristics with *se*, in what follows I will claim that *ele mesmo* is not an anaphor, in the sense that it does not obey Principle A of Binding Theory. In section 2, I will compare Brazilian Portuguese (BP) *ele mesmo* with French *lui-même*. I will show that, similarly to what happens with the French expression, *ele mesmo* can appear in contexts where (a) it is not c-commanded by its antecedent, (b) it has a non-local antecedent, or (c) it has an antecedent in another sentence. In section 3 I will discuss the distribution of this form, reaching the conclusion that it is not regulated by a syntactic principle. Following Zribi-Hertz 1989/1990/1995/2007 and Menuzzi 1999, I will claim that semantic and pragmatic principles regulate its distribution. In section 4 these observations will be taken into consideration in order to discuss the acquisition of *ele mesmo*. I will present the results of a study conducted with children acquiring BP as their mother tongue. Section 5 is the conclusion.

2 *Ele mesmo* is not regulated by Principle A

As mentioned above, *ele mesmo* cannot be used deictically, as it must have a linguistic antecedent. However, the examples below illustrate that such antecedent does not have to be in a c-commanding position. The same occurs with *lui-même*.³ In all the cases discussed below, the form with only the pronoun, without *mesmo*, is also possible:

- (6) A formação das **jovens_i** é primordial não só para **elas_i mesmas**, mas também para o futuro econômico, social e cultural do país. (Zribi-Hertz 1990:108, ex. (33))
'The education of the young_i is crucial not only for them_iselves, but also for the economic, social and cultural future of the country'.
- (7) As defesas da **Joyce_i** estão dentro **dela_i mesma**. (Zribi-Hertz 1989:718, ex. (73e))
'Joyce_i's defenses are within her_iself'.

Besides the fact that it does not need to be c-commanded, the examples below indicate that *ele mesmo* can be free in its clause:

- (8) **Ela_i** sentou na escrivaninha e abriu as gavetas. Na gaveta da direita tinha um envelope endereçado a **ela_i mesma**. (Zribi-Hertz 1989:716, ex. (66))
She_i sat down at the desk and opened the drawers. In the top right-hand one was an envelope addressed to her_iself'.
- (9) **Minha mãe_i** nasceu numa pequena vila, na Alemanha. Eu sei mais coisas sobre a **mãe dela_i** do que sobre **ela_i mesma**. (Zribi Hertz 1990:108, ex. (36))
'My mother_i was born in a small village, in Germany. I know more things about her_i mother than I do about her_iself'.

These facts indicate clearly that *ele mesmo* is not an anaphor. It also indicates that it cannot be simply classified as a pronoun, since it cannot be used deictically and does not have a referential reading in ellipsis contexts. I will discuss below other contexts in which *ele mesmo* is possible and this will lead us to claim that its distribution is regulated by semantic/pragmatic principles, rather than syntactic ones.

3 *Ele mesmo*: distribution

Ele mesmo can appear in accusative or oblique positions, as shown below:

- (10) a. A Maria_i viu ela_i mesma na TV.
The Mary_i saw her_iself on TV ('Mary saw herself on TV'.)
- b. A Maria_i conversa com ela_i mesma.
The Mary_i talks with her_iself ('Mary talks to her_iself'.)

As observed by Zribi-Hertz 1990 for French *lui-même* and Menuzzi 1999 for BP *ele mesmo*, the acceptance of these complex forms improves depending on the semantics of the predicate. In (11), we see predicates that accept both the simple form *ele* as well as the intensified form *ele mesmo*. In (12) we have predicates for which the form *ele* is not acceptable and only *ele mesmo* is possible:

³ The BP data below are adapted from the French data presented in several works by Anne Zribi-Hertz, who studied the French expression *lui-même* in depth. The papers from which the examples are adapted are shown in parenthesis in the text.

- (11) Ela/Ela mesma
- | | | |
|----|---|--|
| a. | A Maria _i tem vergonha dela _i (mesma). | ‘Mary is ashamed of her (self)’. |
| b. | A Maria _i fala dela _i (mesma) o tempo todo. | ‘Mary speaks of her (self) all the time’. |
| c. | A Maria _i criticou/elogiou ela _i (mesma). | ‘Mary criticized/complimented her (self)’. |
- (12) ?*Ela/Ela mesma
- | | | |
|----|---|--------------------------------------|
| a. | A Maria _i conversa com ela _i mesma. | ‘Mary speaks with her self’. |
| b. | A Maria _i tem ciúme dela _i mesma. | ‘Mary is jealous of her self’. |
| c. | A Maria _i esmurrou/esfaqueou/apunhalou ela _i mesma. | ‘Mary hit/stabbed/punched her self’. |

The distinction above is also found for the French *lui-même*, as reported in Zribi-Hertz 1990:115, exs (68)-(69)):

- (13) a. Pierre_i a honte de lui_i-même/lui_i.
‘Peter is ashamed of him-self/him’.
- b. Pierre_i bavarde avec lui_i-même/?*lui_i.
‘Peter talks with him-self/him’.

Similarly to what happens in French, in BP predicates like *ter vergonha de* (‘be ashamed of’) and *falar de* (‘speak of’) accept the pronoun with or without *mesmo*. On the other hand, predicates like *conversar com* (‘talk with’) and *ter ciúme de* (‘be jealous of’) are only acceptable with *mesmo*. Co-reference between the arguments of the predicates in (11) and ((13)a) is natural, contrary to the predicates in (12) and ((13)b), where co-reference between the arguments isn’t natural. Zribi-Hertz claims that this is so due to the fact that the semantics of predicates in (12) and ((13)b) increases the probability of referential disjunction between its arguments, whereas the semantics of predicates like (11) and ((13)a) do not have this property. Thus, ‘talk with’ is generally an activity involving two distinct participants. The co-indexation of these two arguments isn’t impossible, but marked. Menuzzi claims that predicates like this display improbable reflexivity. Therefore, the adjunction of *mesmo* makes explicit that the index on the pronoun is marked. In the case of predicates like ‘be ashamed of’, such co-indexation isn’t surprising or improbable. Thus, the use of *mesmo* is possible, but not necessary.

Summarizing, the adjunction of *mesmo* to the pronoun *ele* in the examples above is used to focalize the referential index on the pronoun, that is, to make explicit its marked status. Such focalization seems optional in (11) and ((13)a), where the index is contextually unmarked, but is obligatory in (12) and ((13)b), where it is contextually marked.

These observations indicate that *ele mesmo* is not regulated by a syntactic principle, such as the Binding Principles, but by discourse principles, involving the notion of prominence and contrast. Baker (1995) proposes that intensive expressions, like *lui-même* and non-locally bound *himself* obey the following discourse restrictions:

- (14) (a) Contrastiveness Condition (Baker 1995: 77)
Intensives are appropriate only in contexts in which emphasis or contrast is desired.
- (b) Condition of Relative Discourse Prominence (Baker 1995: 80)
Intensives can only be used to mark a character in a sentence or discourse who is relatively more prominent or central than other characters.

The cases discussed above suggest that *ele mesmo* obeys these conditions as well. However, it isn’t the case that *ele mesmo* always displays this focalizing aspect related to contrast or prominence. In some contexts, *ele mesmo* obeys a semantic restriction of logophoricity. This means that the sentence must convey the thoughts or feelings of the antecedent. As Zribi-Hertz 1989:705 puts it: “the

antecedent of a LDB (long distance bound) reflexive pronoun must be interpreted in discourse as a SUBJECT OF CONSCIOUSNESS.” When the antecedent of *ele mesmo* is the subject of consciousness, the sentence is possible, and it does not need to obey the focalizing restrictions discussed above (data adapted from Zribi-Hertz 1990:109, ex. (40)):

- (15) a. *Essa pobre coitada_i, o João ama todo mundo menos ela_i mesma.
 ‘This poor girl_i, John loves everyone but her_i;self.’
 b. Essa pobre coitada_i está convencida de que o João ama todo mundo menos ela_i mesma.
 ‘This poor girl_i is convinced that John loves everyone but her_i;self.’

(15)a is a topic-comment structure, in which the antecedent of *ela mesma* (‘this poor girl’) is not the subject of consciousness of the sentence. We have John’s feelings expressed and he is the subject of consciousness of sentence. Thus, only John could be the antecedent of a complex pronoun with *mesmo*. On the other hand, (15)b expresses the opinion of ‘this poor girl’, the antecedent of *ela mesma*. Thus, *ela mesma* is possible, since its antecedent is the subject of consciousness of the sentence.⁴

Finally, it should be noted that focus is a relevant notion in order to properly describe the distribution of *ele mesmo*. Zribi-Hertz 2007 observes that *lui-même* is licensed with primary accent and construed semantically under narrow focus. Adapting the data from Zribi-Hertz for *lui-même* to the BP *ele mesmo*, we see below that the Brazilian form works in the same way as the French one:

- (16) A: O que a Maria descobriu sobre o João?
 ‘What did Mary find out about John?’
 B: Que ele é mais ALTO que ela (*mesma). [focus on the predicate]
 ‘That he is TALLER than her (*self)’.
- (17) A: A Maria pôs o livro atrás dela?
 ‘Did Mary put the book behind her?’
 B: Não, ela pôs DO LADO dela (*mesma). [narrow focus on the preposition]

⁴ Klein 2001:47 presents the example below and claims it to be evidence that *ele mesmo* cannot be co-referent with a non-c-commanding antecedent:

- (i) [O pai_i [do João]_j]_i deu um tapa nele_{*j/i} mesmo.
 The father-of-the John gave a slap at-him self

Indeed, in the example above, *ele mesmo* must have the DP *o pai do João* ‘John’s father’ as its antecedent. However, such requirement isn’t always present, as shown in (6) and (7) above. The c-command requirement seems to come from the fact that the DP *o pai do João* ‘John’s father’, being the subject of the clause, is the most prominent element in the sentence and potentially the subject of consciousness in discourse. *O João*, being embedded within this DP, does not stand as the central element and is not the subject of consciousness. Zribi-Hertz 1989:718, presents two groups of examples, adapted here to BP:

- (ii) *O pai do João_i bateu nele_i mesmo.
 ‘* John_i’s father hit himself_i’.
- (iii) A impulsividade do João_i se virou contra ele_i mesmo.
 ‘John_i’s impulsiveness rebounded against himself_i.’
- (iv) O filho do João_i, Louis_k, recebeu mais livros do barão do que dele_i mesmo.
 ‘John_i’s son Louis_k received more books from the Baron than from himself_i.’

Zribi-Hertz observes that, although these sentences have similar structures, in (ii) the subject NP that includes the antecedent for *himself* is a potential subject of consciousness (being mainly agent or experiencer). This is not the case in (iii), where the subject NP is [– human]. In (iv), the subject is marked as theme. In both cases, the subject NPs cannot be the subject of consciousness the sentences (iii) and (iv).

‘No, she put it NEXT to her (*self)’.

(18) A: A Maria pôs o livro atrás do João?
‘Did Mary put the book behind John?’

B: Não, ela pôs atrás DELA mesma.

[narrow focus on the pronoun]

‘No, she put it behind HERself’.

As observed above, if we have focus on the pronoun, *ele mesmo* is possible. On the other hand, if focus falls on the predicate, the adjective or the preposition, *ele mesmo* isn’t possible. In these cases, we can only have the pronoun without *mesmo*.

The discussion above indicates that, similarly to *lui-même*, *ele mesmo*: (a) cannot be used deictically; (b) can be locally bound, non-locally bound, or free in its clause (but bound in the discourse); (c) must have an unexpected antecedent or logophoric antecedent in its context; (d) has narrow focus with primary accent on the pronoun.

That is, *ele mesmo* needs an antecedent, but it does not need to be local. It is an intensifying form in cases where it has an unexpected antecedent. Where there is no unexpected antecedent, it is logophoric. It is possible in cases of contrast, when narrow focus falls on the pronoun.

The simplex form *ele* can appear in almost all contexts where the complex form with *mesmo* can. This seems to indicate that in BP, similarly to French, the simplex form *ele* is not regulated by principle B of Binding Theory. *Ele* can be locally bound, as shown in (11)c.⁵ The difference between *ele* and *ele mesmo* lies in the fact that *ele* doesn’t need a linguistic antecedent (i.e., it can be deictic), whereas *ele mesmo* does.

Since both forms can be used in the same contexts (exception only to the deictic one), the choice for the complex form is motivated by some semantic effect that the adjunction of *mesmo* brings to the sentence, like its focalizing function, its logophoricity, or the improbable index in an argument.

Keeping in mind these aspects about *ele mesmo*, I turn now to the discussion about the acquisition of such form.

4 The acquisition of *ele mesmo*

The acquisition of *ele mesmo* involves acquiring its morphological, syntactic and semantic properties. Children must learn that *ele mesmo* is a maximal projection, and that the particle *mesmo* has number, person and gender features that agree with those of the pronoun *ele*. These morphological properties should not be problematic for children to learn. The difficulty seems to come from its semantic and pragmatic properties. We claimed that *ele mesmo* is an intensifying form in cases where it has an unexpected antecedent. Thus, children must master the semantics of the various predicates in order to evaluate whether co-reference between their arguments is unexpected or not. If it is, the use of the complex form is licit. Besides this, we claimed that *ele mesmo* is possible with narrow focus. Studies on the acquisition of focus, mainly in association with the operator *only* indicate that 4- and 5-years-olds do not behave like adults in tests with this operator (cf., among others, Baauw et al 2003; Gualmini et al 2001; Gualmini et al 2002; Halbert et al 1995; Hornby and Hass 1970; Szendroi 2003 and Tavakolian 1974). Considering cases of contrastive stress (as in (16)-(18) above), we can predict that structures such as those would be problematic for children as well.

When there is no unexpected antecedent, *ele mesmo* is logophoric. The literature on the acquisition of logophoricity isn’t vast, but in Sigurjónsdóttir and Hyams 1992, for instance, it is observed that children acquiring Icelandic master the aspects of logophoricity with the long distance anaphor *sig* at 4;6 years of age. Based on these observations, we predict that the acquisition of *ele mesmo* will not be early.

On the other hand, the anaphoric form *se* does not present such semantic and pragmatic properties associated with *ele mesmo*. *Se* is a neutral form, used in neutral contexts (without contrast or

⁵ Cf. Galves 1986 and Lemle 1985 for descriptions of cases where *ele* can be locally bound.

focus), and is more frequent in children's input. It does not display gender and number agreement. We predict therefore that it will be acquired before *ele mesmo*.

In what follows, we discuss the acquisition of anaphoric expressions in other languages and afterwards we discuss the acquisition of *ele mesmo* in longitudinal data (section 4.2) and, finally, in experimental data (section 4.3).

4.1 The acquisition of simplex and complex forms in other languages

Jakubowicz 1994 studies the acquisition of French forms *se* and *lui-même* and Danish forms *sig* ('(him)self') and *sig selv* ('him-self'). With respect to the French *se*, Jakubowicz tested 46 children between 3;0 and 5;11 years of age. She observes that the form *se* is acquired early, at around 3;0 years.

Children's behavior with *lui-même*, on the other hand, was considerably poor. The rates of correct responses increased with age, but they remained around 58% even for the older children (5;6-5;11 years). This rate is quite low when compared to those of adults (100%). This low rate of correct responses remained low for both types of predicates tested (those in which reflexivity is probable, like *parler de* ('talk about') and *rêver de* ('dream about'), and those in which reflexivity is improbable (*parler avec* ('talk with') and *crier après* ('yell at'))).

The acquisition of the Dutch forms *sig* and *sig selv* was investigated with 100 children between 3;0 and 9;11 years of age. In relation to *sig selv*, the rate of correct responses is high even for the younger children (above 80%). The form *sig* can be locally or non-locally bound. Children display a high rate of correct responses when it is locally bound. However, when it is non-locally bound, the rates of correct responses are quite low, even for the 9 year olds.

These results lead Jakubowicz to conclude that French *se* and the Dutch *sig selv* and local *sig* are acquired early, around 3 years of age. One possible explanation for the late acquisition of non local *sig* is the lack of robust input data, since this form is rare in the speech of adults. The same explanation does not seem possible for French *lui-même*, which is absent from children's productions, but is frequent in the input. Jakubowicz concludes that it is necessary more studies in order to understand why this form is absent from children's productions and why children have low rates of correct responses in the experiments.

In English, Chien and Wexler's 1990 study (C&W) is the most influential work on the acquisition of principles A and B of Binding Theory. The authors tested 156 children between 2;6 and 6;6 years of age. Three methods were used. The first one was the "Symon says" game, in which the puppet orders the child to do something. The sentences used had the following structures⁶:

- (19) a. Kitty says that Sarah should point to herself/her.
b. Kitty wants Sarah to point to herself/her.

For a sentence like "Kitty says that Sarah should point to herself", the child had to point to herself. Children had better results with the reflexives than with the pronouns. In what follows, I will concentrate on the results for reflexives.

The rates of correct responses increased with age, with 4-year-olds having 58% of correct responses. In 39% of cases, children made the mistake of co-indexing the reflexive with the non-local antecedent. C&W's conclusion is that the mistakes made by the younger groups can be explained by the fact that children are still learning the lexical forms *himself* and *herself*.

The discussion above seems to indicate that, around 4 years of age, children show knowledge of the French reflexive *se*, English *himself* and Danish *sig selv*. Similar conclusions are reached in the studies of McDaniel, Cairns and Hsu 1990, McDaniel and Maxfield 1992, Zukowski, McKeown and

⁶ Kitty was the name of the puppet and Sarah was the name of the child being tested. If the child was a boy, the puppet was also male, Snoopy. Each sentence was tested with the reflexive and with the pronoun. So, sentence (19)a was tested twice with the same child: (a) Kitty says that Sarah should point to herself and (b) Kitty says that Sarah should point to her.

Larren 2008 for English and Grodzinsky and Kave 1993/1994 for Hebrew. What seems to take longer is the acquisition of more specific forms, such as French *lui-même* or Danish non-local *sig*.

4.2 Spontaneous production of *mesmo* in Brazilian Portuguese

In order to have a better overview of the acquisition of the complex form *ele mesmo*, we collected spontaneous production data from two children, who were acquiring BP as their native language: R. (recorded between 2;0 and 5;0 years of age) and L. (recorded between 2;0 and 5;6 years of age). We looked for occurrences of the form *mesmo* and its gender and number variations (*mesma*, *mesmos*, *mesmas*), preceded or not by the pronoun. In R's data, we found three occurrences of *mesmo* used as an adverb, but no occurrence of this form used emphatically, adjoined to the pronoun. At 2;7, the first production of *mesmo* as an adverb is found (cf. (20)). At 2;8 and 3;2, we find other occurrences of *mesmo* as an adverb:

- (20) *MAE: (vo)cê foi lá ## (vo)cê foi lá pinta(r),, é ?
Mother: 'you went there, you went there to paint, is it?'
*CHI: pinta(r) mesmo.
Child: 'paint really'

L. produced 11 sentences with adverb *mesmo*. The first one appeared at 4:05 (see (21)). The first (adjectival) feminine form appeared at 4;6 (see (22)):

- (21) Eu quero ficar ai mesmo
'I want to stay there indeed'
(22) Mas tem que ficar na mesma cor se não elas não voam mais.
'But it has to stay in the same color, if not, they don't fly anymore'

There are no productions of *ele(a) mesmo(a)* in the spontaneous production data of these two children.

4.3 Experimental data

Method. We used the "symon says" game, following C&W's study, experiment 1. We presented a puppet to the child, and invited her to participate in a game, where she should do what the puppet ordered. If the child being tested was a girl, the puppet was also female, a dog named "Pinky". If the child was a boy, the puppet was a male donkey named "Billy". The child was interviewed in a separate room, where there were only the child and two experimenters. Firstly, the child was presented to the puppet and the game was explained. Then, in order to be sure that the child understood the task, a training session was undertaken, in which the puppet gave orders and the child did what was asked.

Materials. We tested the complex form *ele mesmo* and the anaphor *se*. There were two conditions, shown below (X represents the name of the child being tested):

- (23) a. SE: {O Billy/a Pinky} mandou X **se** coçar.
{Billy/Pinky} asked X to scratch {him/her}self
b. ELE MESMO: {O Billy/a Pinky} mandou X cheirar **ele mesmo**.
{Billy/Pinky} asked X to smell {him/her} self

There were 4 sentences for each condition, a total of 8 sentences tested. The verbs used in these conditions were the same: *coçar* (scratch), *beliscar* ('pinch'), *cheirar* ('smell') and *abanar* ('fan').

All the conditions had a sentence with a matrix clause and an embedded one. The form *se* is an anaphor, which requires a local, c-commanding antecedent. Thus, on the SE condition, the children

were expected to perform the action on themselves. The form *ele mesmo* is not a local anaphor. However, the verbs used in the test involved marked actions, like pinching, which generally involves two distinct arguments. Thus, we expected children to perform the action on themselves rather than on the puppet.

Subjects. We interviewed 20 children, between 4;0 and 4;11 years of age. The children attend the day care center *Emir Macedo Nogueira*, in São Paulo. They are all Brazilians, with Brazilian parents and are only acquiring BP as their native language. Five adult native speakers of BP were also tested to serve as controls.

Results. In the tables below, we provide children’s and adults’ responses. The table presents, for each condition, the type of answer provided: if the child performed the action on herself (column “self”), on the puppet (column “puppet”) or on another person or toy (column “other”).

Table 1. Children responses (N = 20)

	SELF	PUPPET	OTHER
SE	79,2%	20,8%	0
ELE MESMO	66,7%	29,2%	4,1%

Table 2. Adults responses (N = 05)

	SELF	PUPPET	OTHER
SE	100%	0	0
ELE MESMO	100%	0	0

Discussion. Starting with condition “SE”, we observe that children correctly performed the action on themselves in almost 80% of the cases. Upon hearing the order, children did as was asked with no apparent problems.⁷ They provided the incorrect response in 20% of the cases. The adult speakers performed the action on themselves 100% of the time. The results obtained for the BP children differ from those obtained in C&W’s study for the English anaphor *himself*. In this case, 4-year-olds provided the correct response only 57,5% of the time (versus 79% in PB). They provided the incorrect response 41,5% of the time (versus 20% in PB).

In the case of the condition “ELE MESMO”, the actions were not as clearly performed by children. When they heard the action with *ele mesmo* for the first time, many children asked: “he who?”, in doubt on how to proceed. We observe that, despite children’s strong tendency to perform the action on themselves, for this condition this tendency is somewhat lost, as they performed the action on the puppet almost 30% of the time. It goes from 79,2% (in the “SE” condition) to 66,7% the number of correct responses for this condition. We found here the only cases where children performed the action in another referent present in the room. That is, children’s hesitant responses make it clear that, at 4 years of age, they have not acquired this form yet. The adults performed the actions on themselves 100% of the time.

5 Concluding remarks

Similarly to what happens in French, in BP the acquisition of the simplex form *se* precedes the acquisition of complex form *ele mesmo*. This is not surprising, as we saw above that in languages such as Danish and French children usually acquire the simplex forms before acquiring the more specialized ones. We claim that in the case of BP *ele mesmo* this is so due to the fact that *ele mesmo*

⁷ Children had doubts on the meaning of the verb *abanar* (‘to fan’). When the first children were tested, we realized such difficulty. We decided then to explain its meaning during the training session. After explaining what ‘fan’ meant, we asked children to fan the puppet, the experimenter and themselves. In this way, it became clear that this action was not exclusively reflexive. After this explanation, children were able to perform the actions without problems.

involves knowledge of pragmatic aspects, such as focus and contrast, which we know are acquired late. Children's perplexed reactions upon hearing this form made it clear that they did not know how to choose the referent to the pronoun, and consequently did not know how to respond.

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