Available online at www.sciencedirect.com

ScienceDirect

Lingua 154 (2015) 27–34

Lingua

www.elsevier.com/locate/lingua

Knowledge of the OV parameter setting at 19 months: Evidence from Hindi–Urdu

Anna Gavarró [a,*], Maya Leela [a], Luigi Rizzi [b,c], Julie Franck [d]

[a] Departament de Filologia Catalana, Centre de Lingüística Teòrica, Universitat Autònoma de Barcelona, 08193 Bellaterra, Spain
[b] Centro Interdipartimentale di Studi Cognitivi sul Linguaggio, Università di Siena, III piano, Complesso S. Niccolò, Via Roma, 56, 53100 Siena, Italy
[c] Département de Linguistique, Université de Genève, Rue de Candolle 2, 1211 Genève 4, Switzerland
[d] Laboratoire de Psycholinguistique, Université de Genève, FAPSE, Boulevard du Pont d'Arve 40, 1205 Genève, Switzerland

Received 16 November 2013; received in revised form 8 November 2014; accepted 13 November 2014
Available online 24 December 2014

Abstract

Although there is extensive evidence for early parameter setting in the syntactic productions of young children, much less is known about parameter setting before production starts. Franck et al. (2011) showed, for the first time, sensitivity to the VO/OV parameter at 19 months of age in children exposed to French, a VO language. Their experiment resorted to the combination of the preferential looking paradigm with pseudo-verbs and the weird word order paradigm. Here we report a closely resembling experiment with an OV language, Hindi–Urdu. We tested 20 children aged 19 months and the results show that children can parse the SOV sequences (and consequently show a looking preference for a transitive action) that generated random behaviour in the French experiment, while non-target sequences grant only random gazing behaviour.

Keywords: Acquisition; Word order; Preferential looking paradigm; VO/OV; Early development; Parameter setting

1. Introduction

Hirsh-Pasek and Golinkoff (1996) initiated the research on sensitivity to word order in infants by resorting to the preferential looking paradigm. They showed that 17-month old children comprehend active sentences such as *Big Bird is washing Cookie Monster* even though they are reversible, i.e. children are capable of identifying Agent and Theme on the sole basis of word order. Gertner et al. (2006) achieved the same result with 21-month old children for transitive sentences with a pseudo-verb, e.g. *The girl is gorping the boy*, when shown an action depicting a girl as Agent and a boy as Theme and the reverse action. Nevertheless, in and of themselves these results do not demonstrate that children are aware that in a language like English objects follow the verb. To address this issue, Franck et al. (2011) designed an experiment testing awareness of the VO/OV contrast by children exposed to a VO language: French. They combined the preferential looking paradigm with the use of pseudo-verbs to preclude the possibility that children were able to understand sentences by simply having memorized similar verbal templates as suggested by Dittmar et al. (2008) in their critique of Gertner et al. (2006). They also resorted to the weird word order paradigm (Akhtar, 1999), in which children are

* Corresponding author. Tel.: +34 935868076.
E-mail addresses: anna.gavarro@uab.cat (A. Gavarró), mayaleela@gmail.com (M. Leela), rizzil@unisi.it (L. Rizzi), Julie.Franck@unige.ch (J. Franck).

http://dx.doi.org/10.1016/j.lingua.2014.11.001
0024-3841/

confronted with grammatical and ungrammatical sequences: nineteen 19-month old children natively exposed to French heard sentences such as (1a), a well-formed SVO sentence of French, and (1b), SOV, ill-formed.

(1) a. Le lion poune le cheval.
the lion pseudo-verb the horse
b. La vache le lion dase.
the cow the lion pseudo-verb

Two synchronized videos were shown to the children; in one of the screens, a causative action was portrayed (a character performing an action on the other character), in the other screen the same action was performed reflexively (each character performed it on himself). By hypothesis, children able to parse (1a) as a transitive SVO sentence would look at the causative action longer than at the non-causative. In line with this prediction, the results indicate that children prefer the causative action over the non-causative one. Crucially, this preference was only found when hearing the grammatical transitive sentence (1a), while no preference was found when hearing the ungrammatical sentence (1b). Hence, the preference observed when hearing a transitive sentence cannot be attributed to a general preference for causative actions. So the conclusion of these eye-tracking measures is that children of 19 months exposed to French have set the parameter that determines the VO/OV alternation according to the adult setting. Franck et al. (2011) go on to show that alternative hypotheses on early development are inconsistent with the findings; in particular, children cannot be solely guided by a principle mapping the first argument to the Agent and the second to the Theme (Lidz et al., 2001), as that would predict the same gazing behaviour with SVO and SOV. Nor are the results expected under the contention that infants lack general knowledge of syntax (Dittmar et al., 2008), as their performance is consistent with the adult grammar in the absence of previous lexical knowledge of the verbs.

Our goal is to run an experiment resembling as closely as possible that in French in a language with another parametric choice, an OV language. We hypothesize that, as in French, children at 19 months will have set the parameter according to the target grammar and thus will show a preference for the causative representation when hearing an SOV sentence.

The paper proceeds as follows. In section 2 we provide the necessary background on the language investigated, Hindi–Urdu. In section 3 we detail the experimental design. In section 4 we present the results and in section 5 we discuss them by reference to the background outlined.

2. Background

As illustrated in (2), the basic word order of Hindi–Urdu is SOV (in fact the language is quite consistently head-final, with postpositions outnumbering prepositions and T following VP, albeit some Cs are initial, see Bayer, 1999), and argument DPs bear case (*ne* in *raam-ne* for Ergative, *ko* in *raavan-ko* for Accusative).

(2) raam-ne raavan-ko dekhaa. S O V
Ram-ERG Ravan-ACC see.PFV
'Ram saw Ravan.'

However, when the object is a finite embedded clause, it follows the verb systematically, as in (3) (example taken from Manetta, 2012) (see Davison, 1999).

(3) a. siita-ne kahaa thaa [ki mohan aayaa thaa]. S V T CP
Sita-ERG say-PFV AUX.PST that Mohan come.PFV AUX.PST
'Sita said that Mohan had come.'
b. *siita-ne [ki mohan aayaa thaa] kahaa thaa. S CP V T

The DP object in (2) may also appear postverbally, and then is interpreted as old information (4a). Other word order alternations of (2) are possible, as shown in (4b–d).

(4) a. raam-ne dekhaa raavan-ko. S V O
b. raavan-ko dekhaa raam-ne. O V S
c. dekhaa raavan-ko raam-ne. V O S
d. dekhaa raam-ne raavan-ko. V S O

For discussion of these departures from the basic word order due to topicalisation and focus, see Mahajan (1990, 1997), Kidwai (2000), and Manetta (2012).