

THE ACQUISITION OF FOCUS: PRODUCTION AND COMPREHENSION
Short visit, February 2013: SCIENTIFIC REPORT

The objective of our project is to test the comprehension and production of focus in young children, who show seemingly paradoxical behaviour with early (around 2-3 years) adultlike production, but delayed comprehension (no adult-like performance before 6 years). Our hypothesis is that comprehension is also operational in children younger than 6 years (possibly already at 2-3 years, paralleling production), but task-related and other performance factors prevented children in previous studies from showing their full competence. To test this hypothesis, we have designed a truth-value judgement task for children and adults, in which participants need to judge the truth of prosodically marked subject- and object-focus utterances (with respect to drawn images) spoken by an experimenter, and offer verbal corrections, as appropriate.

Dr Szendroi visited Dr Gervain and in consultation with Professor Hoehle, who was not present, they reviewed preliminary results for the project. Dr Szendroi also presented comments from the poster presented at BUCLD 2012 in the autumn. Based on these discussions two abstracts were written for the forthcoming EURO-XPRAG meeting, to be held in Utrecht, The Netherlands and for GALA 2013, to be held in Oldenburg, Germany. Both abstracts have since been accepted for poster presentation and we are also alternates at GALA 2013.

GALA-abstract:

The acquisition of prosodic focus by English, French & German 3-,4- & 5-year-olds

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1. Focus marking indicates to the hearer what the speaker intends to assert. Focus is often marked prosodically: for instance, in English by shifting stress and accent to the focal constituent (1). This is also possible in French, although clefting is preferred (2). In German, syntactic displacement may accompany accent shift (3). In our experiment, we investigate whether 3-, 4- and 5-year-old children show comprehension of focal differences marked by changes in accent placement alone in the three languages.

2. Acquisition of focus shows seemingly paradoxical behaviour: children seem to employ prosodic focus marking correctly at least in certain pragmatic contexts already at 2 (Hornby & Hass 1970; Wieman 1976; Baltaxe 1984, Müller et al 2006), while they seem to find it problematic to interpret focal accent (at least in certain contexts) at least until 6 (Lahey 1974; MacWhinney & Bates 1978; Paterson et al 2003; Gualmini et al 2002; Szendrői 2004, Wells et al 2004; no problems with syntactic focus marking, Costa & Szendrői 2006).

Many of the previous comprehension research involved explicit judgment tasks (pace Ito et al 2012). Some tasks involve semantic operators, like *only*, to ensure that focal differences give rise to truth-conditional differences, (4). These factors might have influenced the findings.

3. To further track children's comprehension of accent as a focus marker we designed a novel comprehension task in which children correct false assertions made by the experimenter with either subject or object focus. Children are exposed to a picture like Figure 1 in each trial (n=12), while in trials of the critical condition (n=4), the experimenter makes an incorrect assertion with focal accent on either the Subject or the Object, (6). If children are sensitive to the position of the accent, and can appropriately interpret focal accent to indicate contrast, they would correct the experimenter differently in the two conditions: (7). We also included control items (n=4) where the experimenter's utterance matches the picture (8), both matching (n=2) and mismatching (n=2) fillers (9), and counterbalanced the position of contrasting entities. Our items were pseudo-randomised and counterbalanced for order-effects in a between-subject design. The experiment is carried out in English, German and French.

4. **Adults:** Preliminary findings reveal that, as expected, German adults overwhelmingly gave Object-focus responses (7) in the Object-focus condition (85.7%), while they had a Subject-focus preference in the Subject-focus condition: 64.3% Subject-responses. In contrast, while French adults gave an Object-response in the Object focus condition 100% of the time, they have an Object preference even in the Subject condition: 67.5% Object-responses. This is consistent with the idea that the primary method for focus marking in this language is not prosodic, but syntactic clefting.

Children: German 5-year olds showed an adultlike pattern, with 61.1% Object-responses in the Object-condition dropping to 30.6% in the Subject-condition. The same pattern was displayed by English 3.5-year-olds with Subject-responses at 55% in the Subject-condition dropping to 20.8% in the Object-condition. French 3-year-olds did not show sensitivity to stress placement, with Subject- and Object-responses

around 50% in both conditions. Interestingly, the pattern of results by 4-year old, and to a lesser extent, 5-year old French children resembles more the pattern of results displayed by their German and English peers than that of French adults: Object-preference in the Object-condition (Age 4: 67.5%; Age 5: 75%), but Subject-preference in the Subject-condition (Age 4: 87.5%; Age 5: 50%).

5. Our current results indicate (i) early sensitivity to prosodic focus marking, even in French, where prosody is not the preferred method of focus marking and (ii) a 'classical' developmental trajectory showing attunement to the native language over the first 3-6 years or so. Potentially, our set of results would open the door to solving the apparent paradox between early production and late comprehension of prosodic focus marking.

- (1) a. *Subject focus*: The BIRDIE has the bottle.
 b. *Object focus*: The birdie has the BOTTLE.
 (2) a. *Subject focus*: L'OISEAU a la bouteille. *French*
 b. *Object focus*: L'oiseau a la BOUTEILLE.
 c. cleft: C'est l'OISEAU qui a la bouteille./ C'est la BOUTEILLE que l'oiseau a.

'It's the bird that has the bottle.' 'It's the bottle that the bird has'

- (3) a. *Subject focus*: Der VOGEL hat die Flasche. *German*
 b. *Object focus*: Der Vogel hat die FLASCHE.
 c. focus fronting: Die FLASCHE hat der Vogel.
 (4) a. The birdie only has a BOTTLE. = TRUE, if it has nothing else
 b. Only the BIRDIE has a bottle. = TRUE, if no other animal has a bottle.
 (5) *Instructions (in English)*: 'There are some pictures on the computer that I looked at yesterday. Let's see whether I can still remember what is on the pictures or whether I already forgot everything. Let's play the game like this: You will look at the pictures, and I will sit down over there and try to recall what is on the pictures, okay? And then you will tell me whether this was right or not.'

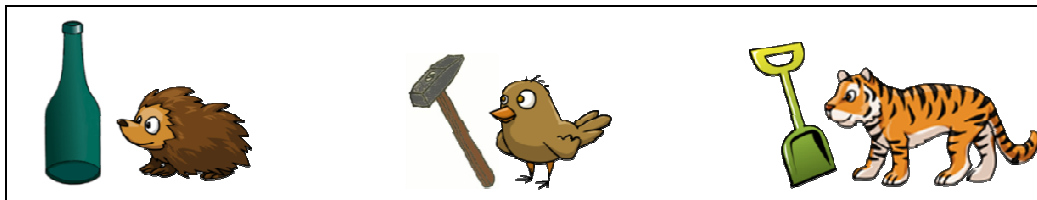


Figure 1: Example of visual stimulus of experimental item.

- (6) *Audio material for Figure 1:*

	<i>Subject-focus condition</i>	<i>Object-focus condition</i>
<i>ENG</i>	The BIRDIE has the bottle, right?	The birdie has the BOTTLE, right?
<i>GER</i>	Der VOGEL hat die Flasche, richtig?	Der Vogel hat die FLASCHE, richtig?
<i>FRE</i>	L'OISEAU a la bouteille, non?	L'oiseau a la BOUTEILLE, non?

- (7) *Expected responses:*

	<i>Subject-focus response</i>	<i>Object-focus response</i>
<i>ENG</i>	No, the HEDGEHOG (does).	No, (it has) the HAMMER.
<i>GER</i>	Nein, der IGEL.	Nein, den HAMMER.
<i>FRE</i>	Non, le HÉRISSEON.	Non, le MARTEAU.

- (8) a. The PENGUIN/ penguin has the mirror/ MIRROR, right? *English*
 b. Der PINGUIN/ Pinguin hat den Spiegel/ SPIEGEL, richtig? *German*
 c. Le PINGOUIN/ pingouin a le miroir/ MIROIR, non? *French*

- (9) a. All the toys are purple, right?/ All the animals are asleep, right? *English*
b. Alle Spielzeuge sind lila, richtig?/ Alle Tiere schlafen, richtig? *German*
c. Tout les jouets sont violet, non?/Tout les animaux dorment, non? *French*

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