Auxiliaries and Verb Classes
A longitudinal analysis of the auxiliary split in L1 Italian

Paolo Lorusso

Università di Firenze /Centro di Ricerca Interdisciplinare sul Linguaggio (CRIL) Università del Salento

Few syntactic phenomena are relevant to as many areas of linguistic theory as auxiliary selection. Standing at the intersection between syntax, lexical and clausal semantics, and morphology, the analysis of auxiliary selection in child Italian will allow us to recognize some features of the early grammar. Following the classic definition of Burzio (1986), the selection of the auxiliary in Italian is an Unaccusative diagnostic: Unaccusatives select the auxiliary *essere* 'to be' while Transitives and Unergatives select *avere* 'to have'. Auxiliaries are found mainly in compound past tenses like *Passato Prossimo* (present perfect): the embedded participle and the matrix auxiliary define each a separate sentential unit (Kayne,1993). On the one hand, *be* appears in copular constructions and it selects monoargumental /defective predicate as Unaccusatives (Manzini & Savoia 2011): in other words *be* selects a predication as its complement (as copulas in Moro,1997) and no external argument. On the other hand, *have* is a possession (modal) transitive predicate and it selects pluriargumental frames: a full sentence with transitive or active predicates (Manzini & Savoia, 2011). Although children learning Italian start to produce *be/have* auxiliary later than the first copulas, they do not show mistakes in the selection of auxiliaries (Caprin & Guasti, 2009). Our proposal is that also in the distribution of *be* vs *have* we will find some differences in child Italian: *have* is more 'complex' than *be* for the type of predicates it selects. Lexical syntactic structure of verb classes is acquired early on (Lorusso, Caprin, Guasti 2005) but while the Unaccusatives selected by *be* are monoargumental /defective, both Transitives and Unergatives imply a pluriargumental structure: Unergatives, in fact, are analyzed as Transitives with incorporation of N (Hale & Keyser, 2003) or with cognate object (Mateu, 2002). In order to test this prediction we propose an analysis of a corpus of longitudinal productions in which we check the distribution of auxiliaries and an experiment on the comprehension of *Passato Prossimo.*

Before examining the auxiliaries, we checked whether Italian children differentiate between verb classes. We performed a longitudinal analysis of a corpora of the productions four Italian children (18-36 months)(Calambrone ,CHILDES MacWhinney & Snow 1990). Children distinguish Unaccusatives and Unergatives/Transitives (as in Lorusso, Caprin, Guasti, 2005) for the rate of subject omission: more overt subjects with Unaccusatives than with Unergatives and Transitives. The higher number of overt subjects with Unaccusatives, is due to the presence of a low focus position within the VP (Belletti, 2004) where indefinite postverbal Unaccusative subjects can be licensed. We checked this proposal and we found that indefinite postverbal subjects are found just with Unaccusatives (tab.1): children from the earliest stage distinguish Unaccusatives for the use of postverbal indefinite as Vernice & Guasti (2014) found for later stage. Children seem to recognize the different status of the subject of Unaccusatives.

Tab.1 Absolute numbers and percentage of (in)definite subjects across verb classes and clausal position.

	Preverbal Subjects		Postverbal Subjects	
	Indefinite	Definite	Indefinite	Definite
Unergatives	2(4%)	55(96%)	0	14(100%)
Transitives	3(1%)	290(99%)	0	117(100%)
Unaccusatives	3 (4%)	70(96%)	23(18%)	130(82%)

Children correctly select the auxiliary *be* for Unaccusatives and *have* for Unergatives and Transitives (Snyder & Stromswold,1997): no mistakes are found (tab.2). Furthermore children omit more *have*-forms than *be*-forms (tab.2). These data confirm the prediction that *have* are more problematic for children than *be*: the difference between *have* and *be* is limited to the type of predicates they select.

Tab.2 Auxiliary Selection and Omission across Verb Classes (absolute Number and Percentag

	Essere (to *be*)	Avere (to *have*)	Omission
Unaccusatives	88 (98%)	0	2 (2%)
Unergatives	0	12 (67%)	6 (33%)
Transitives	0	194(75%)	65 (25%)

But, which are the predicates that determine a higher omission of *have*? We point out that the auxiliaries with Unergatives are few (tab.2) and appear later than with other verb classes in our corpus: Unergatives are active predicates with no overt object. These findings are compatible with Antonucci & Miller's (1976) prediction for which children use the perfective morphology of *Passato Prossimo* to refer to telicity in the early stage: since telicity can be determined in Italian at VP level by the presence of an overt direct object, Transitives and Unaccusatives (but not Unergatives) are more likely to be interpreted as telic and produced with perfective morphology.

We performed a comprehension experiment: a sentence picture-matching task with 55 children (3-7 years) and 11 adults. Subjects were asked to interpret the perfective morphology with telic Transitives (with an overt object) and atelic Unergatives (no overt object). While children properly interpreted the perfective morphology with Transitives, they failed to assign till the age of 7 the perfective reading to atelic Unergatives (fig.1). The results show that children have problems with perfective morphology (as also aphasics in Yarbay et al., 2009): they may rely only on the presence of an overt object to interpret perfectivity /telicity.

Fig.1 Percentage of perfective reading for the perfective auxiliaries with Atelic Unergatives across age.
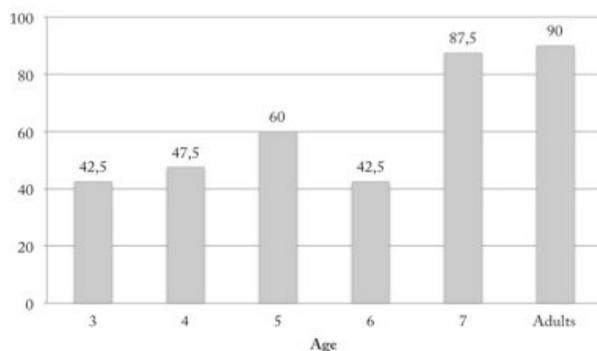
In summary, children differentiate between verb classes from the very early stages, as the data about the indefinite subjects found just with Unaccusatives and the distribution of the auxiliary across verb classes show. They omit *have* auxiliary more than *be*: *be* auxiliary, in fact, selects a monoargumental defective predicates while *have* selects full sentences with active predicates. A delay is found in the use and in the comprehension of the *have*-auxiliary perfective morphology with Unergatives. Although these verbs imply active predicates with an external argument, their (a)telicity cannot be inferred by the presence of an overt object: children in the early stages are not able to assign the perfective aspect to this verb class in AspP since, at this stage, they probably check aspect only through the presence of an overt object, so they may fail to derive forms with aspectual auxiliaries. Anyway, the mechanism for which Unergative and predicates and Unaccusative predicates are selected by the lexical auxiliaries *have* vs *be*, respectively, is acquired early on. The 'sentences' selected by *have*, when they do not present an overt aspectual entailment (overt object) may determine a higher percentage of omission and a delay in the use of the forms of the *have* auxiliary.

References

Antinucci, F. and R. Miller, 1976. "How children talk about what happened." *Journal of Child Language*, 3:167–189.

Belletti, A.,2004. "Aspects of the low IP area". In: *The structure of CP and IP. The Cartography of Syntactic Structures,* L. Rizzi, ed., volume Volume 2, pages 16–51. New York: Oxford University Press.

Hale, K. and Keyser,S.J., 1993. "On argument structure and the lexical expression of syntactic Relations". In: *The view from Building 20, A Festschrift for Sylvain Bromberger*, K. Hale & S. J. Keyser, ed., pages 53–109. MIT Press.

Kayne,R. 1993. "Towards a modular theory of auxiliary selection".*Studia Lingüística* 47:3–31.

Lorusso,P. Caprin, C and M.T.Guasti, 2005."Overt Subject Distribution in early Italian Children" in *BUCLD web proceedings*

MacWhinney B., and C.Snow 1990. "The Child Language Data Exchange System: An Update", *Journal of Child Language*, 17,457.452

Manzini, M.R and Savoia, L.M., 2011. *Grammatical Categories. Variation in Romance Languages*, Cambridge Studies in Linguistics:128. CUP.

Mateu, J. 2002. *Argument Structure: Relational Construal at the Syntax Interface*. PhD thesis, Universitat Aut´onoma de Barcelona.

Moro, A. (1997) *The Raising of Predicates: Predicative Noun Phrases and the Theory of Clause Structure*, Cambridge University Press, Cambridge.

Perlmutter,D., 1978. "Impersonal Passives and the Unaccusative", *Berkeley Linguistic Society* IV , 157-189.

Snyder, W. and K. Stromswold, 1997. "The Structure and Acquisition of English Dative Constructions," *Linguistic Inquiry* 28, 281–317.

Yarbay Duman, T. and R. Bastiaanse, 2009. Time reference through verb inflection in Turkish agrammatic aphasia. *Brain and Language* 108, 30-39.

Vernice, M. and M.T.Guasti, 2014."The acquisition of sv order in unaccusatives: manipulating the definiteness of the np argument. Journal of child language, pages 1–28.