

EMERGENCE OF SELF-REFERENCE IN AN ENGLISH-SPEAKING CHILD

STÉPHANIE CAËT

Abstract. The present study aims at analyzing the emergence of early explicit forms of self-reference in the speech of an English-speaking girl, Ella, between 1;5 and 2;6. In a detailed analysis of contexts in which explicit forms appear, I first show that their emergence is initially bound to the child's need to contrast, compare, affirm her position in dialogue and then, progressively, to her need to disambiguate her utterances and make them clearer for her interlocutor. Adopting a functionalist approach to language development, I also show that each explicit form of self-reference is used in specific contexts and carries particular values. These parallel processes, together with an increasing exposure to the language input and active participation in interaction, will progressively lead the child to the construction and reconstruction of transitory grammars and the internalization of the linguistic system of her linguistic community.

Introduction

The issue of the development of self-reference in children's speech is at the crossroads of three major domains: cognition (as it involves visual perspective taking – Chiat 1986), psychology (as it reflects children's representations of their person – Piaget 1926), and linguistics (as it follows the acquisition of the semantic, grammatical and pragmatic rules – Pavlovitch 1920). These three domains, although often working separately, share common issues. In particular, children's use of several different forms to refer to themselves is tackled across the three disciplines. As children grow up, they may designate themselves with a null form, a preverbal vowel, their first name, nicknames (such as "baby") and pronouns in the 1st person but also in the 2nd or 3rd person. These forms may be used transitionally as well as simultaneously and their use is thought to reflect different cognitive, psychological or linguistic stages.

Among linguists, different hypotheses have been proposed in order to explain the simultaneous use of adult-like and non adult-like self-words by children. Loveland (1984) suggested that children produce these different forms almost at random, whereas Bates and her colleagues (1989) proposed that this multiplicity of forms arises from children testing self-made and statistically-based hypotheses from the language they hear. Proponents of a functionalist approach of language (Brigaudiot *et al* 1994; Bugdwig 1995; Morgenstern 2006) argue that these different forms are each used in specific contexts, carrying particular functions.

A large amount of interest has been given to understanding the transition from non-adult-like forms to adult-like forms in children's speech. Only few studies have investigated the very first transition within children's emerging systems: from no-form to form. In an analysis of the corpus of Peter, an English-speaking child, Morgenstern (1996) suggested that explicit forms of self-reference emerge both from a differentiation process between the child and the adult, and a disambiguation process of the child's own utterances, reflecting Peter's growing need to express his own perception on situations directly to his interlocutor.

The current study aims at testing Morgenstern's hypotheses further, by investigating the emergence of self-words in the speech of another English-speaking child. After presenting the quantitative development of implicit and explicit forms in the child's speech, I describe the contexts in which early (null-)forms can be observed. This detailed analysis aims at understanding the pragmatic reasons for the child to use explicit forms when she is perfectly understood with implicit forms. Our findings first confirm that explicit forms emerge in the child's early needs to express her own position in interaction to her interlocutor. They also give additional evidence for the functionalist hypothesis of early language uses, since each explicit form appears to be produced in specific contexts and to carry specific functions for the child.

Method

In this study, I investigated the data of an English-speaking child, Ella, from the Forrester corpus (Forrester 2002) on the CHILDES database (MacWhinney 2000). Ella was video-recorded during meal times with her father, once a month between 1 and 3 years. Our analyses were conducted from 1;5 (when Ella produces her first self-predicate) to 2;6 years.

A first step consisted of systematically analyzing all self-references that Ella produced. Among self-words, null forms, first names, filler syllables (Peters and Menn 1993), possessives and 1st, 2nd and 3rd person pronouns were included. Each time Ella explicitly talked about herself, several parameters were then coded: the phonological form of the self-word and its orthographical equivalent, the adult-target, the associated element (a verb for subject or object arguments, a nouns for possessives) and its tense or number, the grammatical function of each self-word (subject, object, possessive), the exact interlocutor (Ella's mother or her sister sometimes interact with her as well), and the pragmatic value of the whole utterance (assertion, question, request, order).

A second step consisted of describing in detail the context in which Ella used each self-word, in order to identify recurrent values carried by each produced form. The next section presents some of the main results drawn from these quantitative and qualitative analyses.

Results

General overview of Ella's development of self-reference

Figure 1 gives an overview of the quantitative evolution of null forms, filler syllables, 1p ("I", "me", "my", "mine" used in both adult-like and non-adult-like positions) and 3p (her first name and "baby" – no 3p pronoun was observed) forms of self-reference in the speech of Ella between 1;5 and 2;6. Second person pronouns were too rare and too systematic (only found twice in the chunk "feed you") to be taken into account here.

Three main phases could be identified in Ella's development of self-reference. During a first period, between the age of 1;5 and 1;11, self-reference emerges progressively. Null forms and 3p forms ("baby" and "Ella") are predominant, although their proportions vary. 1p forms represent less than 15% of self-words (their high proportions at 1;5 have to be nuanced since Ella verbally refers to herself only three times). All forms can be used either in isolation, or in adult-like or non adult-like positions: 84% of forms consist of non-adult-like uses of self-words, with a mean of 12 self-words per recording.

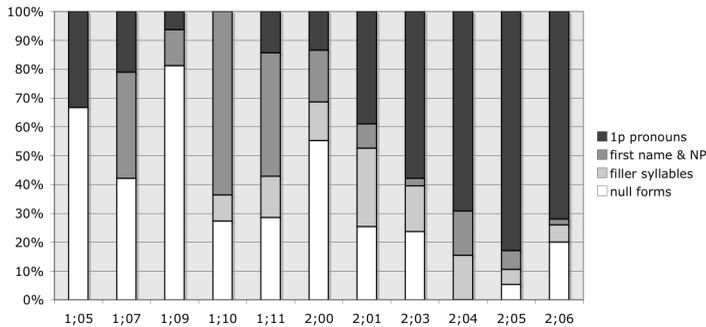


Figure 1. Development of self-word proportions (1p; 3p; filler syllables and null forms) in Ella's speech between 1;5 and 2;6

A second period, at 2;0, is characterized by a suddenly large amount of self-words (N=67), additionally including “my” and “me”, produced in adult-like and non adult-like positions as well (non-adult like uses of self-words are still observed in 85% of contexts). This phenomenon parallels Ella's lexical explosion and the complexification of her utterances: from 70 different words per recording in average she reaches around 170, and her MLU is then close to 2.

In a third period, from 2;1 to 2;6, Ella first reduces the number of different self-words she uses, then starts producing more and more again (including then “mine” and “myself”). 1p proportions increase significantly and overcome proportions of all other forms (more than 70% of self-words are 1p pronouns). Null forms and 3p forms decrease progressively. Filler syllables remain numerous between 2;1 and 2;4, but they then gradually decrease as well. In this period, explicit forms are mainly used in adult-like positions (only 20% of non adult-like uses, with a mean of 51 self-word per recording).

The following section focuses on the contexts of emergence of explicit forms and the status of null forms during the first period, between 1;5 and 1;11.

Implicit and explicit forms in Ella's emerging self-reference

The first time Ella verbally refers to herself, she points at a piece of cake and says “want” as illustrated in (1a). Despite the absence of an explicit

form of self-reference, Ella's father perfectly understands that she is requesting bread for herself.

(1a) 1;5 - *Ella and her father are having breakfast. After a long break, Ella is asking for bread and chocolate.*

*CHI: wan(t) [pointing to bread].	*CHI: 0 [retracts her arm] xxx.
*CHI: yyy [shakes her head and then looks up].	*FAT: (1.6) 0 [gives Ella the bread]
*FAT: what ?	*FAT: say more.
*CHI: 0 [squeak].	*CHI: more.
*FAT: want some more ?	*FAT: more that's right more.
	*FAT: when you want some more

In this sequence, the verb itself (carrying quite a strong modal meaning already), the pointing gesture and the intonation allow the father to interpret Ella's utterance as "I want some bread". This spontaneous and syntactically "economical" way of interacting seems to be shared by the father who then asks "want some more?", without any explicit form either, simply relying on intonation, gestures, body movements and gaze to identify Ella as the referent. Example (1a) is interesting for it also illustrates how the father, in spite of his perfect understanding of Ella's request, is teaching her another way of requesting by saying "more". His teaching first seems to be successful (Ella repeats "more"), but then Ella shows that she picked up words from her father's production, as shown in (1b).

(1b) 1;5 – *Later on, Ella is asking for bread and chocolate again.*

*CHI: I some [points at the bread with index]
*FAT: (1.9) some more ? [cuts a piece of bread]
*CHI: more.
*FAT: more.

Example (1b) illustrates Ella's first use of an explicit form of self-reference. The child seems to have taken up from her father's previous utterances other words but the expected "more": she uses the 1p pronoun "I" (perfectly reversed) and the determiner "some". At that moment, what seems to be the most important for her is to express the recipient of the process rather than the actual verb itself. Although this first use of «I» may result from an effort to satisfy her father's request, it may also constitute the precursor of following explicit forms.

Ella's second use of "I" was observed 2 months later, at 1;7. It is then produced as she is contrasting her situation to her father's. Her father has

just given her a biscuit, and as he is about to take one for himself, Ella says “I get biscuit yy!” with strong emphasis on I, bending in the direction of the table. Ella’s first “I” are often produced with phonological intensity, a characteristic which can obviously not be part of a null form. Doing so, Ella seems to be insisting on her being the subject (here, the recipient as well) of the verb, contrasting with other potential subjects. The intensity given to “I” may also be due to its syllabic shortness: longer words such as “baby” (produced for the first time in the same recording) do not require this prosodic stress to be perceived. Nevertheless, “baby” does not carry the same intensity also because its function is different: “baby” is preferred when making explicit comparisons, as (2) illustrates.

(2) 1;7 – *As Ella and her father are eating eggs. she starts making comparisons between entities who eat eggs (human beings) and those who don't (dolls).*

*CHI: egg.		*CHI: baby.
*FAT: egg.		*FAT: and baby does too.
*CHI: Daddy egg.		*CHI: dolly (.) egg [points and shakes her
*FAT: Daddy like egg.		head while speaking at doll on table].

At 1;10, Ella uses her first name for the first time. This form of self-reference takes over previous uses of “baby”, as it also fulfills the function of comparison. But it also takes over the contrasting function previously carried by “I” as illustrated in (3), whereas “I” and its phonological reduced form [ə] get specialized for contexts of strong affirmation.

(3) 1;10 – *Ella is going to have breakfast and she wants to read a book while eating. Her father comes back with one, and leaves it open near a teddy bear.*

*FAT: Jimby will be reading the book just as we are having our breakfast.
 *CHI: Ella.
 *FAT: and Ella.
 *FAT: Ella can read the book too (.) when she's having her breakfast.

In this example, Ella uses her first name to insist on her reading the book (not the teddy bear). Although functions carried by her first name may be similar to those carried by the previous « baby » or « I », the distribution of those forms is not the same: « baby » was used in isolation or in pre-nominal position, and « I » in pre-verbal position. On the contrary, although first names can be used in isolation too, they are never found in pre-nominal position, but in post-nominal position, as in (4).

(4) 1;10 – *Ella, her sister and her father are having breakfast.*

*SIS: I know that's peanut-butter inside		*FAT: yes butter for Ella
*CHI: (3.2) butter Ella.		*CHI: (1.5) yy butter.
*CHI: (1.3) butter Ella.		*CHI: (0.3) Ella (.) butter Ella.

Uses of «Ella» as in (4) may be the precursors of prepositional phrases such as «butter for Ella», especially when the father reinforces such an interpretation by rephrasing his daughter's utterance.

Although all these explicit forms exist in Ella's linguistic system, she may still use verbs with no explicit subject. Null forms seem to consist of default forms in two ways. First, null forms are used in all other contexts but those *marked* contexts in which Ella is using explicit forms to compare, contrast or strongly affirm her position toward someone or something. Secondly, null forms seem to be default forms when the referent (herself) is already mentioned in the linguistic context, or when it is deducible from the non-linguistic context thanks to gestures.

When the linguistic context or the actual situation do not seem to be sufficient for the interlocutor to understand who Ella is talking about, the child uses an explicit form to disambiguate the referent. In (5) for instance, Ella is talking about an event which happened in the past: buying a piece of paper. In this case, who bought the paper is not given by the situation itself. Ella therefore introduces it by using her first name. Once the referent is made clear, the null form may take over explicit forms again.

(5) 1;11 – *Ella's father is reading a piece of paper.*

*CHI: Ella bought it [pointing at the paper slip].		*CHI: shop
*FAT: did Ella buy it ?		*FAT: in the shop!
*CHI: 0 [nod].		*CHI: give it daddy [pointing again]
*FAT: oh !		*FAT: did you give it to daddy ?

At 2;0, Ella produces a high proportion of several different forms of self-reference, in many different (adult-like and non adult-like) positions. Yet, among these forms, null forms are still observed a lot. They will be present up to the age of 2;6 at least (cf. Figure 1), although explicit forms in Ella's system will get more and more normalized.

Discussion

This study aimed at analyzing the emergence of self-words in the speech of one English-speaking girl and at answering two questions: 1) Does the child use different forms in different contexts? 2) Why does she start using explicit forms when her interlocutors understand her with implicit forms?

First, our detailed analyses of contexts in which early explicit forms were produced showed that Ella uses specific forms in specific contexts, depending on the meaning she wants to express. “I” first seems to express contrast, whereas “baby” or her first name are preferred for making comparisons. But these form-meaning associations, these “transitory systems” (Cohen 1924), constantly undergo reorganization. In order to better understand the reasons underlying Ella’s first choices for each of these forms to express these particular values and how these associations are transformed, further studies will be dedicated to the analysis of the input that Ella receives from her father, when he is addressing her or when he is talking about himself. We will probably find that these forms are also used with particular values, in the father’s speech but more generally in English. This would also allow us to observe whether despite formal rules of English, adult speakers produce subject-less sentences when the referent is deducible from other clues (as it was the case in (1a) with “want” or in (5)), and what part of personal reference this represents in adult-child interactions. This could take part in the explanation for the long-lasting presence of null forms in the speech of children.

Second, in coherence with Morgenstern’s findings (1996), the detailed analysis of contexts in which Ella produces early explicit forms showed that the child starts verbalizing about herself when she needs to affirm her position, contrast or compare her situation. These *marked* contexts for forms seem to be highly necessary for the child to make explicit that she is the referent of her utterances. Then, from *marked* contexts Ella slowly switches to the need of *disambiguating* the referent of her utterances when she talks about past events or when other referents may be possible.

The similarity with Peter, the English-speaking child studied by Morgenstern, corroborates that this process may be shared across children learning languages in which the subject referent has to be explicit. As they acquire their language, as their linguistic skills develop and their utterances get more and more complex, children seem to be learning that verbalizing the referent is necessary in their language. And as they

gradually manage to take into account their interlocutor's perspective, as they develop intersubjectivity, children are also learning that disambiguating the referent may be necessary for other speakers of their language community to better understand them. The development of explicit personal reference in English-speaking children is therefore bound to and reflects the children's growing linguistic, cognitive and psychological abilities.

References

- Bates, E., Bretherton, I., & Snyder, L. 1989. *From first words to grammar: individual differences and dissociable mechanisms*, New-York, Cambridge University Press.
- Brigaudiot, M., Morgenstern, A. & Nicolas, C. 1994. Me found it, I find it. A la recherche de 'je' entre deux et trois ans. *Faits de langues – la personne*. Paris, P.U.F.
- Budwig, N. 1995. *A developmental-functionalist approach to child language*. New-Jersey, Erlbaum.
- Chiat, S. 1986. Personal Pronouns. In P. Fletcher & M. Garman (Eds.), *Language Acquisition: Studies in first language development*, (pp. 339-355). Cambridge University Press, Cambridge, London.
- Cohen, M. 1924. Sur les langages successifs de l'enfant, in E. Champion, *Mélanges linguistiques offerts à M. J. Vendryes par ses amis et ses élèves*, Paris, collection publiée par la société de linguistique, XVII, 109-127.
- Forrester, M. 2002. Appropriating cultural conceptions of childhood: Participation in conversation. *Childhood*, 9, 255-278.
- Loveland, K.A. 1984. Learning about points of view : spatial perspective and the acquisition of I/you. *Journal of Child Language*, 11 : 535-556.
- MacWhinney, B. 2000. *The CHILDES project: Tools for analysing talk*. Third Edition. Mahwah, NJ: Lawrence Erlbaum Associates.
- Morgenstern, A. 1996. Pour qui JE parle. *Groupe T.E.L.O.S, La détermination*. Presses de la Sorbonne Nouvelle, 105-128.
- Morgenstern, A. 2006. *Un JE en construction. Ontogenèse de l'auto-désignation chez l'enfant*. Bibliothèque de Faits de langues, Ophrys, 176.
- Pavlovitch, M. 1920. *Le langage enfantin (acquisition du serbe et du français par un enfant serbe)*, Paris, Champion.
- Piaget, J. 1926. *La représentation du monde chez l'enfant*. Paris, Alcan.