Telic verbs in early Catalan[1]

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Abstract

This article focuses on child speech sequences which diverge from their corresponding adult counterparts in terms of the order of their constituents. Adult Catalan does not allow neutral preverbal objects whereas early Catalan seems to allow objects preceding verbs in the very early stages. We analyse the OV sequences found in our data and show how these only show up co-occuring with a certain type of verbs, namely, 'telic' verbs. In line with this observation we propose that aspect is a crucial feature of these sequences projecting whenever one of these verbs is selected and providing a landing site for object movement. Another part of the analysis of the OV constructions implies noticing that the morphological make-up of the verbal elements is not always non-finite. The alternation that we observe between VO-OV constructions seems to be determined by the verb type but it is only fully accounted for if we allow for a framework in which the AGR parameter is not yet set. This possibility follows from the bilingualism proposal in Roeper (1999) where child language permits different grammars to co-exist in a particular stage. In the case under consideration the AGR feature would be allowed to have two values and thus the verb would not raise obligatorily.

1. Introduction

As many researchers have noted, the acquisition of verbs comes after the acquisition of nouns in the linguistic development of children acquiring any language. In the one-word stage (1;0-1;6) there are not many instances of verbal elements, but as soon as children start producing sequences of two items (early two-word stage 1;6-2;0), verbs begin to combine with nouns and other elements. There seems to

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be a consensus in the acquisition literature that systematic word order 'errors' are highly exceptional in child language but in this article we will present data that appear to go in the opposite direction: we find *systematic* word order 'errors'. Nouns combine with verbs in patterns that may differ crucially from the corresponding target language. More specifically, in the data that we will analyse in this article, we find a systematic occurrence of objects of transitive verbs of a certain kind occurring preverbally, a construction not allowed in the target language, Catalan. Moreover, there is variation in the verb morphology: both finite and non-finite inflected forms appear in object + verb constructions. We will analyse this particular structure in the light of the Minimalist Program (Chomsky (1995), (1998)), following the proposal in Roeper (1996) which assumes that features are acquired and fixed gradually predicting both variability and alternative constructions to the adult productions in child speech.

We believe that a crucial contribution of the analysis presented here is that language acquisition data can lend support to adult grammar proposals: our explanation of the unexpected word order is based on a movement that underlies adult productions but for which there is no direct evidence in adult language. Besides, it provides an instantiation of the so-called bilingual stage in monolingual, first language acquisition (Roeper (1999)).

In section 2 we introduce the relevant data; in section 3 we briefly look at other proposals which have analysed preverbal objects both in Catalan and in English; in section 4 we consider the aspectual properties of the predicates where the OV sequences occur; and in section 5 we provide an analysis of the data.

2.   The data

2.1.   Sources

In a first stage of our research we considered data from longitudinal studies of 3 Catalan monolingual girls (Mireia, Eva, Júlia) videotaped and recorded in their early stages (1;7–2;4). For the three of them we have diary annotations, where mothers observed the emergence of non-adult constructions, apart from the video sessions in which they were recorded interacting with a parent or in the course of an activity which was especially rich in language production (e.g., taking a bath and talking to a rubber duck; playing and explaining to mummy (who was videotaping) what she was about to do or what she wanted mummy to do). The data were rich enough for us to be able to observe a parallel stage in the acquisition of these three girls, two of whom are sisters, which shows an idiosyncratic syntactic behaviour of objects when combined with certain verbs. We focused on the emergence of these constructions in the very early stages, their occasional reappearance for some weeks and their final complete disappearance, when the morphology of verbs becomes more adult-like. We then proceeded to quantify the data from two corpora, Mireia's diary notes and Júlia's transcript files.

Table 1. Transitive verb utterances

	Telicity		Finiteness		Word Order	
	Telic	Atelic	Finite	Nonfinite	OV	VO
Mireia	23 (74%)	8 (26%)	19 (61%)	12 (39%)	20 (65%)	11 (35%)
Jčlia	37 (68%)	17 (32%)	41 (75%)	13 (25%)	10 (19%)	44 (81%)

Total number of Mireia's transitive verbs found in transcripts corresponding to ages 1;8–2;0 = 31
Total number of Júlia's transitive verbs found in transcripts corresponding to ages 1;7–2;2 = 54

Table 2. Telicity and word order

	OV	VO
Telic	27	33
Atelic	3	22

(Fisher Exact test: two tailed $p = 0.005$)

It should be mentioned that just the files corresponding up to the age of 2;0 for Mireia and 2;2 for Júlia contained either non adult OV instances and/or non-finite forms in root sentences.

First we identified each transitive verb instance and coded it as [+/−telic] and [+/− finite] and for OV, VO. We did not consider transitive verbs with non-overt objects since our aim was solely to study verb/object word order.

To identify a telic predicate we considered its 'delimitedness', its possibility to co-occur with adverbial complements such as 'in a few minutes' when the verb is inflected for the simple past. This particular tense was used to avoid the imperfective paradox that arises systematically when the imperfective past is used.

We analysed as finite those inflected forms that correspond to adult inflected verbs, both in form and in use and meaning. Non-finite forms include infinitive, participle, gerund and non-adult like inflected forms.

Above we report the results. Table 1 shows the number as well as the percentage of telic/atelic, finite/non-finite verb instances and the word order.

In order to establish which variable was significant for the observed non-adult like word order, we crossed the data for each child in particular and all the data as a whole. Tables 2, 3, 4 correspond to the latter case.

As we can see from Tables 2–4, both finiteness and telicity are significantly related to OV word order whereas there is no significant relation between telic predicates and finiteness. Table 2 shows that OV constructions occur predominantly with telic predicates. Although Table 4 indicates that there is a significant relation between finiteness and word order, the index is not as clear as in Table 2. Both finite and non-finite verbs co-occur with OV order (in 17 and 13 cases respectively).

Table 3. Telicity and finiteness

	Finite	Non-Fi
Telic	41	19
Atelic	19	6

(Fisher Exact test: two tailed $p = 0.60$)

Table 4. Finiteness and word order

	Finite	Non-Fi
OV	17	13
VO	43	12

(Fisher Exact test: two tailed $p = 0.04$)

2.2.   *OV: A non-adult pattern*

In the data below (1)–(12) we find constructions which contain a transitive verb preceded by its object. This is an unexpected construction given that it is not allowed in the target language. In adult Catalan, objects typically follow verbs as in any VO language [2].

   (1)–(12) are OV structures from the 2 corpuses. The two girls vary with respect to the percentage, but both of them produced these deviant structures in the early stages. The most striking fact in these data is that we only find OV order with verbs with specific aspectual properties. In all these examples the verb is telic or 'delimited' (Tenny 1987): it has an inherent end-point.

   As we noticed in table 4, another characteristic that comes up in these data is that there are both finite (examples 4,5,6 and 10,11,12) and non-finite forms (1,2,3 and 7,8,9). This variability is most unexpected, mainly because it has been claimed (Rizzi (1993/94), for example) that in Romance languages there should not be a root infinitive (RI) stage. Certainly our data does not show a clearly defined RI stage – the percentage of non finite forms attested in our corpora is lower than in Germanic languages. Nevertheless, Bel, Capdevila, Llinàs (1998) and Bel (1998) argue in favour of an RI stage in early Catalan, on a par with the RI stage generally accepted for English. Bel (1998) discusses in detail the different types of infinitival forms found in early Catalan and Spanish and shows that there are pure RIs in these languages. The analysis of the data is also based on the fact that children at these early stages do not know yet that Catalan is a strong AGRS language. It must be noted again that we included under the header non-finite both pure root infinitive

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2. Preverbal objects are not allowed in adult Catalan unless marked for focus fronting or left dislocation. They imply the use of emphasis or clitics, respectively, and neither of them is found in the data under analysis. All the structures were produced with a neutral intonation.

and forms that are not morphologically activated with respect to finiteness; some correspond to other non-finite forms (9,11), and those that resemble adult finite forms are not produced in the adequate context (3), they have an inappropriate morphology.[3]

From Mireia's corpus

(1)   *Sabates   treure.*   (1;8)
       shoes   to-take-off
       'Take off my shoes.'

(2)   *Papa aquest columpio comprar.* (1;10)
       dad   this   swing   to-buy
       'Dad will buy this swing.'

(3)   *Aigua   posi.*   (1;8)
       water   he-put-Present-Subjunctive
       'Put water here.'

(4)   *Aquestes posa*   *Mimi, mama.* (1;9)
       these   you-put-Imperative Mimi,   mom
       'Put these on Mimi, mom.'

(5)   *Porta   sabatilles Mimi.* (1;9)
       she-wears slippers   Mimi
       'Mimi is wearing slippers.'

(6)   *a   sofà   mossego.* (1;11)
       /ə/ armchair I-bite
       'I am biting the armchair.'

From Júlia's corpus

(7)   *a   nas   a   embrutat.* (2;0)
       /ə/ nose /ə/ dirtied
       'I dirtied his nose.'

(8)   *Això   recollir.*   (2;1)
       this   to-pick-up
       'I am picking this up.'

(9)   *Això   recollint.*   (2;1)
       this   picking-up
       'I am picking this up.'

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3. A line of future research could be to consider the semantic interpretation of these forms, much in line with Hyams (1999), in order to be able to establish whether Catalan non inflected forms would be best analysed as real root infinitives or as bare infinitives.

(10)   *a   llengua   treu.*   (2;0)
/ə/ tongue   he-sticks-out
'He sticks his tongue out.'

(11)   *a   tito   va   a   buscar   la   Júlia.* (2;1)
/ə/ bear she-goes to to-look-for the Júlia
'Júlia is going to look for the little bear.'

(12)   *a   tito   té.*   *(2;0)*
/ə/ bear   you-take-Imperative
'Take the little bear.'

In the following sections we study each of these two characteristics – deviant word order and variability in finiteness in telic predicates – in turn, and make a specific proposal for the tense and aspectual features involved in these structures.

3.   Structure-based accounts of OV structures in early English

Although there are not many proposals concerning deviant orders found in child speech, Radford (1990) and Powers (2000) do consider these and posit a basically structural solution for the few attested word order deviations in early English. Both of these approaches locate OV structures in prefunctional stages and, thus, cannot have recourse to any functional structure. In his overall account of the acquisition of English syntax, Radford notes that OV structures in early English can be accounted for by free adjunction to VP. The preverbal object occupies the vacant left-adjoined subject position in structures such as the following:

(13)   *Kimmy kick*

(14)   *Doggie sew* (from Bowerman (1973))

This proposal, though, makes a strong prediction: SOV structures are not possible and not attested in Radford's data. For Radford (1990) the assumption that preverbal objects occupy the superficial subject position "seems to provide the most plausible account of why preverbal objects occur only in sentences which lack a preverbal subject" (Radford 1990:233). Crucially, we find this kind of structure in some of the corpuses of Catalan monolingual girls – (15) below and (2) above in Mireia's corpus.

(15)   *Mama   pitet   posa.*   (1;9)
mummy bib   she-puts-on
'Mummy is putting my bib on.'

Powers (2000) studies the emergence of OV structures in her binary-branching analysis of early English. On the basis of her data she postulates two different prefunctional stages. She claims that OV is only attested in the second stage,

namely, after the emergence of SVO structures, where the missing subject position provides a landing site for the object. This proposal does not predict our data as we find very early instances of OV structures. In fact they are mainly instantiated in the early two-word stage. On the other hand, her proposal, like Radford's, incorrectly predicts that no SOV order will be attested, therefore leaving (15) unexplained. Moreover, neither of these two accounts provides us with any clues as to why the OV structures in (1)–(12) systematically contain a telic verb with a variable marking for tense.

A more recent proposal on the acquisition of a bilingual Catalan/English girl, Gavarró (1998), considers word order alternations by focusing not on the purely positional possibilities of objects but rather on features and their specification (or lack there of) in child language. Gavarró (1998) considers several word order alternations, but we will only make reference to her account of the OV structures in her corpus (16)–(17):

(16)   *No això toca.*   (LENA: 2;1)
       not this you-touch-Imperative
       'Don't touch this.'

(17)   *A   llengua treu.*   (LENA: 2;0)
       /ə/ tongue   she-sticks-out
       'She is sticking out her tongue.'

Gavarró's account is based on the analysis of Catalan verbs as strong for the AGRS feature; both tensed and non-tensed verbs raise overtly – as shown in (18) and (19). The ungrammatical examples follow from the lack of verb raising over the adverb *mai*, as is standardly assumed.

(18)   a.   *La Maria no   menja   mai   peix.*
            the Maria not she-eats never fish
       b.   **La Maria no   mai   menja   peix.*
            the Maria not never she-eats fish
            'Maria never eats fish.'

(19)   a.   *no menjar mai   peix.*
            not to-eat never fish
       b.   **no mai   menjar peix.*
            not never to-eat fish

Examples (16) and (17) are explained by a process claimed to be active only in bilingual children acquiring languages with different feature specifications. Lena, the bilingual child studied in Gavarró (1998), has conflicting evidence from English – a weak AGRS language – and Catalan – a strong AGRS language. This conflict in features results in a period of underspecification of features which gives apparent optionality of movement. Weak feature values imply covert movement and are preferred (Economy of Derivation), strong features make overt movement

obligatory. The object in (16)–(17) is analysed as being in Spec-AGRO, as is standardly assumed for adult Catalan.

We believe that the preverbal object position can best be accounted for if the trigger for object movement is considered to be in the aspectual features of the verbal predicates in these structures. These aspectual properties, as will be explained in the following section, make object movement a straightforward claim if an ASP node is claimed to project whenever the verb contains a telic feature.

Gavarró's analysis relates different feature specifications to word order 'errors' in child language. Her analysis of bilingual acquisition can be adapted to monolingual acquisition by claiming that at this stage monolingual children in fact show a bilingual stage, in line with Roeper (1999). In this sense two different grammars would coexist in this intermediate stage, when the value for AGR is not yet fixed. On the one hand, the child would analyse AGR as weak and thus there would be no overt verb raising. OV structures, both finite and not finite, would be instances of one grammar (G1), which resembles English. VO structures, on the other hand, would be the result of AGRS analysed as strong (G2), as it will be in adult grammar.

Examples of telic VO structures, which in our analysis imply both object movement to Spec-ASPP and verb raising, are given below:

From Mireia's corpus

(20)   *Tiro   a   pilota.*   (1;9)
        I-throw   /ə/ ball
        'I am throwing the ball.'

(21)   *Mama   cull   xumet.*   (1;9)
        mummy   she-picks-up   pacifier
        'Mummy is picking up my pacifier.'

(22)   *Papa   neteja   plats.*   (1;9)
        dad   he-washes   dishes
        'Dad is washing the dishes.'

From Júlia's corpus

(23)   *Treu   això.*   (2;0)
        you-take-off-Imperative   this
        'Take this off.'

(24)   *Mama,   porta   a   tito   Neus*   (2;1)
        mummy,   you-bring-Imperative /ə/ bear   Neus.
        'Mummy, bring Neus' bear.'

(25)   *Pinta   això.*   (2;1)
        you-colour-Imperative   this
        'Colour this.'

Under Gavarró's account, lack of verb raising in Catalan is triggered by positive input, namely English utterances. In our bilingual stage in monolingual children, there is no such input. Instead, the different values of AGRS come from UG. If language acquisition is considered as a process in which the child has to figure out which UG formal features will be instantiated in her language then the bilingual stage follows naturally since strong AGRS and weak AGRS have to be part of UG, much in line with Chomsky:

> UG makes available a set F of features (linguistic properties) and operations C_{HL} (the computational procedure for human language) that access F to generate expressions. (…) acquiring a language involves at least selection of the features [F], construction of lexical items LEX, and the refinement of C_{HL} in one of the possible ways – parameter setting. (1998: 12–13)

Under this account – variability in terms of bilingualism – no *ad hoc* stipulation of an underspecification stage has to be claimed.

It should be mentioned that the period in which both grammars coexist is a short one, in fact, just 2 months or 2 months and a half. Interestingly, after that, in the three corpora we analysed, the children seem to master Catalan verbal inflection at the same time that OV constructions disappear. Whatever triggers the acquisition of the verbal morphology, and the eventual disappearance of our deviant order, though, remains a mystery.[4]

4.   Aspect of the verbal forms in the OV structures

As we have already mentioned, the OV utterances in our data denote a telic predicate, i.e., one that has a natural end-point. More specifically, these verbs belong to the *accomplishment* verb type. In Tenny's terms, these predicates are *delimited*: they contain an element that measures out the event. In line with Tenny, Borer (1993) offers an account of telic predicates for adult grammar which can account for our data in a straightforward fashion. Borer proposes a specific syntactic structure for telic interpretation which contains an aspectual projection and relies on the movement of the object to Spec-ASPP. This movement gives the NP dominated by Spec-ASPP the status of *Event Measurer* (EM).

Other authors have also noted that telicity is related to the projection of an internal argument. (cf. van Hout (1996) and references quoted there). "If a verb denotes a telic event, it projects an argument in the direct position." (Van Hout 1996: 105). In a transitive frame the internal argument position will correspond to the direct object; in an unaccusative frame it will surface as the subject. In her analysis telic event features must be checked in AGROP.

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4. See Roeper (1999), section 5.

Sanz (1996) proposes a similar analysis for telic predicates. She claims that there are two functional nodes at stake, a Transitive Phrase, which has the interpretable feature [+/−measure] and where accusative case can be assigned; and an Aktionsart Phrase, where features of the event are encoded. In a transitive telic predicate, the internal argument moves up to Spec-TrP in order to check both its case features and an apectual feature [+measure out]. The [+measure out] feature is projected whenever the predicate is non-inherently telic, but becomes telic thanks to its internal object. On the other hand, Aktionsart Phrase is projected as [+telic] in the case of telic predicates in general.

Sanz's Transitive Phrase is similar to Borer's Aspectual Phrase in the sense that they both check off a [+measure out/event measure] feature and case. But under Borer's proposal case and aspectual features are interrelated, whereas Sanz proposes an additional functional projection, AKTP, where the telicity feature of inherently telic verbs is checked off.

As already introduced in the previous sections, we will analyse the deviant OV order as a result of the object raising to the specifier postion of an aspectual phrase. Our ASPP will be like Borer's inasmuch as it is projected with telic verbs and is used to check off telicity. Moreover, it is like Sanz's AKTP in the sense that it is not linked to accusative case.

5. Summary and conclusions

The analysis of the data presented so far relies on several assumptions:
– objects of transitive telic verbs must move to a position which ensures their interpretation as measurers of the event (Borer (1993), Van Hout (1996), Sanz (1996)). This process is activated in very early stages.
– variability in word order is explained by a *bilingual* stage in monolingual acquisition.

These assumptions, which have been independently argued for by other authors, allow us to account for the following characteristics of the data under consideration:
– preverbal objects co-occur with telic verbs predominantly, and for a very short period of time.
– preverbal objects disappear about the same time Catalan verbal morphology is acquired, that is, when the child no longer uses non adult-like non-finite forms.

We propose that telic verbs project an aspectual phrase, in line with Borer (1993), Van Hout (1996) and Sanz (1996). The specifier of this aspectual phrase is the position where objects move to ensure telic interpretation of the non-inherently telic predicate.

We also claim that the variability in word order, namely OV and VO in telic predicates, is just an instantiation of a bilingual stage. More specifically, OV order will be considered as the result of object movement to Spec-ASPP and the lack of

verb raising when AGRS is weak. VO order, on the other hand, will correspond to the movement of both the object and the verb – AGRS being strong in this case.

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References

Bel, Aurora (1998). Teoria lingüística i adquisició del llenguatge. Anàlisi comparada de trets morfològics en català i castellà, Unpublished Ph. D. dissertation, Universitat Autònoma de Barcelona.

Bel, Aurora, Capdevila, Montserrat & Llinàs-Grau Mireia (1998). Infinitival constructions in child language: evidence from English, Catalan and Spanish. Paper presented at AESLA.

Borer, Hagit (1993). The projection of arguments, in *Functional Projections*, Elena. Benedicto and Jeff Runner (eds.), 19–46. GLSA, Amherst: University of Massachusetss.

Chomsky, Noam (1995). *The Minimalist Program*, Cambridge, Mass.: MIT Press.

— (1998). Minimalist inquiries: The framework. Unpublished manuscript. Massachusetts Institute of Technology, Cambridge.

Gavarró, Anna (1998). Word order alternations and feature assignment in bilingual Catalan acquisition. *Probus* 10: 103–114.

Gavarró, Anna and Jaume Solà (1996). Word order acquisition in bilingual contexts: evidence from Catalan. Paper presented at the Going Romance Symposium, 1996.

Hyams, Nina (1996). The underspecification of functional categories in early grammar. In *Generative Perspectives in Language Acquisition*, Harald Clahsen (ed.), 91–127. Amsterdam: Benjamins.

— (1999). The aspectual nature of non-finite root clauses in child language. Paper presented at GALA 1999.

Llinàs-Grau, Mireia (1997). Verb-complement patterns in early Catalan. In *New Perspectives on Language Acquisition*, Bart Hollebrandse (ed.), 15–27. GLSA, Amherst: University of Massachusetts.

Powers, Susan (2000). Scrambling in the acquisition of English? In *The Acquisition of Scrambling and Cliticization*, Powers, Susan & Cornelia Hamann (eds.), 95–126. Dordrecht: Kluwer Academic Publishers.

Rizzi, Luigi (1993/1994). Some notes on linguistic theory and language development: The case of root infinitives. *Language Acquisition* 3, 4: 371–393.

Roeper, Tom (1996). The role of merger theory and formal features in acquisition. In *Generative Perspectives in Language Acquisition*, Harald Clahsen (ed.), 415–450. Amsterdam: Benjamins.

— (1999). Universal Bi-lingualism. *Bilingualism: Language and Cognition* 2 (3): 169–186.

Sanz, Montserrat (1996). Telicity Objects and the Mapping onto Predicate Type, Unpublished Ph.D. dissertation, University of Rochester, Rochester, New York.

Tenny, Carol (1987). Grammaticalizing Aspect and Affectedness, Unpublished Ph.D. dissertation, Massachusetts Institue of Technology.

— (1994). *Aspectual Roles and the Syntax-Semantic Interface* (Studies in Linguistics and Philosophy, 52). Dordrecht: Kluwer Academic Press.

Van Hout, Angeliek (1996) Event semantics of Verb Frame Alternations, Ph.D. dissertation, Tilburg Dissertation series 1996-1, Tilburg. University. [Published in 1998, Garland Publishing. New York].