

First language acquisition of French grammar (from 10 months to 4 years old)¹

Introduction

MARTINE SEKALI

University of Paris Ouest Nanterre La Défense

How do French children acquire the grammatical system of their native language so easily? Many hypotheses have been put forward and experimentally tested to solve this mystery. Generative theories argue that grammar is a universal and innate ability ready to be instantiated after birth. Within this framework, grammatical development is seen as a process whereby universal grammar gradually settles into the language-specific structures of the linguistic input that children receive in the first years of life. In the last decades however, many researchers of child language development have suggested other explanations. Current functional-cognitive research (cf. Langacker, 1988, 2000; Bybee, 1995, 2002; Elman et al., 1996; Tomasello, 2003; Diessel, 2004), proposes a usage-based approach to first language acquisition, where grammar is shaped by usage, and linguistic constructions are taken from parental input and gradually generalised by the child. Usage-based theories thus consider grammatical development as a dynamic process which emerges and evolves, in parallel with cognitive and psychological development, through the use of symbolic patterns which consolidate into grammatical constructions.

This JFLS Special Issue gathers together nine linguists who investigated the same French children but looked at different aspects of their grammatical development, using this usage-based model. The authors are all researchers belonging to the CoLaJE ANR² Project team, (Communication Langagière chez le Jeune Enfant), whose specificity (and perhaps originality) is to propose a multi-modal observation

¹ My warmest thanks go to all the members of the CoLaJE ANR research project, and in particular, to A. Morgenstern, P. Beaupoil, M. Blondel, D. Boutet, M. Collombel, S. Caët, N. Chang, C. Dascalu, C. Dodane, C. Enzinger, C. Maillard, K. Martel, E. Mathiot, C. Parisse, C. Rossi, and V. Charrière for their time and involvement in the *DevGra* (Grammatical Development) section of our research. Their careful readings, and stimulating remarks have proved essential to this work.

² Agence Nationale pour la Recherche. The *CoLaJE Project* (*Communication Langagière chez le Jeune Enfant* n° 08-COM-O21, <http://colaje.risc.cnrs.fr>), directed by Aliyah Morgenstern, was selected by the ANR in 2008, and follows on from the *Leonard Project* (*Acquisition du langage et Grammaticalisation*, n° JCo5_47273, <http://anr-leonard.ens-lsh.fr/>) which started collecting and analyzing the data in 2005.

of the same longitudinal corpus of spontaneous speech, joining qualitative to quantitative analyses of the collected data. Each author thus analysed a specific part of the French linguistic system, but all using the same methodology, i.e. adult-child discourse-analysis in context, within a usage-based functionalist approach to language acquisition. The corpus under investigation is the *Paris Corpus*, now available in the CHILDES database, which collected monthly video recordings, with full transcripts, of four monolingual French children as they develop from the age of 10 months until they are 4 years old: Madeleine, Théophile, Anaé and Antoine.³

First language acquisition of French grammar is investigated from a linguistic and developmental point of view. Quantitative analyses are presented to support developmental conclusions, but are always associated with more fine-grained qualitative analyses of examples taken from the data. In this JFLS issue on the acquisition of French grammar, grammar is not considered as a set of target rules, or an innate ability, but as a creative process of generalisation of constructions from parental input in daily interactions. This process is creative in so far as children do not only replicate parental input, but associate forms and functions according to cognitive, pragmatic or discursive needs, (sometimes in non-conventional ways) and shape grammar in transitory sub-systems. In the studies gathered here, the usage-based model of language development is combined with the theoretical framework of Functionalism (cf. in particular Budwig, 1995; Tomasello, 2003) and Construction Grammar (cf. Langacker, 1987; Fillmore and Kay 1993; Goldberg, 1995; Croft, 2001), where lexicon and grammar are not considered as separate modules of language, but as forming more or less complex and abstract 'grammatical constructions', i.e. symbolic units pairing a specific (phonological, morphological and syntactic) form with a specific (semantic, pragmatic and discursive) function. This definition of grammatical constructions proves particularly relevant and useful in developmental studies and for the analysis of child speech, where grammar is not always compositional from the start, as in Chomsky's conception of generative grammar. A child's holophrastic production such as 'dodo!', for example, is not just a word, but a grammatical construction with a predicative value (meaning *I am/he/she is sleeping* or *I/he/she want(s) to sleep* etc.. according to the context of use), while seemingly more complex structures such as '*c'est à moi*' or '*c'est moi qui fait*', are, in their early uses by French children, not to be decomposed into syntactic or semantic primitives, but should rather be taken as lexically-specific idiomatic constructions.

Throughout the Special Issue, the authors analyse the development of grammatical constructions in spontaneous productions using theoretical tools which enable them to consider the interface between the syntactic, phonological, semantic, and pragmatic levels of linguistic analysis. They also give great importance to the interaction process in the dyadic exchanges, which plays an essential part in the way grammatical constructions emerge, diversify and generalise in the children's speech.

³ A detailed presentation of the corpus used throughout this Special Issue is given below.

Parental input analysis is thus an important aspect of this work, and is quantified and observed closely in relation to the children's productions.

The papers are organised to cover the traditional components of grammar, from proto-grammar to first categories, and from nominal and verbal determination to complex sentences. Yet in each paper, children's grammatical constructions are analysed in their specificity and development rather than as a settled system, and the overall objective of this Special Issue is to retrieve the moving and developing process of grammaticalisation as it actually occurs in child speech from 10 months to 4 years old.

To open this Special Issue, Martel and Dodane explore the very first traces of grammatical constructions in the *Madeleine* Corpus from 11 to 23 months, before the child even combines two words, and suggest that a number of specific prosodic features (in particular, pause length and prosodic contours) could be the first indicators of combinations of what might be called 'proto-words'. A detailed account is given of the role of prosody in the onset of early grammatical constructions through term-delimitation and term-combination into early linguistic patterns which form interpretable constructions.

In the second paper, Rossi and Parisse analyse how grammatical categories develop in the first linguistic productions of *Antoine*, *Madeleine* and *Théophile* from 1;06 to 2;06. The authors first explain a detailed coding system, which enables them to check for paradigms of semantic features conventionally associated with nouns and verbs in the data. By testing the gradual emergence and development of semantic differences between nouns and verbs in the way the children actually use language, they show that semantic and syntactic categorisation are not pre-established and parallel (there are no specific semantic features delineating syntactic categories), but that categories become progressively differentiated as the children's words acquire a syntactic function within more and more generalised grammatical constructions.

The following two articles deal with French nominal (and pronominal) constructions across the corpus of *Anaé*. Caët investigates the nature and function of early subject-forms in *Anaé*'s spontaneous speech from 1 to 3 years old, and describes how self-reference and reference to the interlocutor in subject-position develop. The author systematically compares the child's productions (forms, constructions, context of appearance) with parental input, and describes their developmental path, from lexically-specific constructions serving semantic and pragmatic functions to more abstract constructions, shifting pragmatic function onto other, more conventional markers.

Leroy-Collombel and Morgenstern analyse the same data, and trace *Anaé*'s rising 'awareness' of grammar by investigating her creative strategies in the acquisition of French possessive markers from 13 months to 3 years old. Fine-grained analyses of target-like as well as non-standard constructions reveal two complementary strategies in the grammaticalisation process. The authors show that the child either over-generalises possessive markers in synthetic, formulaic constructions (*donne ma main, c'est l'anniversaire à moi*), or, on the contrary, she splits the constructions into over-analytic forms (*mon truc de moi*) associated to complex relational functions.

The fifth article focuses on the acquisition and development of temporal reference and verbal determination in first language French. Parisse and Morgenstern describe the emergence and development of verbal forms in two datasets (*Anaé* and *Madeleine* aged 1 to 3) showing that the children's system develops in two main stages. In early productions, a small subset of the large variety of forms available in French is systematically used, corresponding to the most frequent and salient forms in the input. Later, children start producing several inflections for the same verb, including forms that are infrequent in the input. This is consistent with other studies on the acquisition of French tenses (see in particular Sabeau-Jouannet (1977), Labelle (1994) and Morgenstern *et al.*, 2009). The authors' results and analyses then suggest that children might be able to refer to past, present, future, and distinguish completed/ongoing processes, from a very early age, but that the conventional link between verbal forms and their functions is shaped and developed through usage and interaction with their adult interlocutors.

To close this Special Issue on the first language acquisition of French grammar, the final study focuses on the emergence and development of complex sentences. After a short account of the overall onset and development of syntactic complexification in *Madeleine's* data from 10 months to 4 years old, Sekali proposes to test Diessel's 'integration' path of development of adverbial clauses (whereby situations which are first expressed separately are gradually integrated in a single grammatical unit, cf. Diessel, 2004), with special focus on the acquisition of the earliest adverbial clauses to appear in the data, i.e. causal adverbial clauses. The author shows that three main patterns can be retrieved in the way the child uses *parce que* constructions in interactional contexts (simple backward modalisation, complex multi-clausal explanations of rules, and bi-clausal causal relations). Using Sweetser's (2005) categorisation of causal domains (content / speech act / epistemic causality), the author proposes a cross-reference of the grammatical and semantic-pragmatic paths of development of complex constructions in *Madeleine's* data, which may provide an insight into the cognitive and pragmatic motives for syntactic development in first language acquisition. Sekali also describes a dynamic pattern of syntactic expansion and diversification, coined *concertina effect*, which seems to be consistent with other analyses of grammatical development throughout this thematic issue, especially with Leroy-Collombel and Morgenstern's study of possessive constructions.

The research community in the field of first language acquisition will undoubtedly find it helpful to see the same longitudinal data of spontaneous French analysed from several different angles of grammatical development in this Special Issue. This multidimensional analysis of the same extended corpus made it possible to distinguish common developmental trends for aspects of grammar which are usually considered separately. Firstly, the studies presented here show unanimously that the various levels of the linguistic system are not acquired separately, or in any chronological order, by the children. On the contrary, there seems to be constant reciprocal bootstrapping between prosody, syntax, semantics and pragmatics in the acquisition of the French grammatical system. This suggests that knowledge

in this field may benefit from more systematic interface analyses of linguistic development. Secondly, this Special Issue, we hope, contributes to advancement in understanding the process of generalisation itself. The analyses carried out in this volume confirm that the items of the grammatical system do not acquire a differential and combinational status before they are considered together in chunks, or constructional sets. Yet these analyses also suggest that set-constructions go through analytical testing stages before they are synthesized again, generalized, and appropriated by the children. This ‘concertina effect’ could be observed in the way verb/noun categories emerge and differentiate only once they are included within more elaborate constructions, but it could also be seen in the way the development of possessive markers and complex sentences exhibits over-analytical expansion stages before they generalise into more synthetic expressions.

Obviously this Special Issue could not cover all aspects of the acquisition of early grammar by children. Future research will have to complete the picture on the same longitudinal data and check the validity of the common developmental trends presented here. An important direction for future research will also be to consider how the children’s grammatical system evolves after 4 years old, and whether reading and writing abilities have an impact on this evolution. Finally, the research community will no doubt find it helpful to consider the results of the longitudinal studies presented in this Special Issue and compare them to other French data or make cross-linguistic analyses of the acquisition of early first language grammar.

Address for correspondence:

Martine Sekali

*UFR Langues, Littérature, Civilisation
Université Paris Ouest Nanterre La Défense
200 Avenue de la République
92001 Nanterre cedex
France
e-mail: sekali@u-paris10.fr*

REFERENCES

- Budwig, N. (1995). *A Developmental-functionalist Approach to Child Language*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Bybee, J. (1985). *Morphology: A Study of the Relation between Meaning and Form*. Amsterdam: Benjamins.
- Bybee, J. (2002). Sequentiality at the basis of constituent structure. In: T. Givon and B. Malle (eds), *From Pre-language to Language*. Amsterdam: Benjamins.
- Chomsky, N. (2000). *New Horizons in the Study of Language and Mind*. Cambridge: Cambridge University Press.
- Croft, W. (2001). *Radical Construction Grammar*. Oxford: Oxford University Press.
- Diessel, H. (2004). *The Acquisition of Complex Sentences*. Cambridge: Cambridge University Press.
- Fillmore, C.J. and Kay, P. (1993). *Construction Grammar*. Berkeley: University of California Press.

- Goldberg, A. (1995). *A Construction Grammar Approach to Argument Structure*. Chicago: University of Chicago Press.
- Jackendoff, R. (2002). *Foundations of Language. Brain, Meaning, Grammar, Evolution*. Oxford: Oxford University Press.
- Labelle, M. (1994). L'utilisation de la valeur des temps du passé par les enfants francophones. *Revue Québécoise de linguistique*, 23/1: 99–121.
- Langacker, R. (1987). *Foundations of Cognitive Grammar*, Vol. I, *Theoretical Prerequisites*. Stanford: Stanford University Press.
- Morgenstern, A., Parisse, C., and Sekali, M. (2009). A la source du futur : premières formes verbales dans les productions spontanées de deux enfants français de 18 mois à 3 ans. *Faits de Langues: Le futur*, 33: 163–175.
- Sabeau-Jouannet, E. (1977). L'expression de l'organisation spatiale et temporelle, son évolution chez l'enfant de 2 à 5 ans. In: F. François, D. François, E. Sabeau-Jouannet and M. Sourdot (eds), *La Syntaxe de l'enfant avant 5 ans*. Paris: Larousse, pp. 193–204.
- Sweetser, E. (1990). *From Etymology to Pragmatics. Metaphorical and Cultural Aspects of Semantic Structure*. Cambridge: Cambridge University Press.
- Tomasello, M. (2003). *Constructing a Language*. Cambridge, MA: Harvard University Press.