Trends in Language Acquisition Research

Volume 3

Language Development across Childhood and Adolescence
Edited by Ruth A. Berman

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Ruth A. Berman

Tel Aviv University

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Contributors

Berman, Ruth A.
Department of Linguistics
Tel Aviv University
Ramat Aviv, Israel 69978
e-mail: rberman@post.tau.ac.il

Blum-Kulka, Shoshana
Department of Communication
and Journalism
Hebrew University
Jerusalem, Israel 91905
e-mail: mskcusb@huji.ac.il

Dockrell, Julie E.
Psychology and Human Development
Institute of Education
20 Bedford Way
London WC1A 0AL, England
e-mail: j.dockrell@ioe.ac.uk

Fayol, Michel
LAPSCO/CNRS UMR 6024
Université Blaise Pascal
34 avenue Carnot,
3000 Clermont-Ferrand, France
e-mail:
michel.fayol@srvpsy.univ-bpclermont.fr

Jisa, Harriet
Laboratoire Dynamique du Langage
(UMR 5596) & Université Lyon 2
14 avenue Berthelot
69363 Lyon Cedex 07, France
e-mail: harriet.jisa@univ-lyon2.fr

Khorounjaia, Ekaterina
Department of Linguistics
University of Barcelona
Gran Vma Cortes Catalanes 585
08007 Barcelona, Spain
e-mail: katit1@yahoo.es

Messer, David
Psychology Department
London South Bank University
103 Borough Road
London SE1 0AA, England
e-mail: messerdj@lsbu.ac.uk

Nippold, Marilyn A.
Communication Disorders and Sciences
University of Oregon
Eugene, Oregon 97403, USA
email: nippold@uoregon.edu

Pacton, Sébastien
Laboratoire Cognition et Diveloppement
(CNRS, UMR-8605)
Universiti Reni Descartes – Paris V
71 avenue Edouard Vaillant, F-92774
Boulogne-Billancourt Cedex, France
e-mail: pacton@psycho.univ-paris5.fr

Peskin, Joan
Centre for Applied Cognitive Science,
Department of Human
Development and Applied Psychology,
OISE/University of Toronto,
252 Bloor Street West, Toronto,
Ontario, M5S1V6, Canada
e-mail: jpeskin@oise.utoronto.ca

Growing into academic French*

Harriet Jisa

The term 'academic French' in the title refers to the type of language that is typical of, although not necessarily confined to, scholarly contexts including writing of dissertations, research reports, articles, and grant proposals; reading of such materials and also of expert writings in various disciplines; making oral presentations of scientific topics; and listening to lectures on such topics. Mastery of academic French occupies a center-stage position for students and teachers at all levels of education. Legislation concerning educational programs is instituted on a national level and results in official published texts which subsequently serve as fuel for hot debates among teachers, administrators, and in the mass media. In the present context, 'academic French' refers first and foremost to the type of language use necessary for school-based academic success from grade school across high school and on to the university level. The chapter aims to demonstrate how, in French, this involves a complex interaction between the variables of modality (writing versus speech), register (level of usage from formal and distant to everyday colloquial), and genre (monologic versus conversational discourse and expository compared with narrative text production). 'Register' is conceived of here as a key facet of linguistic expression — and an important feature of communicative competence, since it involves the ability to vary linguistic forms of use to suit the circumstances of their use. In a developmental perspective, mastery of the register appropriate to a given communicative context is one of the many facets involved in acquisition of communicative competence in a given speech community and the sign of a well-educated, literate individual in any society is that he or she has access to and command of a wide range of registers.

1.   Introduction

Producing a text requires that speaker/writers make a number of computations in order to ensure that the discourse they produce is appropriate to the particular communicative situation. Any given communicative setting influences the forms that the propositions making up the text will take at all levels – phonological, morphological, lexical, and syntactic. Competent speakers of French know, for example, which situations require *bagnole* (slang for 'car') as against the more neutral, normative *voiture* 'car' or the more formal *véhicule* 'vehicle'; *j'ai pas faim* 'I'm not hungry' (omitting the initial negative marker *ne*) as opposed to the normative version of the same utterance *je n'ai pas faim*; or *vous voulez un café?* 'want some coffee?' as opposed to *voulez-vous un café?* 'Would you like some coffee?' It is probably impossible to predict exactly when one form or construction will be chosen over other potential competing forms. Speaker/writer decisions relevant to such computations involve consideration of a multitude of factors, including: the interlocutors, their social status, and the relations between them, the institutional setting, the physical context, the goal and type of the discourse, and most important for the present study, the mode of production, written or spoken.

1.1   Learning to speak as you write: The key to academic success

Cutting across differences due to modality of production are differences due to relative level of *formality*, ranging from informal to formal, which can be characterized as representing four register prototypes: informal spoken, informal written, formal spoken, and formal written (Bialystok 1991). Fully-established adult competence involves being able to establish correspondences between a given linguistic form and its appropriateness to a given communicative situation and hence to a particular choice of register. The knowledge necessary for constructing such correspondences, of course, does not emerge full-blown from one day to the next. Rather, it constitutes a long developmental process that continues across many years, possibly across the entire life-span.

An important step in this developmental process is the achievement of literacy, learning to use language to encode information in writing and to extract information in reading (Ravid & Tolchinsky 2002). While it is interesting to study how spoken language affects children's early writing, this study aims to show that it is no less interesting to consider how writing affects children's spoken discourse. No less importantly, the ability to use lexical and morphosyntactic forms characteristic of highly planned, formal written discourse while operating under the time constraints of spoken production is an important facet of academic success – for example, in such school-based activities as classroom discussion, oral class presentations, giving talks or lectures, and conducting debates or interviews. The present chapter investigates various aspects of French children's language use, both written and spoken, with the goal of illustrating how learning to read and write has a profound impact on developing knowledge of language. To this end, different types of monologic texts elicited from French-speaking schoolchildren and adolescents are examined – picturebook-based oral narratives (Section 2.1) and two samples of expository texts, both oral and written (Sections 2.2 and 2.3).

1.2   'Standard' French

Though the literature dealing with register proposes many different definitions, there is a general consensus that register correlates with situationally defined language usage (Andersen 1992; Ferguson 1994; Biber 1995). Register variation is both a question of circumstances (the discourse context and communicative goal underlying a given piece of discourse) and of expression (the linguistic means used to encode a given discourse content) (Berman 2003b). Register differences are the subject of considerable controversy in sociolinguistic research in general, and in relation to variation in French usage in particular. Recent research in French linguistics has devoted considerable attention to the problems inherent in applying the terms 'standard' and 'non-standard' language usage. Lambrecht (1981:13–14) uses 'Non-Standard French' to refer to the spoken language, so as to avoid reference to the notion of 'Standard French', which has generally been associated with the written language. Blanche-Benveniste (1990:207) suggests using the idea of *grammaire première* 'first grammar' to refer to the grammar that all speakers acquire before going to school and *grammaire seconde* 'second grammar' to refer to the language to which speakers are exposed in school. While all French speakers will acquire a 'first grammar', mastery of the 'second grammar' varies from one individual to the next, and across different groups of speakers. The problem of where to draw the line between standard and non-standard French is compounded by the confounding variables of differences in dialect (due to social class and geographical origin), in register (literary or formal versus informal or colloquial), and in modality (speech versus writing).

While in theory it is relatively easy to identify structures which represent the extremes of a continuum ranging from spoken informal at one end to written formal at the other, in practice the categorization of a given form or usage

as more or less characteristic of a particular type or situation of use requires careful analysis of the form, its variants and its functions in many contexts. Only after examining a large corpus, ranging over several different situations, is it safe to consider a given form as an index of a given level of formality. Such careful, empirical study of French in both the spoken and written modalities is just beginning. The present chapter aims to contribute to this endeavor by examining empirical evidence from the development of written and spoken French by monolingual, non-expert writers.

1.3 Variable usage: Past participle agreement marking and two forms of future tense

Blanche-Benveniste (1995) points to a number of structures that show variation in French usage, whose distribution has, in her view, been oversimplified as a simple choice between formal or informal register. Two examples of such variable usages are agreement marking on the past participle (1.3.1) and distribution of the so-called 'simple future' versus the periphrastic future (1.3.2). In the first case, there is evidence that the rule governing past participle agreement differs in formal compared with informal French, whereas in the second, the two future markings which might appear to constitute no more than a register distinction in usage, in fact also reflect a difference in meaning.

1.3.1 Past participle agreement

Sweeping generalizations such as 'French speakers no longer indicate the agreement between past participles and their objects in spoken French' or 'Only highly educated speakers continue to mark agreement between the object and the past participle' are often not entirely accurate. In normative varieties of French, the past participle requires obligatory agreement with the direct object when the direct object, or a direct object clitic pronoun precedes the participle. For example, a sentence such as *Le garçon avait apparemment capturé une petite grenouille qu'il avait mis dans un bocal* 'The boy had apparently caught a little frog that he had put in a jar' uttered by a French-speaking adult would be considered ungrammatical in normative French, and the relative clause should be replaced by *une petite grenouille qu'il avait **mise** dans un bocal*, with the past participle *mise* 'put, placed' marked for feminine singular to agree with the feminine object noun *grenouille* 'frog'. For some verbs, this distinction is audible, as in the case of masculine *mis*, pronounced [mi] (unless followed by a vowel initial word) versus feminine *mise*, pronounced [miz]. For most verbs, however, agreement marking on the past participle – for feminine gender or plural number –

fails to yield any audible distinction (see Pacton & Fayol, this volume). For example, the past participle 'kissed' can be written in four different ways depending on its direct object: masculine singular *embrassé*, masculine plural *embrassés*, feminine singular *embrassée*, and feminine plural *embrassées*, as in *la/les fille(s) qu'il a embrassée(s)* 'the girl(s) that he kissed' compared with *le(s) garçon(s) qu'elle a embrassé(s)* 'the boy(s) that she kissed'. Despite these different spellings, the four different written forms (*embrassé, embrassée, embrassés, embrasséés*) are pronounced identically.

Gibier's analysis of spoken French (1988, as cited in Blanche-Benveniste 1990) examined over 500 cases where agreement on the past participle is obligatory in written French, showing that factors pertaining to the educational status of the speaker and the speech situation (conversational interviews versus radio, television, and school situations) are relevant, but insufficient to explain the data. The examples in (1), from Blanche-Benveniste (1990: 204–206) show that when the position following the participle is filled, there is an overall tendency *not* to mark the agreement in spoken French, as in (1a); on the other hand, when the position following the participle is not filled, there is a quite generally tendency to mark the agreement, as in (1b). The past participles in question are bolded.

(1) a. *Je l'ai **pris** parce que je croyais que personne la voulait*
[university student, talking about *une gosse d'aïl* 'a piece of garlic, feminine gender]
'I it took because I thought that no one wanted it'
 b. *pour les raisons que j'ai **dites***
[university student, talking about *raisons* 'reasons', feminine gender, plural]
'for the reasons that I said'

When the direct object refers to a feminine third person, even if the position following the past participle is filled, agreement is marked, as in (2a). If, however, the feminine direct object refers to the speaker or the listener, the agreement is usually not marked (2b).

(2) a. *Ils l'ont **mise** à l'hôpital la fille*
[talking about a female university student]
They him/her/it put in the hospital the girl
They put her in the hospital, the girl'
 b. *des choses qui ne m'ont pas **satisfait***
[speaker is a female university student]

things that me did not satisfy
'things that didn't satisfy me'

In written language, if the direct object (or a pronoun referring to a direct object) precedes the participle, agreement is obligatory, irrespective of what follows the participle, or of who is speaking to whom. Thus, it turns out that in fact there are *two* standards, one standard oral and one standard written, and they have different rules.

1.3.2   *Simple versus periphrastic future*

The two futures in French, the so-called simple, inflected future (e.g., *il descendra* 'he will come down') and the periphrastic future with the auxiliary verb *aller* 'go' plus infinitival verb (*il va descendre* 'he's going to come down') provide another interesting instance of variable standards and characterizations of register distinctions. Some scholars treat the choice between the two forms as a question of register (e.g., Lambrecht 1981), and in many cases this is true. However Jeanjean (1980) has shown that the two are not always interchangeable. For example, for the expression of general truths only the simple future can be used, as in *Une femme sera toujours une femme* 'a woman will always be a woman' versus the less acceptable *Une femme va toujours être une femme* 'a woman is going to always be a woman' – not entirely unlike the case in English *will* versus *going to* future forms, in fact (Bybee 1985). The periphrastic future is used when the projected action is either under way at the moment of speaking or will occur shortly after the moment of speaking. Compare, for example, the sentences in (3a) and (3b).

(3)   a.   *je vais avoir un enfant*
           I'm going to have a baby'
      b.   *j'aurai un enfant*
           'I will have a baby'

In uttering (3a), the speaker is probably already pregnant or is attempting to become pregnant, whereas in (3b) the speaker is projecting an action onto some indefinite or distant future. The choice between the simple and periphrastic future is thus not purely a question of register variation.

1.4   Lexico-syntactic indicators of spoken versus written French

In contrast to these two examples, certain linguistic features can be relatively clearly categorized as either written or spoken forms. Several such examples

have been noted in the literature. While the negative particle *ne* is rarely used in spoken French, its absence in written French would shock most readers; and colloquial *ça* 'that' is typically represented by *cela* in written French (Blanche-Benveniste 1990). Another clear distinction is represented by the analytic or composite past tense *passé composé*, with an auxiliary verb plus past participle which is typically oral but also used in writing, as against the synthetic or inflected simple past tense form *passé simple*, which is found almost exclusively in written discourse. Some non-standard forms of relative clauses that are common in spoken French would also be considered totally unacceptable to most adult French readers (Gadet 1990). Another feature which seems to differentiate spoken from written French is use of nouns and pronominalization, particularly in subject position.

1.4.1   *Lexical nouns and pronominals*

French is described as having a basically SVO order (Hawkins 1983), yet in spoken French, the subject position is only rarely occupied by a lexical noun. The preferred, unmarked clause structure in spoken conversational French typically involves a subject clitic pronoun and often other pre-verbal clitics as well. François (1974) found a total of 1,550 nouns in a long corpus of conversation between members of a working class family, out of which only 46 (some 3%) were lexical subjects as compared with the vast proportion of 1440 clitic subjects (Lambrecht 1987). Jeanjean (1980) confirmed this finding on the basis of a corpus of casual conversation where she found an average of 11% out of total lexical nouns in subject position. Blanche-Benveniste's (1990) comparison of a variety of discourse types gathered from a wide range of speakers revealed that an increase in lexical nouns in subject position is associated with a more elaborate discourse code. Gayraud (1998) shows that children as young as seven years of age are sensitive to this variable, and that they use significantly more lexical noun subjects in written than in spoken texts.

Not only are nouns in subject position associated with written French, but nouns in other syntactic positions, too, contribute to a higher noun per verb ratio in written as opposed to spoken texts in general (similarly to what has been shown for other languages as well, cf. Ravid et al. 2002). Thus, Blanche-Benveniste (1995) compared two different types of accident stories, one consisting of stories recorded in oral interviews, the other of accidents reported in the press. Both types of stories obviously contained nouns, but more lexical nouns and various types of nominalizations were observed in the press reports (Ravid & Cahana-Amitay, in press). Where verbs with single arguments were common in the spoken stories – for example, *il est tombé et il est mort* 'He fell

and he died' – written stories collapsed equivalent information into a single clause – e.g., *un homme a fait une chute mortelle* 'a man took a fatal fall'.

Crucial to understanding the forms used in a text is the time allotted to text planning. Producing language in writing alleviates some of the time pressure involved in online spoken language production, and so allows more time for the work of converting information into words (Strömqvist et al. 1999). Becoming a proficient writer involves gaining mastery over more compact means of establishing the flow of information, resulting in texts that show more densely integrated packages of information (Chafe 1994). For example, syntactic subjects in written expository discourse do not necessarily obey Chafe's (1994) 'light subject constraint' which is characteristic of spoken discourse. It is for this reason, for example, that written French shows more lexical nouns phrases than pronouns (Blanche-Benveniste 1990, 1995; Lambrecht 1987). Heavy subjects, often the result of syntactic packaging through nominalization or subordination, are characteristic of mature written expository discourse (Ravid et al. 2002). In addition, written texts generally show more lexical diversity than spoken texts, since writing allows more time for planification and hence more time to search one's mental lexicon for different and less frequent lexical items (Ravid & Tolchinsky 2002; Strömqvist et al. 2002).

1.4.2   *Prosodic information as a source of difference*

While it thus does seem possible to make relatively clear distinctions between spoken and written French for some constructions, several French linguists consider broad, sweeping generalizations contrasting written French and spoken French to be premature at the present stage of research in this domain (Berrendonner 1990; Berrendonner & Reichler-Béguelin 1997; Blanche-Benveniste 1990, 1994; Gadet 1997). These well-motivated objections to drawing hasty distinctions between spoken and written French have motivated researchers to take considerable pains in their description of relevant constructions as well as in how they characterize their distribution. Prosady is an important candidate for diagnosing modality distinctions in French, as an area that is inherent in the very nature of spoken compared with written language, since speech alone marks syntactic, semantic, and pragmatic distinctions through prosodic means which are unavailable in writing.

Consider the following examples, from Gadet (1990:15).[1]

(4)   a.   *moi / j'ai faim / je mange*
      b.   *moi / j'ai faim. je mange*
           'Me I'm hungry I eat'

The semantic interpretation of the relationship between the two clauses in the utterances in (4a) and (4b) differs depending upon the intonation given to *j'ai faim* 'I'm hungry'. Rendering the meaning of (4a) in written French would require something like *dès que j'ai faim, je mange* 'As soon as I'm hungry, I eat'; in contrast, a written version of (4b) would be something like *je commence à avoir faim. je vais manger* 'I'm beginning to feel hungry, (so) I'm going to eat'. Even the assignment of subject versus object status to a given nominal in a clause can vary by prosodic contour (Lambrecht 1994). For example, the string of words *Marie Nicole elle ne l'aime pas*, literally 'Mary Nicole she her not like' can mean either 'Marie doesn't like Nicole' – pronounced as *Marie / Nicole/ elle ne l'aime pas* – or 'Nicole doesn't like Marie' – when pronounced as *Marien/ Nicole elle ne l'aime pas* (Gadet 1990). Such prosodic distinctions lack a clear punctuation convention in the written mode, and thus ambiguous constructions like these tend to be avoided in writing. In speech, however, they are heavily exploited and have a marked effect on the size and the linear ordering of constituents in utterances produced in the spoken mode.

Given these marked differences in the two modalities, it is of interest to consider how children of different ages and levels of schooling and hence literacy develop the ability to modify the texts they produce to take full advantage of these distinctions, on the one hand, and to manipulate them appropriately in a given communicative context, on the other.

2.   Developmental perspectives on text production

This section examines evidence for the development from grade school age across adolescence of sensitivity to different facets of monologic text production in both narrative and expository texts and in speaking compared with writing. Production of monologic texts requires that speaker-writers engage in planning at different levels (Levelt 1989). Individual messages must be elaborated and encoded into a linear form for articulation in a propositional format, and the resulting propositions must then be packaged together by the various syntactic means available for clause-combining in a particular language. These inter-clausal packages of information also need to be structured into more global text components, such as the opening and closing segments of a piece of discourse – in the setting and coda of narrative texts and the introduction and conclusion of expository texts (Berman & Katzenberger 2004; Tolchinsky et al. 2002). The ability to plan and organize a monologic text demands a complex

interweaving of linguistic and cognitive abilities, and is a capacity that develops gradually over the years of childhood, into and even beyond adolescence.

Clearly, both speaking and writing call upon a number of shared cognitive abilities. However, writing typically allows people to allot more time and hence greater cognitive and linguistic resources to planning activities than can be accessed in the course of rapid online speech output. As a result, the study of what children know about language can be fruitfully approached by observing their text production in both written and spoken modalities. Once children are over the major hurdles of letter formation and spelling and other facets of what Ravid & Tolchinsky (2002) refer to as 'writing as a notational system', writing may actually facilitate the use of less frequent and more complex constructions, and thus give a somewhat different picture of what children know about language and how to use it. Since children's knowledge of language changes as a function of their experience with how it is used in different circumstances, close examination of how children make use of language in both the spoken and written modalities seems necessary for understanding later language development in general, and the process of 'moving into academic language' in particular. To this end, the following sections summarize a range of studies which reveal how French children's spoken language is impacted by their learning to write.

2.1 Syntactic packaging and maintaining reference in narrative discourse

In spoken French, new referents are generally introduced in either clefted presentational structures, such as in (5a), or in other post-verbal positions such as in (5b) (Hickmann et al. 1996; Lambrecht 1994).

(5) a. *y a un homme*
         'There is a man'
     b. *hier j'ai vu un homme*
         'Yesterday I saw a man'

The newly introduced referent can be promoted to subject of the following clause by means of four structural options: repetition of the noun as in (6a), repetition of the noun with a clitic pronoun (6b), use of a pronoun alone (6c), or use of a subject relative pronoun (6d).

(6) a. (et) *l'homme m'a donné un bonbon*
         '(And) the man gave me a candy'
     b. (et) *l'homme i m'a donné un bonbon*
         '(And) the man he gave me a candy'
     c. (et) *il m'a donné un bonbon*
         '(And) he gave me a candy'
     d. *qui m'a donné un bonbon.*
         'who gave me a candy'

Two additional structural options are available for maintaining a subject argument in subsequent clauses after it has been introduced and promoted: subject ellipsis as in (7a) and non-finite subordination (7b).

(7) a. *(et) est parti au travail*
         '(and) left for work'
     b. *avant de partir au travail*
         'before leaving for work'

While all of the structures illustrated in (6a) to (6d) and (7a) and (7b) are grammatical in French, they are not all equally appropriate in all situations. Blanche-Benveniste's (1990) comparison of a wide range of discourse from a variety of speakers revealed, as noted earlier, that anaphoric subject clitic pronouns abound in spoken conversational French. In more formal registers of French, however, they are avoided through the use of such devices as lexical noun substitutions, pronoun ellipsis (7a), or non-finite syntactic packaging (7b).

Maintaining referents in subject position, then, involves numerous different potential structures, including full noun phrases with or without a detached pronoun, anaphoric pronouns, subject ellipsis, subject relative pronouns, and non-finite subordination. Relative pronouns and subject ellipsis, as opposed to full nouns and anaphoric subject pronouns, exhibit denser packaging of events by establishing a tighter dependency relationship between the two clauses (Berman & Slobin 1994:515–554). Non-finite connectivity represents perhaps the most tightly packaged type of clause combining, since in such constructions, the subject and the tense of the subordinate clause are totally dependent on the principal clause (Foley & Van Valin 1984), and it has been shown to be a late development in different languages (Berman 1998). Forms for maintaining referents as subjects show variation both in compactness of information and in register appropriateness. The more compact forms, for example, use of optional subject pronoun ellipsis or non-finite ellipsis, indicate a more formal register (Blanche-Benveniste 1995), and these, too, are known to develop late, beyond preschool age (Berman 1990; Jisa 2000).

The structures used for maintaining reference across propositions were examined in narratives produced in speech and writing by French-speaking children aged 5, 7, and 10 years compared with adults, in a study that replicated the Berman & Slobin (1994) oral picture book task with speakers of five other languages (Jisa 2000). Participants were shown a booklet of 24 pictures without text that relate the adventures of a boy and his dog in search of their runaway frog, in the course of which they encounter several other characters (an owl, a mole, bees, a deer). Here, findings are noted for a group of children aged 9 to 10 years (the equivalent of 4th graders in the U.S.), twenty of whom were asked to tell the story orally and twenty of whom in writing. Results revealed that the children who wrote their stories used significantly more indications of formal written register than their age- and background-matched counterparts who told the story orally. For example, they made significantly more use of the *passé simple* and of the preverbal negative particle *ne*. More interestingly, they also used more of the two types of highly compact syntactic packaging – pronoun ellipsis and non-finite subordination – to maintain referents in subject position than did children who produced their texts in the spoken modality. These differences are illustrated in the excerpts in (8) and (9), written and spoken respectively, both recounting the final episode of the story, where the boy finds his missing frog or a substitute for it.

(8)   *Ils virent Marguerite avec son fiancé. Ils avaient fait des petits. François et Flippeur prirent un petit et___ partirent___ en disant au-revoir.* [girl, aged 10;6, written]
      'They saw Marguerite with her fiancé. They [=the frog and the fiancé] had had babies. François and Flippeur took a little one and ___ left, while ___ saying good-bye'

(9)   *Il voit toute la famille. Et il retrouve sa grenouille. Et il dit au revoir à sa famille.* [girl, aged 10;3, spoken]
      'He [= the boy] sees the whole family. And he finds his frog. And he says good-bye to his family'

Even these young gradeschool-age writers show variation in the grammatical encoding of events in spoken versus written narrations. In (8) reference to the two protagonists, the boy and his dog, *François et Flipper*, is maintained in subject position by a range of devices – first by subject ellipsis (*et partirent*) and subsequently through non-finite syntactic packaging (*en disant au revoir*). In contrast, the narrator in the spoken text (9) re-uses the same subject clitic *il* 'he/it' to maintain referential cohesion to the boy as protagonist across the three

clauses in a way that is typical of children's oral "frog story" texts in French as in other languages.

2.2 Non-finite syntactic packaging in expository texts

Against this background, we undertook a second study which specifically examined the use of non-finite syntactic packaging among schoolchildren at different levels of schooling compared with adult speaker-writers of French as a native language (Gayraud et al. 1999, 2001). Four groups of subjects aged 9 to 10 years, 12 to 13 years, and 15 to 16 years of age, and adult university students – with twelve subjects in each group – were asked to discuss their ideas about violence in schools in the form of an oral class presentation and a written essay, with tasks balanced for order. In this study, in contrast to the picturebook "frog story" narratives discussed in the preceding section, the same subject produced both a written and spoken version of an expository text.

Findings showed that non-finite forms of clause-combining or syntactic packaging were more frequent in the adult than in the children's texts. Moreover, non-finite subordination was more frequent in the texts written by the adults than in their spoken versions, regardless of the order of production. An even more interesting result was yielded by the youngest group of children, 9- to 10-year-old grade schoolers: for them, the order of production proved to be an important factor. If children performed the task first in writing and then in speech, *both* their texts – spoken as well as written – showed a significantly higher percentage of non-finite syntactic packaging (t = 2.32, 10df, p < 00;02), as illustrated in Figure 1; but this was not the case for their peers who first produced a spoken text and then wrote an essay on the same topic. In other words, producing a written text *before* discussing the same topic in speech had an effect on the syntactic structures deployed by children in both their spoken and written versions.

It might be claimed that the young subjects who produced the texts in the order written-then-spoken were simply repeating from memory what they had written when they switched to the spoken modality. There are two reasons to doubt this interpretation. First, the children were administered a questionnaire in the time interval between the productions of their two texts – written and spoken; this questionnaire was intended to gather information about their reading practices, but it also afforded an activity that would reduce the possibility of rote memorization of the written text being carried over to the spoken text. A second reason suggesting that children did not simply repeat their written texts in the spoken modality stems from comparison of the written and
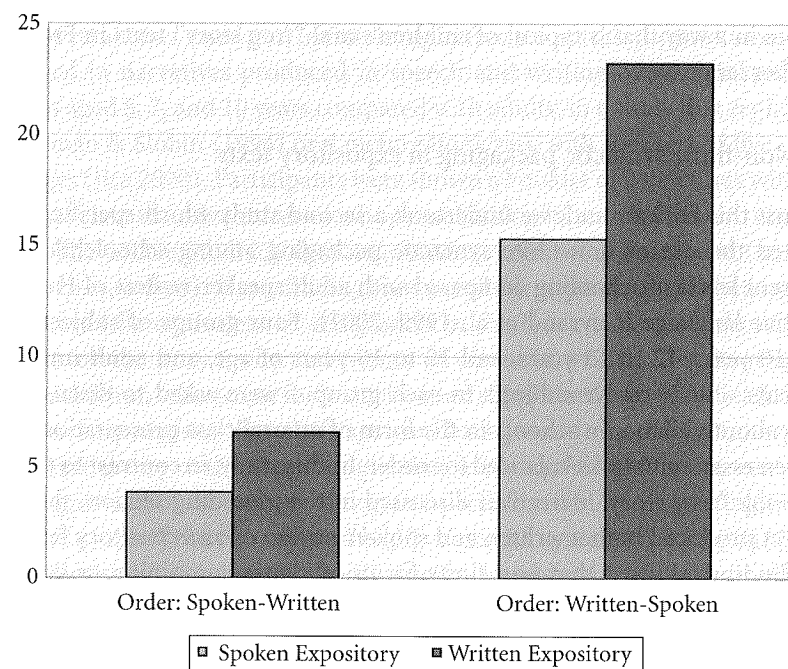
Figure 1. Mean percentage of non-finite subordination in 9-10-year-old expository texts

spoken texts produced by individual children. This is illustrated for the French data base by the excerpts in (10) and (11) from the texts of a French girl (Charlotte, aged 10;2), where (10a) and (11a) are from her written version, compared with the corresponding excerpts from the spoken text produced by the same child in (10b) and (11b). The relevant pieces of her texts are bolded.

(10) a. *Mais aussi elle peut commencer par un jaloux d'une simple note de poésie **faisant un croche-pied**.* [Written version]
      'But also it can begin by (someone) jealous simply over a grade in poetry, tripping up (someone)'

   b. *ya aussi euh quand on est jaloux euh pour nos notes ou euh (2") des choses comme ça (1") **quand on fait un croche-pied*** [Spoken version]
      'There is also when one is jealous over grades or things like that when one trips (someone) up'

(11) a. *Alors punissons ces gens-là **pour arrêter la violence**.* [Written version]
      'So let's punish those people in order to stop violence'

   b. *ben euh **pour qu' tous ces gens là recommencent** plus faut qu'i soient punis* [Spoken version]
      'Okay / well er in order that those people don't start again, they must be punished'

In the written version, (10a) and (11a), Charlotte uses non-finite packaging, whereas in her spoken version, (10b) and (11b), she combines the same information in a more linear fashion, by stringing together finite subordinate clauses. This clearly shows that comparing written with spoken texts produced by the same subject fails to provide evidence for a transfer by rote repetition of form from the written to the spoken versions.

This conclusion is strongly confirmed by findings of other studies that elicited similar sets of data comparing spoken and written expository texts discussing the problem of violence in schools in Hebrew (Berman in press-a; Berman & Ravid 1999). And it is also strongly demonstrated in research comparing the written and spoken versions of narative texts produced by children, adolescents, and adults, native speakers of American English and of Israeli Hebrew, who had been asked to write and tell a story about an experience of interpersonal conflict (Berman & Ravid submitted; Ravid & Berman 2003b). (See, too, Section 2.3 below).

It might be tempting to argue that there is a communicative basis to the differences observed in the spoken and written version. For example, some semantic relations might be preferentially encoded by non-finite packaging while others might favor alternative means. In such a case, distinct semantic relations should also be encoded in the written and spoken texts. This idea, however, is not supported by comparison of the written and spoken versions of texts produced on the same topic by the same person. Thus, for instance, in both (10a) and (10b), Charlotte gives the same hypothetical examples of a potential trigger to a dispute, while in (11a) and (11b) she proposes the same possible goal or solution for stopping violence. This, again, suggests that differences in referential semantics or thematic content do not seem to be what underlies choice of different forms for packaging information in texts. Rather, the difference in syntactic packaging of information in the spoken and written versions appears attributable to the order in which the child produced the texts. When children start with the written text, both the written and the spoken versions show tighter syntactic packaging than when they start by speaking.

Strömqvist et al. (2003) suggest that in very early stages of learning to write, speaking solidly underpins writing. This first stage is followed by a strongly marked differentiation between writing and speaking as children be-

gin to acquire what Ravid & Tolchinsky (2002) call "written language as a special discourse style". It can be argued that the children in our study are in this second period of development. This would contribute to explaining why those who produced their written texts in the written-first order condition showed more non-finite subordination – a clearly prototypical feature of written French. Similar results were observed in Swedish 15-year-olds by Strömqvist et al. (2004) using the frog story as the basis for written and spoken narratives produced in either a written-first or spoken-first condition. Characteristics of written Swedish narratives carried over into subsequently produced spoken narratives, whereas written narrations produced subsequently to spoken narrations remained unaffected by the previous spoken narration.

A syntactic priming effect may be responsible for the children's use of non-finite subordination constructions in their spoken texts. Recent research in syntactic priming (Bock 1986; Branigan et al. 2000; Pickering & Branigan 1998; Scheepers 2003) has revealed that adult speakers (Smith & Wheeldon 2001) and writers (Corley & Scheepers 2002) produce utterances that are structurally consistent with an initial prime. The same effect is observed in experiments where participants are constrained to use a particular prime structure in one trial, but are free to choose between two or more alternative target structures in the following trial. In addition, over consecutive trials, temporal latencies for selecting the structurally consistent utterance decrease. It is argued that when a structurally consistent form is produced over consecutive trials, the cognitive effort associated with its generation is reduced.

Results from syntactic priming experiments are regarded as providing important insights into the mechanisms of grammatical encoding (Bock & Levelt 1994). Clearly, further research on syntactic priming in children is needed, but it may be argued that the results we obtained from children in the written-first condition show a priming effect with the non-finite structures used in the written versions serving as primes for the non-finite structures in the spoken versions.

Our results also illustrate one way in which "thinking for writing" can influence "thinking for speaking" (Slobin 1993, 1996). A construction mobilized in the written version "primes" that construction in the spoken version. They also show how literacy impacts grammatical performance in the spoken mode: Children show that they are in fact able to speak using forms which are more characteristic of written planned discourse when required to produce a more formally structured oral monologue as in the study in question, and this impact is most strongly evident when they can use a version they have already

produced in writing, if not as a model, then as a clear point of reference for how they speak.

2.3 Discourse stance

A final example of French children's exploitation of forms more characteristic of formal, planned discourse in their later language development revolves around the notion of *competition* between constructions. Languages provide mature speakers with a variety of grammatical options, the choice among which depends on speakers' individual conceptualizations or point of view and their communicative intention in a given discourse context. The notion of 'competition' adopted here differs somewhat from how the term is used in the acquisitional literature (see, for example, Bates & MacWhinney 1987). Rather, in the present context, competition refers to the idea that there is no single way to verbalize the contents of any given situation in the world (of reality or fantasy), and that speaker/writers have a range of options for describing the selfsame scene (Berman & Slobin 1994: 516–517; Slobin 1996, 2001).

The third study discussed here, like the one referred to in the preceding section, concerns monologic *expository* texts in which French children and adults were asked to discuss a socially relevant topic, in a talk and an essay about interpersonal conflict or problems between people in general. Expository discussion is a discourse genre that requires the speaker/writer to package information in a generic, generalized fashion. In contrast, for example, to personal-experience narratives, where speaker/writers report on highly individualized and specific experiences, expository texts require a generic discourse stance as a means of talking or writing about quite general and abstract ideas with a certain degree of objectivity or personal detachment between the speaker/writer and the content of the propositions he or she encodes (Berman et al. 2002; Berman in press b).

As noted, any event – whether veridical or not – can be expressed in various ways. This is illustrated in (12), where different renderings of the situation of 'resolving a conflict' can be ranked on a continuum of speaker involvement in, or responsibility for, the contents of the utterance, from highest in (12a) to lowest in (12e).

(12) a. *J'ai résolu le problème.*
           'I resolved the problem'
      b. *On a résolu le problème.*
           '(Some)one~We resolved the problem'

   c. *Le problème a été résolu (par moi).*
      'The problem was resolved (by me)'
   d. *Le problème est/était résolu (?par moi / par la législation).*
      'The problem is/was resolved (by me / by the law)'
   e. *Le problème s'est résolu*
      'The problem resolved (itself)'

In (12a) the speaker takes full responsibility for the information in the predicate by use of the first person pronoun as subject; in the *on* construction (12b), the agent of the activity encoded in the event is necessarily human, but *on* can either attribute responsibility to the speaker or not – that is, it may, but need not have a reading that is close to (12a); the passive construction in (12c) enables the speaker to shift responsibility for the action encoded in the predicate to an agent, or omit all mention of an agent; the resultative passive construction (12d) is very close to the process passive construction (12c) (Croft 1991: 248). Process passives describe the same process as the corresponding active, but they do so from the perspective of the affected entity rather than the agent or initiator. In contrast, resultative passives describe only the resulting state of the affected entity and, in fact, do not accept an agent. A paraphrase of *par* in *par la legislation* (12d) is *grâce à* 'thanks to' or 'due to', indicating a means, but not an animate agent. (This contrast corresponds largely to adjectival passives compared with verbal or syntactic passives, as discussed for Hebrew in Berman, this volume). Finally, in (12e), the middle voice construction with the reflexive clitic *se* avoids any explicit mention of or implicit attribution of an agent potentially responsible for the resolution of the problem. Note that each of these constructions shares certain features with the others, but also differs in critical ways. Thus, the *on* construction illustrated in (12b) shares some of the functional load carried by agentless passives and middle voice constructions in French and in other languages (Ashby 1992; Berman 1980; Jisa et al. 2002; Koenig 1999; Lyons 1995; Tolchinsky & Rosado in press; Vinay & Darbelnet 1995). Agentless passive constructions as in (12c) and middle voice constructions as in (12e) have in common the fact that the patient participant is foregrounded and the agent participant backgrounded. A human agent is implied in both cases, but explicit reference to this participant is typically absent in passive constructions and is disallowed in middle voice constructions. Use of *on* as in (12b) does not eliminate the agent, but serves to clearly downgrade its individuation. Thus, the *on* construction resembles the passive in foregrounding the patient and downgrading the agent; and it contrasts with the middle

voice since *on* is confined to (an implied) human agentivity, whereas middle voice is not.

Each of the constructions illustrated in (12) contributes differentially to expression of what Berman et al. (2002) have termed the 'discourse stance' adopted by a speaker-writer, and all serve as crucial markers of two important facets of this notion: orientation (to sender, recipient, or product of a piece of discourse) and generality of reference (ranging from specific to generic and impersonal). A competent speaker-writer of French can deploy all these alternatives to encode a highly involved, personal stance as in (12a) or a removed, more generalized stance as in (12c), (12d), or (12e) in the interest of expressing different perspectives on events. The question is when and how these distinctions are manifested developmentally in accordance with different discourse and communicative settings. To address this issue, focus in this section is on the distribution of passive constructions as in (12c) and (12d) compared with use of the *on* subject (12b) in expository texts produced in both speech and writing by French schoolchildren, adolescents, and university-educated adults.

As background to this analysis, and in order to elucidate the notion of 'competition' between superficially similar, and often referentially synonymous, constructions, consider first, the *passive*, as illustrated in (12c). The passive construction is said to be used less frequently in French than in English (Jones 1996), for two reasons: syntactically, French passives are more constrained than in English, and discursively, French has a wider variety of alternative constructions that serve functions carried by the passive. The main syntactic constraint is that only direct objects of transitive verbs can be promoted to subject in French, ruling out a sentence such as **Pierre a été donné un livre par Marie* 'Pierre was given a book by Mary'; relatedly, objects of prepositions cannot occupy subject position in the passive, so that a sentence like *The doctor was sent for* would require either a rather different verb that takes a direct object, e.g., *Le médecin a été appelé* 'The doctor was called' or the generic pronoun *on*, as in *On envoya chercher le docteur* 'One / we / they sent to-seek the doctor' (Vinay & Darbelnet 1995: 140). In other words, if a French speaker wants to promote an argument other than a direct object to subject position, some other grammatical means must be employed. These could take the form of a topicalizing construction, e.g., *C'est à Pierre que Marie a donné le livre* 'It's to Pierre that Mary gave a book'; by dislocation as in *Pierre, Marie lui a donné un livre* 'Pierre, Marie gave him a book' (Lambrecht 1994) or in a closely related 'as for' construction as in *Quant à Pierre, Marie lui a donné un livre* 'As for Pierre, Marie gave him a book' (Kuno 1972; Reinhart 1982); or else by using an infinitival pronominal verb construction with the clitic *se*, which is limited to

a small set of verbs (e.g., *faire* 'make', *laisser* 'let', *voir* 'see'.) that can have either a passive sense, as in (13) or a benefactive interpretation, as in (14) and (15) (Creissels 1995).

(13) *Jean s'est fait attraper (par la police).*
John got (himself) caught (by the police)'

(14) *Jean s'est fait construire une maison (par l'architecte).*
'John got (himself) a house built (by the architect)'

(15) *Jean s'est vu donner un livre (par Marie)*
'John saw (himself) given a book (by Marie)'

Clearly, as noted by Jones (1996), French thus has several grammatical alternatives for achieving some of the patient topicalizing effects of passives.

Passive constructions have not only a patient topicalizing function, they also contribute to *backgrounding* the agént of an event, either by demoting it to an oblique argument position or by eliminating it altogether through use of an agentless passive as in (16). In this connection, we find the indefinite or generic *on* construction illustrated in (17) as 'coming into competition' with the agentless passive, as shown in some detail in cross-linguistic terms by Jisa et al. (2002) and from a developmental perspective in Jisa & Viguié (in press).

(16) *Les documents ont été volés.*
'The documents were stolen'

(17) *On a volé les documents.*
'Someone stole the documents'

The chameleon character of *on* has been studied from many different angles, including its social and demographic distribution in everyday discourse and in interviews, its use and perhaps abuse in the mass media, both for Canadian French (Laberge 1978; Laberge & Sankoff 1980) and for European French (Ashby 1992; Atlani 1984; Koenig 1999; Simonin 1984). An important conclusion emerging from such analyses is that *on* is extremely multifunctional, and that its reference varies depending on the particular discourse context and communicative setting. As a colloquial alternative to *nous* 'we', *on* has first person plural reference, as in sentences like *on a passé les vacances dans le Midi* 'We spent our vacation in the Midi' (Jones 1996). As a generic form, *on* refers to people in general, e.g., *en France on mange les escargots* 'In France one eats / people eat / they eat snails', in which case it corresponds approximately to English 'one' or impersonal 'they' and to French impersonal *ils* 'they' or to other generic expressions such as *tout le monde* 'everyone'. In yet a third use, *on* cor-

responds to indefinite *quelqu'un* 'someone', e.g., *on a volé mon stylo* 'someone stole my pen' or to the understood subject of a passive construction, e.g., *mon stylo a été volé* 'my pen was stolen'. In the latter case, *on* indicates a change of verb valence by eliminating an agent without promoting any other participant, a use which serves to foreground the predicate (Ashby 1992). In all cases – except as a variant of first person plural *nous* – reference is non-specific, but restricted to human referents.

It is not always easy to classify different uses of *on*, but several studies note that features of the verb with which it is associated are critical for how it is interpreted. Verb tense, for example, is important for determining the type of *on*. The generic interpretation is available only when the verb is non-punctual, e.g., in the present or imperfect tense, denoting a state or habitual event (Jones 1996: 287). When used with a verb in the specific past tense (French *passé composé* corresponding roughly to English simple past), as in *on a volé son sac* 'someone~we stole her/his purse', *on* can have either a first person plural or an indefinite interpretation – as shown by the gloss. Verb semantics is also important in determining the indefinite interpretation of *on*. For example, Koenig (1999: 238) argues that the referent of indefinite *on* must be an active, volitional participant in the situation encoded by the sentence in which it has the subject role, as shown in (18b) compared with (18a).

(18) a. *On a reçu des lettres d'insultes*
'*Somebody~We received insulting letters.'
 b. *On lui a envoyé des lettres d'insultes*
'Somebody~We sent him insulting letters'

The subject of *recevoir* 'to receive' in (18a) does not entail agentivity, since no causal role of semantic agency is needed in order to 'receive' something. In contrast, indefinite *on* can occur as the subject of a verb such as *envoyer* 'to send' in (18b), which does involve volitional agentivity. This means that in order to be interpreted as an indefinite subject, the clitic *on* "must be the subject of a verb whose agentive or actor semantic role it satisfies" (Koenig 1999: 237). In sum, *on* can be characterized as having three basic functions: (1) to refer to first person plural *nous* 'we', (2) as a generic referent, particularly when used with a verb in a non-punctual tense, and (3) as an indefinite variant of *quelqu'un* 'someone' or of an agentless passive.

In order to trace the developmental underpinnings of these constructions, we examined the distribution of generic and indefinite *on* and passives in spoken and written texts produced by French monolinguals in the same age-groups as those in our earlier study (Section 2.2): gradeschoolers (aged 9 to 10

years), junior high (12 to 13), high school (15 to 16), compared with university-educated adults. The texts examined here form part of a larger cross-linguistic, developmental study of spoken and written text production in seven languages including French (the chapters by Khorounjaia and Tolchinsky and by Wengelin and Strömqvist in this volume deal with Spanish and Swedish materials from this same project).[2] In each country, twenty subjects in these four age groups were shown the same short video clip depicting different types of interpersonal conflict (moral, social, physical) and they were then asked to tell and write a story describing an incident where they themselves had been involved in a situation of conflict with someone and also to give a talk in class and write an essay discussing the topic of 'problems between people'. Thus, closely comparable methods of elicitation were applied so that each participant across age groups and countries in the project produced four monologic texts: a personal-experience narrative – both written and spoken – and an expository text – both written and spoken – on a socially relevant topic, with performance on the four tasks balanced for order across the population. (Details on the goals, population, and procedures of the project are given in Berman & Verhoeven 2002a). The French school-going participants were recorded in two private schools in Lyon, and the adults were graduate students attending two universities in Lyon.

The following discussion deals with the expository texts produced by the French-speaking subjects in both speech and writing. Expository discourse appeared particularly appropriate to the aims of this analysis, since it requires that speaker/writers generalize across individuated experiences and events, to present information as objective generalities (Berman & Katzenberger 2004; Tolchinsky et al. 2002). The two constructions targeted here – on and passives – can both be used by speaker/writers to step back from attributing unequivocal, clearly specified responsibility for the information contained in their utterances, and as such they are important indicators of speaker/writer stance.

Consider, first, the findings for use of on, as shown in Figure 2.

Overall, Figure 2 shows that on is more frequent in the spoken modality than in written (F(1,152) = 5.61, p < 0.01) and the higher frequency of on in spoken texts is attested at all age groups. Age is a significant variable in the distribution of on (F (3,152) = 2.59, p < 0.05) with generic, indefinite on being more frequent in the two younger groups as opposed to the two older groups. Thus, the use of on decreases with age and this is particularly true of the written modality. As will be shown, one of the reasons that the use of on decreases is that the passive which is in competition for the same depersonalizing function becomes more productive.
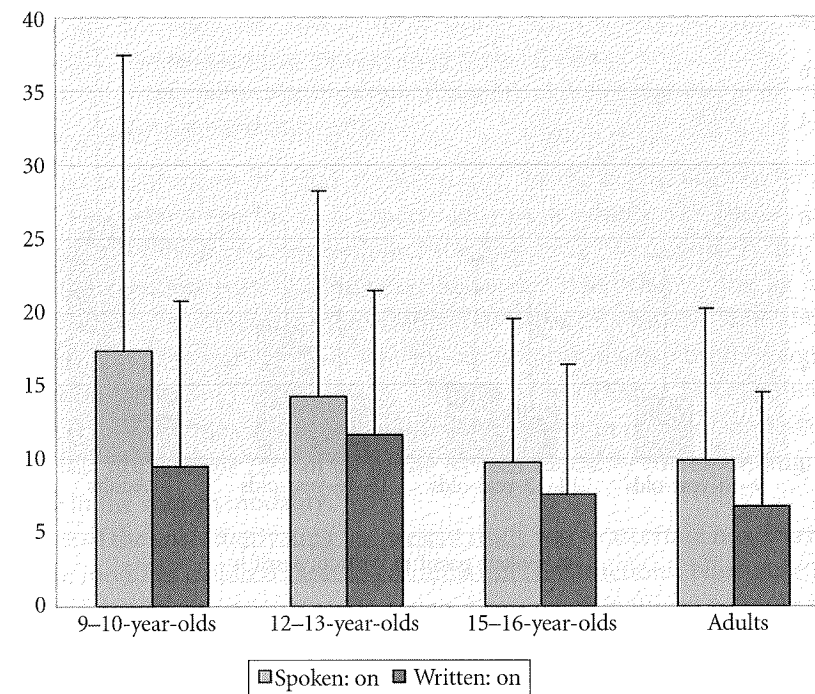
Figure 2. Distribution of on constructions in spoken and written expository texts (in %)

Because the overwhelming majority (91%) of the passive constructions were agentless, passives with and without agent arguments are not distinguished. In addition, no distinction was made between process and resultative passive constructions. The distribution of passive voice constructions given in Figure 3 shows that this construction is more frequent in the written than in the spoken modality ($F_{(1, 152)}$ = 19.24, p < 0.0001) and this applies across all age groups. The use of passive constructions increases with age ($F_{(3, 152}$ = 5.06, p < 0.002), and this is particularly clear in the written modality.

In comparing these two means of expressing a less personalized, more generic and hence distanced discourse stance, it turns out that on is more frequent in spoken French and decreases with age, whereas the passive is more frequent in written French and increases with age. This illustrates a well-established pattern in the domain of language acquisition (Slobin 1973) as in other areas of cognitive development (Werner & Kaplan 1963:60): new forms take on old functions and old functions receive new forms. New forms taking
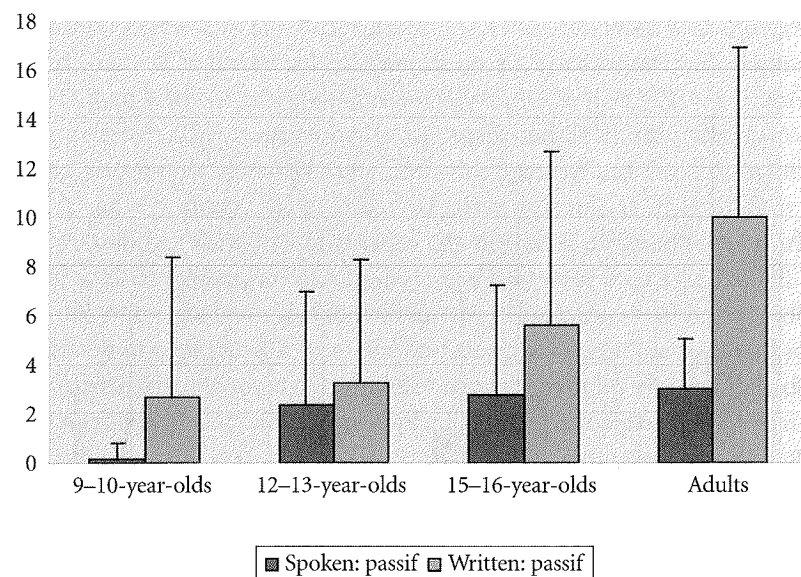
Figure 3. Distribution of passive constructions in spoken and written expository texts (in %)

on old functions is illustrated by the development of passives taking over some of the functional load of *on* constructions. Old forms taking on new functions can be observed by considering that, with age, earlier use of *on* as the spoken French equivalent of non-personal *nous* 'we' comes to be replaced by more generic and indefinite uses of the same form. In both cases, we find expanding repertoires along the dimension of form–function mappings as a function of increased age and schooling. Of course, not all indefinite uses of *on* are replaced by a passive construction. Rather, what emerges is a gradual development of control over the multiple options provided by the language.

One of the advantages of the methodology adopted in this study (and across the cross-linguistic project in which it is anchored) is that the written and spoken texts are produced by the same subject. This allows for comparison of the same or similar text content with contrasting forms of information packaging. The excerpts in (19a) and (19b) contrast use of an *on* construction in a spoken expository text and an agentless passive in the written text produced by the same woman.

(19) a. *Il y a d'autres problèmes qu'on a tendance à négliger* [A 11 Exp, Sp][3]
'There are other problems which one tend(s) ~ we tend to neglect'

b. *Les autres difficultés de rapports entre les personnes au niveau collège sont par contre un peu oubliées* [A 11, Exp, Wr]
'Other difficulties in personal relations at junior high are on the other hand somewhat forgotten'

In the *on* construction in (19a), responsibility for the negligence can be ambiguous between a specific or a generic agentive meaning. The passive construction in (19b) leaves responsibility for forgetting unassigned. In this respect, the agentless passive eliminates the sender role, whereas the *on* construction leaves it somewhat more ambiguous between a generic 'one' and an inclusive first person plural 'we'. This modality contrast was observed consistently across all age groups. That is, when there is a change in construction choice, it is always the case that the passive is opted for in the written modality. There was not a single case of *on* in the written modality corresponding to a passive in the spoken modality.

One of the goals motivating the present study was to ascertain how learning to write modifies children's use of grammatical constructions. Nine-year-olds use some passive constructions in written discourse, but almost never in spoken discourse (Figure 3). Starting from 12 years of age, the subjects used the passive in spoken, as well as written expository texts, while across age groups, passive constructions are more frequent in the written modality. It is often claimed that children write as they speak. These results suggest that children also learn to speak the way they write. That is, it may be the case that experience with use of passive constructions in writing increases their accessibility in speech.

3. Conclusion

The results reviewed here from several different studies of monologic text production highlight the importance of studying (later) language development on the basis of children's performance in both the written and spoken modalities. Generalizations based on just a single modality may fail to do justice to the developing linguistic knowledge of school age children, particularly at more advanced stages of general cognitive development, on the one hand, and of schooling, on the other, when subjects have had extensive experience with literacy-based activities and with reading and writing different types of academic discourse. Some forms, such as non-finite syntactic packaging or passive voice constructions, are more characteristic of the written modality. Relatedly,

pronoun ellipsis for topic maintenance and use of non-finite subordination for the purpose of inter-clausal information packaging develop later than the use of anaphoric pronouns as a competing means of expressing the function of reference maintenance; and the use of passive constructions to downgrade the agent of an event develops later than one of its competitors, the *on* construction. That is, later language development and development of written language as a special discourse style (Ravid & Tolchinsky 2002) coincide in the ability to use more sophisticated, more academic or higher register forms of expression.

The findings discussed here are typical of French, a language which is noted for a rather extreme divide between everyday colloquial usage compared with the higher, more formal linguistic register associated with the written modality. However, findings for related as well as other data bases suggest similar interactions between later language development and mastery of written language as a hallmark of literacy in different languages across a range of domains, including vocabulary (Ravid, this volume; Strömqvist et al. 2002); clause length (Ravid in press); clause-combining (Berman 1998); use of passive constructions (Jisa et al. 2002; Reilly et al. in press; van Hell et al. in press); as well as of other means for downgrading of agency (Tolchinsky & Rosado in press).

These late developing forms are all more characteristic of formal, planned discourse typical of writing in general and of academic language in particular (hence, too, of expository discussion rather than personal-experience narratives). Exposure to these constructions is crucial for their emergence, but experience with applying these constructions in a range of different contexts is crucial for their mastery (see Berman, this volume). Written language constitutes a highly appropriate communicative medium for exercising the ability to use such less frequent, higher-register constructions. It is thus not surprising that children's knowledge of and ability to use language is profoundly affected by learning to produce written discourse and by their increased command of written language as a special style of discourse.

Notes

1. I use a slash '/ ' to indicate rising intonation and a period ' . ' to indicate falling intonation.

3. The subject identification codes given at the end of these examples specifies the following variables: The first number or letter refers to age group: 9 refers to 9-10-year-olds, 12 to 12-13-year-olds, 15 to 15-16-year-olds and A refers to adults. The next number makes reference to the individual subject in the age group. Finally, Exp refers to expository, followed by an indication of modality, either Sp (spoken) or Wr (written).