WHAT DO CHILDREN DO WHEN THEY FOCUS ON FORM?

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In recent years there has been a growing interest in notions such as "focus on form", "explicit learning", "attention", "noticing", in second language acquisition (SLA). Several theoretical and experimental studies have appeared that shed much light on the processes whereby learners concentrate on the forms of the language they are acquiring. However, these studies have been primarily concerned with adult learners, and very little is known to date about children's form-focussing (for a preliminary investigation see Huot 1995).

A research area that may be relevant to fill this gap is that on learning strategies. Learning strategies have been variously defined; however, their core meaning is that of activities whose principal aim is to facilitate language acquisition. It can be argued that learning strategies are what learners do when they focus their attention on linguistic forms with the aim of facilitating acquisition. Some studies have been carried out that deal with language learning strategies in school-age children (e.g. Chesterfield & Chesterfield 1985; Palmberg 1987; Wong-Fillmore 1976).

This paper has the aim of looking at focus on form from the perspective of learning strategies: we will analyze what a young child actually does when she seems to be directing her attention to the forms of the language she is acquiring. This approach to focus on form can be said to be inspired by Vygotskian psychology under at least two respects: 1) it views mental processes as activities; 2) it uses private speech as an important window for studying these activities in young children.

Why private speech? According to Vygotsky (1962), children initially use language in social interactions only, in order to direct others. Gradually, they begin to direct themselves by means of language, but still with overt verbalizations. This self-directed speech will eventually become fully internalized, producing adult inner speech, which is claimed to have a crucial role in our higher cognitive functioning.

Turning to SLA, many of the learning strategies reported by subjects are based on some form of inner speech: repeating and rehearsing linguistic expressions, trying alternative combinations, monitoring one's utterances before actually producing them, planning and organizing (de Guerrero 1994; O'Malley & Chamot 1990). A crucial methodological problem in studies of learning strategies in adults and adolescents is that these strategies can never be directly observed, but they can only be reported through introspection. In this study we are going to look at children who still self-regulate through overt private speech, and this will give us some kind of "direct" access (that is, not introspection-mediated) to their learning strategies.

Such an approach presents several advantages. First, learning strategies can be observed as they spontaneously occur in a naturalistic setting; that is, the external validity of the observation is much higher than in studies using questionnaires or tightly controlled experimentation. Secondly, it is virtually the only possible way to investigate young children's use of form-focussed learning strategies: their meta-cognitive capacities are such that one cannot ask direct questions like "what do you do to facilitate your learning?". One last methodological point needs to be addressed. If the private speech we are looking at is overtly produced, how can one tell if it is really private, and not directed to someone else? Studies of child private speech generally specify several criteria whereby speech can be coded as private or social: the following are among the most often cited (from Rubin 1979, modified).

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<thead>
<tr>
<th>Communicative speech</th>
<th>Private speech</th>
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<th>Eye contact with interlocutor</th>
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Studies on child private language have generally been carried out in artificial settings, typically with an adult inert observer, sitting at some distance from a child playing alone (for an example with bilingual children, Amodeo & Cardenas 1983; for a critique of such studies, Frauneglass & Diaz 1985). In this constrained situation, it is normally easy to tell whether speech is directed to the adult or to the self. But in a nursery school like the one where the present research was conducted, there are always several people nearby, activities and participation frameworks change very rapidly and whatever is said may be taken by anyone as a first move in a conversational exchange. In such conditions classifying an utterance as private or publicly addressed often poses difficulties: rather than establishing an arbitrary divide between private and communicative speech, it seems wiser to posit a continuum from definitely private speech, exhibiting all its distinctive features, and purely communicative speech, exhibiting all the opposite features. The examples which will be discussed in the following pages are all instances of language that is rather clearly non-communicative, meeting most or all of the above-mentioned defining criteria. The basic assumption that will be made is that, if an utterance is spoken with no communicative intent whatsoever, one may reasonably claim that the learner's focus in producing that utterance was on its form, as a linguistic expression per se.

A taxonomy of form-focussing activities in children

The data analyzed here come from previously published studies and from my own research on a Moroccan five-year old child learning Italian as a second language in a nursery school (Fatma). The girl entered school with no previous knowledge of Italian, and her language development was observed for an entire school-year. My role in the nursery school was that of a semi-participant observer: I generally sat in a corner with my videocamera, but I allowed the children to interact with me if they wished; I also took part to some classroom activities and to some meetings with the staff. Field notes were taken during video-recording, in order to assist subsequent transcription. Globally, 150 hours of videotape were collected and preliminarily transcribed. Of these, 25 hours so far have been fully transcribed and analysed. The research on the whole can be said to be an attempt to provide an ethnoographic account of a second language learner's "language socialization" (Schieffelin & Ochs 1986), by systematically relating interlanguage development with the socio-interactional features of the environment in which it took place (more details and other research results can be found in Pallotti 1994a, b, 1996, in press).

The data for the present study will be organized within a framework for form-focussing activities which orders them along a scale ranging from instances of "focus on input" to instances of "focus on output". The expressions "focus on input" and "focus on output" should be taken as short for "focus on form that is heavily dependent on the input" and "focus on form that is minimally, if at all, dependent on the input". Since the data analyzed here are all production data, some attention to output is always implied. There are cases, however, in which the learner's attention is clearly oriented to the input: for example, when she repeats to herself a word that she has just heard, or when she attempts some minimal elaboration on input sentences. On the other hand, there are
cases in which the form-focussing activity bears no relationship with immediately preceding input: an obvious example would be when there is no preceding input at all; in these cases we are going to talk of "focus on output". It should be noted that all the categories employed in the discussion are strongly data-driven, in that they emerged from an analysis of data from my own research and published elsewhere, and not from theoretical speculation about what categories might be relevant. Therefore, it is not claimed that these are the only strategies possible, or that children use, but simply that these are the categories which can be identified based on existing data.

The following table presents the form-focussing strategies that are going to be discussed in the remainder of the paper, ordered according to the extent they are dependent on the input. Lists of strategies partially overlapping to this one have been suggested in previous research, notably by Chesterfield & Chesterfield (1985), Saville-Troike (1988), Tabors & Snow (1994).

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*Verbatim repetition.* Beginning with the form-focussing strategy most dependent on input, we find verbatim repetitions, in which children simply repeat the words or phrases they hear without modifying them in any way. In this sequence, taken from the first month of school, Fatma repeats twice the word *rosa*, "pink", previously uttered by the teacher. 

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Teacher: che colore lo facciamo, verde, rosa, [giallo, [si, 
Fatma: 
Teacher: rosa? 
Fatma: ro- 
Teacher: rosa? che colore è questo? rosa. 
Fatma: ro-sa 
Teacher: what color shall we make it? Green, pink, [yellow? [yes 
Fatma: 
Teacher: pink?
Repition is a very common and easy way of focussing on form, employed especially by beginners. Its use has been attested in virtually all the studies on language learning strategies, in both children and adults (e.g. Chesterfield & Chesterfield 1985, O'Malley & Chamot 1990, Oxford 1990, Tabors & Snow 1994). Two examples will be given here from children learning English as a second language.

Teacher (to all children): Take out the pink cards
Learner: pink.

(Saville-Troike 1988)

Teacher (correcting other child): only.
Learner: only.

(Chesterfield & Chesterfield 1985)

Repetition is a simple and basic way of drawing one's attention on a linguistic item and retain it in working memory for some time. According to some recent theories of attention in SLA (e.g. Robinson 1995, N. Ellis 1996), rehearsal in working memory is a fundamental strategy for all learners, regardless of their age, which mediates between noticing in the input and long-term storage. Thus, in all its simplicity, "private" self-repetition may play quite an important role in second language acquisition. Actually, all the instances of form-focussing strategies relying on input that will be discussed in this paper consist in the repetition of more or less significant stretches of previous discourse; in other words, in our data-driven classification, it appears that repetition is the only way in which children can be said to be focussing on forms in the input.

Repititon with language play. Moving down on our scale, a type of focus on form which is still heavily dependent on input but shows some degree of creativity as compared to verbatim repetition is the incorporation of repeated words in some sort of language play, as in the following examples.

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Child1: come si chiama il tuo cagnolino?
Teacher: Gigio.
Child1: GIGIO, che bel nome::!
Fatma: GEGIO GEGIO
Child2: si chiama come topo gigio?
Fatma: topo gigio gegio to:po gegio top topo gegio gegio gegio gegio gegio gegio ((shaking head and looking around))

Child1: how's your doggie called?
Teacher: Gigio.
Child1: Gigio, what a cute name!
Fatma: Gegio, gegio.
Child2 is he called like Topo Gigio? (television character)
Fatma: topo gigio gegio to:po gegio top topo gegio gegio gegio gegio gegio gegio gegio gegio gegio

Native child: you know why?
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Learner: you know why - you /not/ why? ((laughing))

(Peck 1978:388)

Minimally elaborative repetition. Still within the broad category of repetitions, we find repetitions involving more complex elaborations than simple word play. They may consist in integrating input materials into a wider construction, as in the first example, in which Fatma recycles part of my sentence, or in simplifying and recollocating them, as in the second example, in English.

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G.P.: buon appeti- grazie buon appetito.
Fatma: (questo) s' chiama appetito ((looking around, moving on chair))

G.P.: /buon appeti-/ Thank you /buon appetito/.
Fatma: (this) 's called /appetito/

Native: It puts that thing up and rip it out.
Learner: Put out thing. Put out.

(Saville-Troike 1988:579)

Input as a trigger for spontaneous production. One step further from heavy reliance on the input are those cases in which what is heard in the environment is noticed and focussed upon, but it is incorporated in creative constructions of a wider scope than the ones just examined, so that the input can be said to act just as a trigger for more spontaneous production. Again, it should not be forgotten that we are always dealing with private speech: these creative elaborations on input data are uttered with no clear signs of communicative intention, but seem to be a way of rehearsing linguistic elements noticed in the input and trying to experiment how they can be combined with already known items. In the following episode, involving Fatma, it can be seen how a couple of words in the input ("look" and "all") may trigger a series of complex sentences by the child, containing many function words not originally included in the input. The second example, in English, also shows how a child can reformulate an utterance heard in the input and make it something quite different.

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Child1: ( ) tutta così. Così, guarda.
Fatma: guarda io ke mangiare tutta
(1.0) Aide looks at Fatma
(3.8) Fatma eats
Fatma: mangiare io tutta
(0.5) Fatma: guarda io ke mangia la tutta

Child1: ( ) all like this. Like this, look.
Fatma: look I /ke/ eat all.
Fatma: eat I all.
Fatma: look I /ke/ eat the all.
In the example by Fatma one could see another spontaneous form-focussing activity that has been repeatedly reported in children learning a second language: a kind of pattern drilling in which different combinations of the same words, or substitutions of elements within a fixed frame, allow the child to formulate hypotheses about the L2. In this case, drilling incorporated items previously uttered by native speakers: in later examples we will also see that children may also engage in this type of activity autonomously, without previous external stimuli.

**Spontaneous practice of memorized chunks.** We now turn to considering form-focussing practices which are independent from the immediate input. The first category to be discussed, however, is still heavily based on the input, albeit not that immediately present in the environment. Children are often observed while practicing with memorized chunks of speech, such as numbers, days of the week, interactional routines, which they noticed on some previous occasion and which they practice in a key that ranges between spontaneous language play and self-monitoring during "serious" speech rehearsal. Examples come from Fatma and from a Finnish boy learning English as a second language.

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Fatma: 

dui l'acqua. (1.8) Dui (1.5). Sinque. (1.0). Nove (2.0). Sette.

Fatma: 
two the water. Two. Five. Nine. Seven.

Anti: 
what do you say, what do you say ... (10x)

Anti: 
no matter, no matter, no matter, no matter.

(Linnakila 1980)

**Spontaneous language play.** Another activity independent from the input is spontaneous language play. The distinction between it and the practice of memorized chunks which we have just seen, on the one hand, and the substitution patterns we are going to examine in the next section, on the other, can be blurred. Garvey (1984) lists some criteria to define language play, the most significant of which are a peculiar, sing-song, intonation, and "non literal orientation", that is the fact that the child seems to concentrate exclusively on sounds and not on the meaning of what she says (many utterances during language play are in fact composed of meaningless syllables). The two following examples show a child playing with the English words jelly and bean, and Fatma playing with the words pronto ("hallo"), pranza ("lunch") and the syllable /to/.

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Fatma: 

(pronto) tonto, (pronto) tonto, (pronto) tonto, pranza - to to toto to::: to:::

Learner: 

jelly bean, jelly bean. Jelly, jelly, jelly, jelly.
Spontaneous substitution patterns. Several researchers (e.g. Heath 1985; Saville-Troike 1988) have reported children engaging in some kind of pattern drills, in which they experiment different combinations of language units in what seem to be attempts at working out the syntactic rules of the second language. We have already seen an example in which Fatma experimented several permutations with the words look, eat, all; such drills, however, also appear independently of previously uttered words, as in the two examples below, involving children learning English as a second language.

Learner: I finished. I have finished. I am finished. I'm finished.

SooJong: one hammering, one hammering
you want a one cup
one hammering
one cup, one cup
one hammering, one hammering
one plate, one plate
one cup, one cup
one plate, plate
one cup
one of music, more music, play, more bike, please

Focus on form and second language acquisition

These last examples of substitution patterns can be seen as a spontaneous way in which children deal with the complexities of second language syntax. They are analogous to the "vertical constructions" described for first and second language acquisition (Scollon 1979; R. Ellis 1985), with the difference that here the child is left alone to gradually construct more and more complex stretches of language; in an environment such as an ordinary nursery school, there are few adults available to engage in long co-constructed interactional sequences, and children like Fatma may have to build their vertical constructions by themselves most of the time. Vertical constructions have been said to assist language development, in that they allow the learner to gradually assemble more complex, syntactically coherent "horizontal" units. Ethnographic studies like the present one cannot obviously give definitive evidence for this claim, but can only show, in a suggestive fashion, some possible relationships between spontaneous behaviors and interlanguage development. The approach taken will thus be similar to that of a non experimental study like Schmidt & Frota's (1986): relationships between form-focussing behaviors and subsequent acquisition of target language structures will be pointed out, suggesting (but not definitely proving) that the former may facilitate the latter.

I will discuss only two examples from my research that may be relevant for the claim that spontaneous focus on form can be a precursor to acquisition. The first was the language play previously analyzed, in which Fatma played with the word pronto and the syllable to. This syllable is the suffix for forming the participle in Italian (as in mangia → mangiato, "eat-eaten", or guarda → guardato, "see-seen"). Fatma began forming participles soon after this episode: one might thus assume that in it the girl was rehearsing a particular grammatical form that she had "noticed" (Schmidt & Frota 1986) as particularly frequent and salient in the input.
A more telling example about the relationship between focus on form and acquisition concerns another of the first grammatical morphemes learned by Fatma, the diminutive suffix -in- (as in pane → panino, "bread-little bread", casa → casina, "house-little house"). Fatma's early acquisition of affect-loaded grammatical morphemes, such as diminutives and superlatives, was analyzed elsewhere, along with a discussion of their importance in a communicative environment like the nursery school (Pallotti 1996). There is an episode in which Fatma can be seen as clearly focussing her attention on these forms, in a kind of language play that is also a real substitution drill on their combinatorial properties.

In this episode we see at work many of the language learning strategies previously discussed. The first thing to be noticed, however, is that Fatma "hooks up" to a piece of conversation that was not taking place at her table, but a few meters away: this was not uncommon for her, and testifies to her great "alertness" (Tomlin & Villa 1994) toward the target language forms. Her form-focussing consists essentially in the repetition of words with superlative and diminutive suffixes (buonissima, patatina, patatine); this repetition leads to language play, evidenced by the sing-song intonation and the non literal orientation of utterances, and to substitution patterns, where the diminutive suffix -in- is used to create the new word perina ("little pear"). These words ending in -issima, -ina, and -ine, definitely attracted Fatma's attention on this occasion; the relationship between form-focussing and acquisition is borne out by the fact that, a short time after this episode, Fatma began using diminutive and superlative suffixes on her own (Pallotti 1996). Both these examples are thus evidence that form-focussing has an important role in promoting acquisition of second language features; furthermore, they show that externalized private speech can reveal what the learner is attending to in the input and what parts of the second language system she is attempting to reconstruct.

Conclusions

In this paper we have seen that children as young as five do focus on form when they learn a second language. Even if it is true that their primary orientation is towards meaning, they cannot be said to be completely uninterested in linguistic form: they pay attention to it, play with it, rehearse it, analyze it and actively form hypotheses about it. One might wonder whether all this is done "consciously"; however, MacLaughlin (1990)
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and Schmidt (1994) have convincingly argued that the term "consciousness" itself is too vague to be of any use in an empirical discussion. They propose instead to break down the general notion of consciousness into more specific claims: for example, accessibility for verbal report, attentional resources allocated, intentionality. The present data show that children certainly allocate some of their attention to matters of linguistic form; other studies (Huot 1995) demonstrate that children can and do speak about languages and language learning, although their ability to verbalize their learning strategies is limited; as for intentionality, I am not aware of any study that specifically investigated whether children make "metacognitive" plans to assist and systematize their learning of languages (although at eleven some of them are able to do so in order to facilitate comprehension of foreign-language texts: Palmberg 1987).

A second outcome of this study is a proposed taxonomy to analyze children's spontaneous form-focussing activities. The taxonomy is data-driven and emerges from several examples discussed in the literature and in my own research; it is naturally open to revision and expansion following further observations. Methodologically, this study crucially relied on the notion of private speech to investigate children's language learning strategies. In keeping with Vygotsky's account of linguistic and cognitive development, overtly verbalized private speech in children is a precursor of inner speech, which represents an important part of adult higher cognitive functioning. The form-focussing strategies reported by adults following introspection of what they do while learning a second language are made visible, better, audible, in young children, who offer a unique opportunity for analyzing spontaneous - i.e., non elicited - think-aloud protocols. Directions for future research include carrying out more studies to obtain a wider data base on children's spontaneous use of form-focussed learning strategies. Methodologically, the study of focus on form in spontaneous interaction (as opposed to its study via controlled elicitation techniques) can be furthered by looking at production data that evidence planning and monitoring activities, such as incorporated other-repair, self-repair, pauses and fluency phenomena in general (e.g. Banfi 1991; see Crookes 1991 for a review). Obviously, these studies of naturally occurring form-focussing are to be seen as complementary, and not opposed, to those based on introspection and controlled experimentation, and efforts should be made to relate data gathered using different research approaches. At the level of theory construction, it is desirable a closer integration of research on learning strategies with that on attention and awareness in second language acquisition; it will also be necessary to spell out in more detail the psycholinguistic relationships between focus on form in the input and focus on form in the output.

References


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2 Such a question becomes more sensical to older children: cfr. Pramling 1988. In Huot's (1995) study, when the adult tried to ask the seven-year old child how she managed to learn or notice some aspects of the L2, she typically received answers like *I just guessed* or *Everybody says it and so I've learned it*.

3 "There appears to be a lack of naturalistic data concerning the incidence and quality of private speech forms. ... Unless researchers pursue the study of self-regulatory mechanisms in the natural setting, we cannot be certain whether or not speech-for-self is ever spontaneously emitted!" (Rubin 1979: 269-70).

4 Transcription conventions are those used in conversation analysis (Sacks, Schegloff & Jefferson 1974; Atkinson & Heritage 1984). The transcription is orthographic, detailing only the most evident deviations from Italian standard pronunciation. Inbreaths are marked by 'hhh'. Fatma's turns are indicated by F and her words are boldfaced. Date of recording is indicate as day/month (i.e., in this example, 29/9 = September 29th); Fatma entered school on September 12th.