

# WRITTEN LANGUAGE AND LITERACY

VOLUME 5 NUMBER 2 2002

## Special Issue

*Cross-Linguistic Perspectives  
on the Development of Text-Production Abilities  
in Speech and Writing (Part 2)*

Edited by Ruth A. Berman & Ludo Verhoeven

The studies reported in this volume of *WL&L* (5:1–2, 2002) all derive from a joint project entitled “Developing literacy in different contexts and in different languages”, funded by the Spencer Foundation, Chicago. The study encompasses seven languages — Dutch, English, French, Hebrew, Icelandic, Spanish, and Swedish — for which data were collected in Europe, Israel, and the US by graduate research assistants in education, linguistics, and psychology, under the supervision of a project director in each country — each of whom is listed as a first or “lead” author in the articles which follow the introduction to this collection.

*WL&L* will be concerned with two major aspects of written language: (a) the structures, histories, typologies, and functions of the writing systems (scripts) used by the languages of the world; and (b) literacy, i.e. the institutionalized use of written language, from the interdisciplinary viewpoints of linguistics, anthropology, sociology, psychology, education, literature and book arts.

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## Passive voice constructions in written texts:

### A cross-linguistic developmental study\*

Harriet Jisa, Judy S. Reilly, Ludo Verhoeven, Elisheva Baruch  
and Elisa Rosado

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The distribution of passive constructions is examined in written texts produced by native speakers of five Languages (Dutch, English, French, Hebrew, and Spanish), from four Age groups (aged 9–10, 12–13, 15–16 years, and adults). These languages contrast in the variety of structures available to promote a patient and to downgrade an agent in event encoding. The results show significant effects of Language and Age. When a language has productive alternative rhetorical options for the two functions, it relies less on passive constructions. Across all five languages, passives increase with Age. However, even our youngest subjects show a language-specific rhetorical bias.

#### 1. Introduction

The meaning of a given utterance is not a simple reflection of objective reality. Rather, meaning is the result of the interaction between the speaker's mind and the world (Croft 1991, 1994). We will use the notion "perspective on a scene" to clarify the relation between semantic roles and grammatical roles of participants. The scene, or the event to be described, is a complex entity composed of participants related via the predicate, and speaker/writers are free to select the verbs and the grammatical roles that they assign to the participant.<sup>1</sup> All grammars provide structural options for the expression of information, depending on the speaker's point of view or conceptualisation of an event or a situation and on the communicative intention in a given discourse context. The focus of the present study is the notion of grammatical "voice," a process entailing

alternations between the verb and its associated nominals (Klaiman 1991). A prototypically transitive situation involves two participants — an agent, the participant that acts in an intentional or voluntary manner to initiate the action, and a patient, the participant affected by the action of the agent (Fillmore 1977). One way of grammatically encoding a patient or undergoer perspective is by use of the passive voice. A patient argument becomes the foregrounded subject of the construction, with the agent being downgraded or even eliminated altogether. Thus the semantic function of the agent (*the dog*) and the patient (*the man*) remain constant in exx. 1–2, but they are mapped onto distinct grammatical roles:

- (1) The dog chased the man.
- (2) The man was chased by the dog.

Although 1–2 are truth-conditionally equivalent, they differ in the way the information is packaged within the clause (Vallduví & Engdahl 1996: 461).

The study presented here examines how writers of different ages and language backgrounds use passive voice constructions. Direct observation of an individual's conceptualisation of an event is impossible. However, much can be learned by examining how individuals encode events through their choice of grammatical voice distinctions. It is probably impossible to predict exactly when a passive construction will be used by a given speaker/writer. However, comparison of actual use of passive voice constructions by children and adults, writing in different languages, can bring us closer to understanding the probability of passive usage. This can then be explained as a function of various factors — including the availability or productivity of a structure in an individual's repertoire, the discourse context, register appropriateness, and the inventory of competing structures in form/function mappings within a given language.

## 2. Factors determining choice of grammatical options

Voice distinctions cannot be considered simply a question of grammaticality. Rather, as noted above, they are essentially a matter of a speaker/writer's choice, which in turn is dependent on a variety of factors. From a developmental viewpoint, it is important to ascertain at what age given structures are available in the individual's productive repertoire. The youngest age-group in our sample (9–10 year-olds) constitute a relatively advanced stage for the study of language acquisition as such. However, the work presented here is not concerned with

the initial acquisition of passive; rather, it concerns the actual use of passive constructions in written monologic texts at a period well beyond their initial emergence. Marchman et al. 1991 have shown that, in dialogue situations, English-speaking children as young as three years are able to use passive constructions like *The cat was chased by the dog* in response to questions specifically requiring answers which foreground the patient of the action (i.e. *What happened to the cat?*). But use of the same construction in the context of on-going monologic text construction may emerge considerably later, since children are required to create the discourse context that motivates the passive construction, as well as the passive construction itself.

Languages also differ in how passive constructions are distributed across different registers. In all the five language studied here (Dutch, English, French, Hebrew, and Spanish), passive constructions are considered most appropriate to formal and written registers. In English, for example, the passive voice has been associated with academic written prose (Swales 1990, Biber et al. 1998). In Hebrew, the canonical *be* passive is infrequent even in formal written texts, and is associated largely with academic or journalistic prose (Berman 1979).

Language-specific factors also need to be taken into consideration when evaluating usage in a given language. For example, Demuth 1992 has demonstrated that passive structures are extremely frequent in spoken Sesotho, even in dialogue discourse directed to children. She attributes this high frequency to a pragmatic constraint on subjects, which blocks new referents in subject position. Sesotho, then, allows only *You were given this by whom?* and disallows *Who gave you this?*

Another source of variation in the use of passives across languages is the restriction on possible arguments that can be promoted to subject in passives (Keenan 1985, Slobin 1993). English and Dutch allow passives on a large range of syntactic arguments, including non-accusatives. In contrast, Hebrew can only passivize objects marked by an accusative preposition; thus it does not allow passives such as *He was laughed at*, *It will be dealt with* (Berman 1979). Compared to English, then, Hebrew has fewer contexts in which a passive construction is a structural option. French and Spanish show a similar restriction, in that only accusative objects can be passivized. A French translation of *The doctor was sent for*, for instance, would require a construction using either the generic pronoun *on*, as in *On envoya chercher le docteur* (Vinay & Darbelnet 1995: 140), or a strictly transitive verb, *Le médecin a été appelé* 'The doctor was called.'

In addition to syntactic restrictions placed on the noun arguments that can be foregrounded to subject in passive constructions, there are also semantic and

pragmatic restrictions (Creissels 1995:279). Japanese, for example, allows only animate arguments as subjects of passive constructions. None of the languages studied here have such a semantic restriction. They do, however, all have a pragmatic restriction on grammatical subjects. In passive constructions, the "patient is more topical than the agent, and the agent is extremely non-topical" (Givón 1995:77). In fact, it will be shown that, across all five languages, suppressing the agent altogether — resulting in agentless passives — is by far the preferred option.

### 3. Competition

Speaker/writers select semantic roles to be expressed in a scene, but they must also select which participant will be foregrounded or backgrounded. As noted, Dutch and English show very few restrictions on arguments that can undergo passivization, while the other three languages in our sample can only passivize on direct objects. Yet all these languages must accomplish the same pragmatic work of foregrounding patient arguments and downgrading agent arguments (Keenan 1985). From a crosslinguistic and developmental point of view, then, it is important to evaluate the number of structural options available for a given function in a given language. Because passive constructions foreground non-agent participants, we need to ascertain what other means are available for foregrounding those participants. French and Hebrew, for example, make frequent use of topicalisations and dislocations for foregrounding a participant other than the agent. Passives also downgrade agent arguments, or eliminate them all together; so that it is important to specify what other structures are available in the language to accomplish this function. Two languages in our sample, Hebrew and Spanish, make important use of subjectless impersonals for this purpose (including *se* constructions in Spanish, but not in French). Some functions of English agentless passives are expressed in French through the use of an active clause with a generic personal pronoun *on* (Berman 1980, Ashby 1992, Koenig 1999), or through use of *se* to mark middle voice. Below we briefly review the constructions which compete to foreground patients and downgrade agents in the five languages of our sample.

### 4. Foregrounding patients

Common structural options for foregrounding a patient, in addition to canonical syntactic passives (3a–e), are topicalising structures (4a–e) and dislocations (5a–e) (Keenan 1985).

#### (3) Passives

- a. Dutch: Pierre werd door Marie geslagen.
- b. English: Pierre was hit by Marie.
- c. French: Pierre a été frappé par Marie.
- d. Hebrew: Pierre huka alydey Marie.
- e. Spanish: Pierre fue golpeado por Marie.

#### (4) Topicalisation

- a. Dutch: Het is Pierre die Marie geslagen heeft.
- b. English: It's Pierre that Marie hit.
- c. French: C'est Pierre que Marie a frappé.
- d. Hebrew: Haya ze Pierre še hikta Marie.
- e. Spanish: Es Pierre a quién Marie pegó.

#### (5) Dislocation

- a. Dutch: Wat Pierre (aangaat/betreft), Marie heeft hem geslagen.
- b. English: (As for) Pierre, Marie hit him.
- c. French: (Quant à) Pierre, Marie l'a frappé.
- d. Hebrew: Pierre, Marie hikta oto.
- e. Spanish: (En cuanto a) Pierre, Marie le pegó.

Topicalisations and dislocations differ from passives in two respects. First, in topicalisations and dislocations, the agent *Marie* maintains its status as the nuclear grammatical subject (Levelt 1989:97); but in passives, *Marie* is downgraded to the syntactic status of an oblique argument. Second, *Pierre* can be considered as more highly foregrounded in topicalisations and dislocations, as compared to passives (Keenan 1985).

In French, dislocations as in 5c are widely relied on in cases where a non-accusative argument is foregrounded. While ex. 6 is ungrammatical, the same event can be construed similarly using a dislocation, as in ex. 7:

- (6) \**Jean a été attribué un prix par le conseil*  
'Jean was awarded a prize by the council.'

- (7) *Jean, le conseil lui a attribué un prix*  
'Jean, the council awarded him a prize.'

Dislocation structures like ex. 7 are commonly used to topicalise a recipient indirect object in spoken, informal French; however, they are generally avoided in written or more formal language (Gadet 1990, 1997, Berrendonner & Reichler-Béguelin 1997). Hebrew speakers also make frequent use of dislocation structures for performing discourse functions associated with passive voice, i.e. for foregrounding a patient in everyday colloquial usage; e.g. passive forms are more typical of academic discourse and of journalistic reporting (Berman 1997).

### 5. Backgrounding agents

In addition to passive constructions, the pragmatic function of backgrounding agents can be achieved through a variety of structures, particularly impersonal and middle voice constructions. In cases where English can demote an agent through the use of an agentless passive, as in 8a and 9a, Hebrew (Berman 1979, Myhill 1997) and Spanish (Givón 1990:602, C. Lyons 1995) can use impersonal subjectless constructions, as in 8b–c and 9b–d:

- (8) a. Two teams will soon be organized.  
 b. Ye'argenu shney cvatim bekarov  
 (' [They] will-organise two teams soon.')
- (9) a. Apples are sold here.  
 b. Moxrim kan tapuxim.  
 c. Se venden las manzanas aquí.  
 d. Se vende manzanas aquí.

The Spanish structure in 8c and 9c — often referred to as the “passive reflexive,” “promotional passive,” or “*se* passive” (Arce-Arenales et al. 1994, C. Lyons 1995) — marks agreement between the patient and the verb (9c); the structure in 9d (“impersonal *se*”) omits such agreement. Note that neither the *se* passive structures in Spanish nor the subjectless impersonals in Hebrew and Spanish allow overt oblique agents (Berman 1979, 1980, Arce-Arenales et al. 1994, Myhill 1997). While English, Dutch and French require a surface grammatical subject, Spanish and Hebrew do not. Thus, in the last two languages, some of the functional load of downgrading agents is allocated to impersonal constructions without any surface subject.

French does not have an impersonal construction equivalent to Spanish or Hebrew; and agentless passives of English are often translated into French with

the active voice, using the impersonal pronoun *on* (Desclés et al. 1985:48). The French ex. 10 is a very common structure for downgrading an agent.

- (10) *On a attribué un prix à Jean* ‘Someone/One gave a prize to Jean.’

However, earlier work on a set of texts corresponding to the present sample shows that *on* is far more characteristic of spoken French than of written French (Jisa & Viguié 1999).

Dutch has a related construction, the impersonal passive, in which the verb is morphologically marked as passive by an auxiliary and a verb in the past participle, but there is no nominal in a nuclear relation to the verb:

- (11) *Er wordt (door de jongens) gefloten* ‘There became (by the young men) whistled’ =  
 ‘There was some whistling (by the young men)’ (Keenan 1985:274–75)

Note that the agent can be explicitly mentioned in this type of Dutch impersonal passive construction.

Another type of construction that functions to demote or downgrade an agent, and to foreground a patient, is the “middle voice” constructions. The active voice adopts the viewpoint of the most active party in a situation (the agent), and the passive voice adopts the viewpoint of the entity being acted upon (Lyon 1968, Klaiman 1991); but the middle voice, as its name implies, lies somewhere in between. The agent of the action is absent, and the predication is a statement about the affected participant. For instance, in English *This shirt irons easily*, the predication is about a quality or a state of the shirt, its “ironability.” No agent is mentioned, but one is understood, since only humans can perform the act of ironing. Across languages, middle voice constructions do not allow an agent argument (\**This shirt irons easily by everyone*, \**Cette chemise se repasse facilement par tout le monde*). Examples of middle voice constructions are:

- (12) a. Dutch: Dit idee werd ontwikkeld in Engeland.  
 b. English: The idea was developed in England.  
 c. French: Cette idée s'est développée en Angleterre.  
 d. Hebrew: Hara'eyon hitpateax be Angliya (Berman 1979:1)  
 e. Spanish: Esta idea se desarrolló en Inglaterra.
- (13) a. Dutch: Deze wijn wordt gemakkelijk geserveerd.  
 b. English: This wine serves easily.  
 c. French: Ce vin se verse facilement.  
 d. Hebrew: Yayin ze nimzag bekalut.  
 e. Spanish: Este vino se sirve fácilmente.

Dutch and English can express middle voice, but they lack explicit morphological forms for this construction like French and Spanish *se*, or Hebrew intransitive verb morphology. As a result, much of the functional load of middle voice constructions is carried by agentless passive constructions in the Germanic languages of the sample (12a–b).

The number of alternative options provided by the different languages can either increase or decrease the functional load attributed to passive constructions. The two null-subject languages (Spanish and Hebrew) use impersonal constructions as alternatives to passives, particularly in preference to agentless passives. We can therefore predict that these two languages will show fewer passives than the other three. Languages with morphologically marked middle voice constructions, like French, Hebrew and Spanish, are also expected to show fewer passives, since such constructions compete with agentless passives.

Given that passive constructions are more characteristic of formal written discourse in all five languages, we expect to see an increase in passives as a function of age. Our youngest children are clearly beyond the initial stages of learning to write; but they have had a much shorter period of exposure to and experience with written language, as compared to the older groups.

## 6. Results

Two Genres of written texts were examined: personal narratives and expository texts. The written texts of ten subjects, in each of four Age groups (9–10, 12–13, and 15–16 year-olds, plus adults), in each of five Languages (Dutch, English, French, Hebrew, Spanish), were coded for passive constructions, yielding a total of 400 texts that were examined. The findings presented here consider only forms which (a) are marked with passive verbal morphology, and which (b) allow an explicitly mentioned oblique agent, in so-called “syntactic” or canonical “verbal” passives (Keenan 1985). This means that subjectless impersonal and middle constructions have been excluded. Table 1 gives the distribution of passive constructions and the average length of texts for all Languages and Ages.

**Table 1.** Mean number of clauses per text, mean number of passive constructions per text, and percentage of passive constructions out of total number of clauses per text across the five languages and four Age groups

	9- to 10- year-olds	12- to 13- year-olds	15- to 16- year-olds	Adults
<b>DUTCH</b>				
<b>Narrative</b>				
Mean clause	13.7	17.1	47.3	36.2
Range of clause	5–36	7–44	23–86	14–60
Mean number of passives	.6	1	2.2	3.2
Range of mean number of passives	0–2	0–5	0–5	0–8
Mean % of passives	3.7	6.3	5.5	8.01
Range of % of passives	0–20	0–31	0–11.3	0–17.3
<b>Expository</b>				
Mean clause	12.6	16.2	46.9	43.3
Range of clause	5–32	7–44	28–104	25–89
Mean number of passives	.5	.7	3.9	7.3
Range of mean number of passives	0–2	0–3	1–7	2–27
Mean % of passives	4.11	4.8	9.1	15.2
Range of % of passives	0–13	0–23	3.3–20	4.8–30.3
<b>ENGLISH</b>				
<b>Narrative</b>				
Mean clause	16.1	22.5	41.9	48.8
Range of clause	4–36	11–61	22–66	24–96
Mean number of passives	.4	.5	1.5	1.6
Range of mean number of passives	0–2	0–2	0–5	0–4
Mean % of passives	2.3	2.4	2.6	3.7
Range of % of passives	0–15.3	0–9	0–7.5	0–8.8
<b>Expository</b>				
Mean clause	9.4	21.6	37.3	53.5
Range of clause	4–17	6–41	18–76	14–94
Mean number of passives	.4	1.7	4.2	5
Range of mean number of passives	0–2	0–5	1–12	1–8
Mean % of passives	4.6	8.1	12.43	11.48
Range of % of passives	0–25	0–16.6	3.9–25.5	1.5–28.5

	9- to 10- year-olds	12- to 13- year-olds	15- to 16- year-olds	Adults
<b>FRENCH</b>				
<b>Narrative</b>				
Mean clause	5.5	13.1	16.1	21.7
Range of clause	3-12	4-25	7-26	10-37
Mean number of passives	0	.8	.3	.6
Range of mean number of passives		0-2	0-1	0-2
Mean % of passives	0	5.7	1.9	3.1
Range of % of passives		0-14.2	0-8.3	0-9
<b>Expository</b>				
Mean clause	7.7	13.9	16.9	27.9
Range of clause	5-11	4-23	9-32	13-67
Mean number of passives	.3	.7	1.7	3.6
Range of mean number of passives	0-2	0-2	0-4	1-8
Mean % of passives	3	4.9	11.7	13.2
Range of % of passives	0-18.1	0-14.28	0-27.2	5.2-30.7
<b>HEBREW</b>				
<b>Narrative</b>				
Mean clause	8.3	17	12.9	23.4
Range of clause	2-31	5-30	5-25	12-51
Mean number of passives	0	.01	.05	.08
Range of mean number of passives		0-1	0-2	0-2
Mean % of passives	0	.47	5	3.1
Range of % of passives		0-4.7	0-20	0-9
<b>Expository</b>				
Mean clause	8.4	12.2	17.6	18.7
Range of clause	2-37	2-28	5-50	9-73
Mean number of passives	0	.3	.9	1.1
Range of mean number of passives		0-2	0-2	0-3
Mean % of passives	0	1.3	7.4	6.6
Range of % of passives		0-7.14	0-25	0-15.7

	9- to 10- year-olds	12- to 13- year-olds	15- to 16- year-olds	Adults
<b>SPANISH</b>				
<b>Narrative</b>				
Mean clause	12.8	26.9	57.8	55
Range of clause	6-24	15-41	4-159	14-140
Mean number of passives	0	.1	1.2	.6
Range of mean number of passives		0-1	0-3	0-3
Mean % of passives	0	.32	1.4	1
Range of % of passives		0-3.2	0-3.2	0-5
<b>Expository</b>				
Mean clause	12.5	30.8	46.7	49.6
Range of clause	4-25	14-48	20-111	20-132
Mean number of passives	.1	.3	.9	1.6
Range of mean number of passives	0-1	0-2	0-3	0-4
Mean % of passives	.76	1.6	2.4	4.3
Range of % of passives	0-7.69	0-14.2	0-11.53	0-13.7

### 6.1 Frequency of passive: Language

Table 2 shows the percentage of passive structures used in the five languages, across both text Genres and all four Age groups. Language shows an overall significant effect ( $F(4,395) = 11.64, p < 0.001$ ). There is no significant difference in distribution of passives between Dutch, English, and French, but each of these three languages differs significantly from Hebrew and Spanish. These last two languages do not differ significantly in the frequency of passive constructions. These results are summarized in Figure 1.

Table 2. Frequency of passive constructions by Language

	English	French	Hebrew	Spanish
Dutch	NS	NS	$p < 0.0001$	$p < 0.0001$
English		NS	$p = 0.0016$	$p < 0.0001$
French			$p = 0.007$	$p < 0.0001$
Hebrew				NS



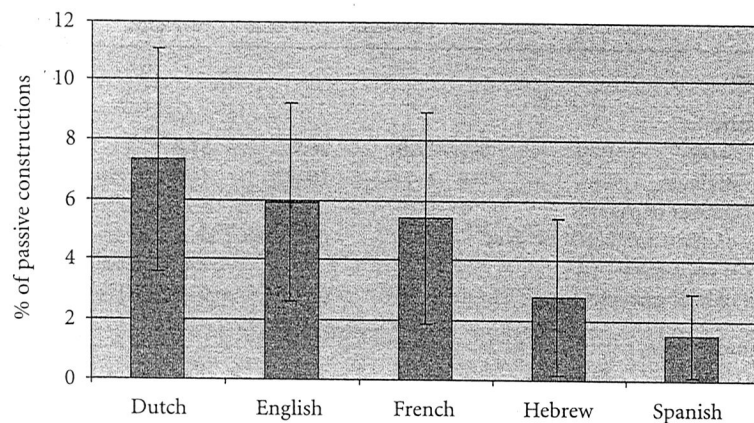


Figure 1. Percentage of passive constructions in written expository and narrative texts by Language

### 6.2 Frequency of passive: Age

Age also shows a significant effect on the distribution of passive constructions ( $F(3,396) = 12.75, p < 0.0001$ ). Table 3 shows the distribution of passive constructions by Age, across the five languages and both text Genres in the sample. These results are summarized in Figure 2.

Table 3. Frequency of passive constructions by Age

	12/13-year-olds	15/16-year-olds	Adults
9/10-year-olds	$p = 0.03$	$p < 0.0001$	$p < 0.0001$
12/13-year-olds		$p = 0.01$	$p = 0.0006$
15/16-year-olds			NS

### 6.3 Frequency of passive: Text type

Passive constructions are much more frequent in expository texts than in narrative texts ( $F(1,398) = 33.88, p < 0.0001$ ). Figure 3 shows this distribution for the entire sample, across Language and Age groups.

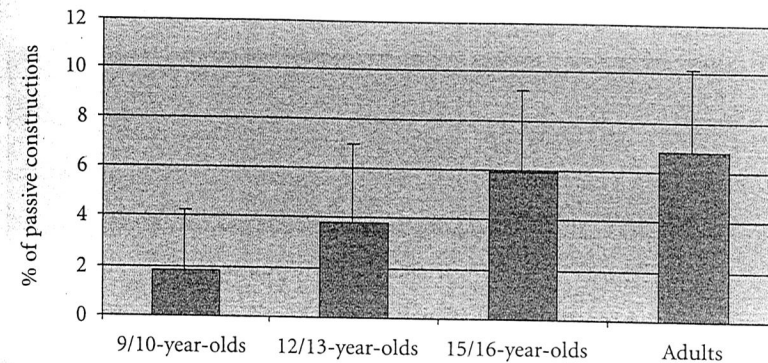


Figure 2. Percentage of passive constructions in written narrative and expository texts by Age

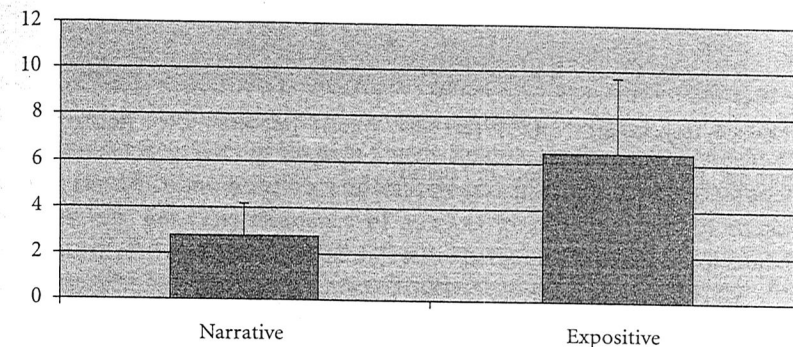


Figure 3. Percentage of passive constructions in written narrative and expository texts across Language and Age

### 6.4 Frequency of agentless passives

Agentless passives predominate in all five languages in our sample. The percentage of agentless passives per total passives for each Language is as follows: Dutch 94%, English 85%, French 76%, Hebrew 100%, Spanish 78%. No significant difference was noted between the two text Genres.

### 6.5 Development of passive construction across Age

Figures 4a–e show that the frequency of passive constructions increases with Age in all five languages. The findings concerning Language type are reflected

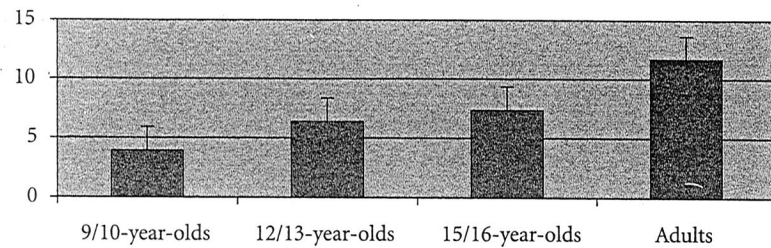


Figure 4a. Passive constructions in Dutch

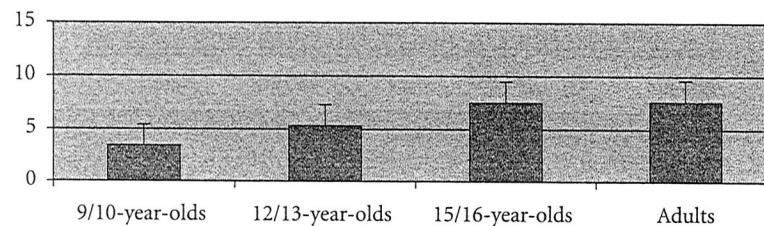


Figure 4b. Passive constructions in English

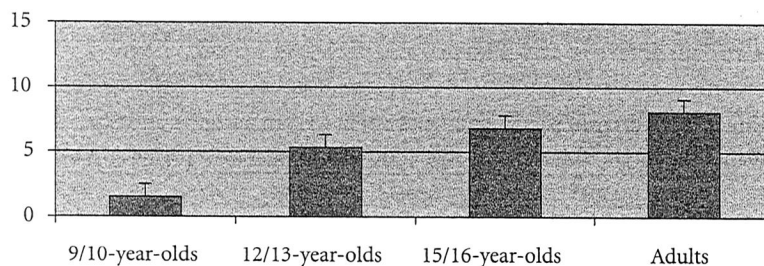


Figure 4c. Passive constructions in French

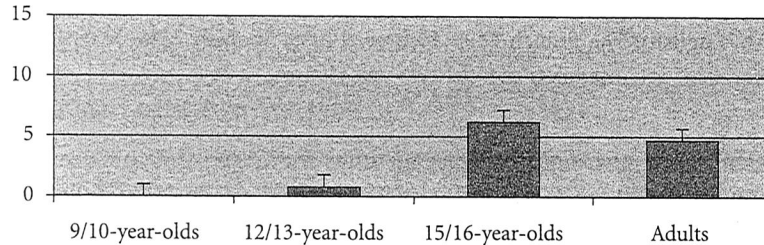


Figure 4d. Passive constructions in Hebrew

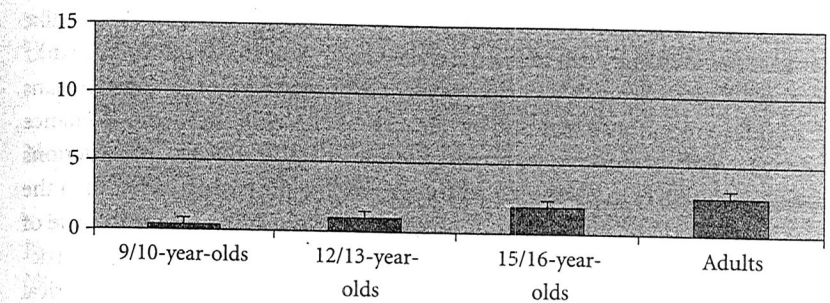


Figure 4e. Passive constructions in Spanish

in the developmental findings: Grade-school children (9–10 year-olds) in Hebrew and Spanish make almost no use of passives; the Dutch grade-school children show the highest frequency; and the English and French 9–10 year-olds are between the two extremes. The use of passives increases between grade school and junior high in all five languages; with the 12–13 year-olds showing a very similar frequency of usage in Dutch, English, and French. Frequency of passive constructions in the texts of Hebrew and Spanish junior high students remains very low. The frequency of passives for the high school students increases in all five languages. The difference between the high school students and the younger groups is particularly remarkable in Hebrew.

## 7. Conclusions

We have described the distribution of passive voice constructions in the narrative and expository texts, written in each of five languages, by children at three different levels of schooling compared with adults. These findings reveal that each of the independent variables had an impact on the relative use of these constructions: target Language, Age and level of schooling, and Genre.

With respect to Language, clear crosslinguistic distinctions emerge. As predicted, passive constructions are used significantly more in Dutch, English, and French than in Hebrew or Spanish; the last two languages show very little reliance on these constructions across the sample. Since French falls with the two Germanic languages in the sample, rather than with Spanish, there cannot be a straightforward “genetic” explanation for this grouping. Rather, Hebrew and Spanish share the key typological property that both allow null subject

constructions in simple clauses; and both have rich subjectless impersonal constructions which serve the purpose of downgrading agency — while, like agentless passives, they still imply the existence of an agent (typically human).<sup>2</sup> Moreover, French, Spanish, and Hebrew all have productive morphological means for middle voice constructions, by the use of the clitic *se* in the Romance languages, and intransitive verb morphology in Hebrew. Such constructions provide alternatives to passive voice, foregrounding the patient rather than the agent of an action or event. This in turn supports our proposal for the role of “competition” in speaker-writer selection of a particular grammatical construction. When a language has productive and readily accessible alternative rhetorical options for expressing the functions associated with canonical passive voice — namely downgrading of agency, and foregrounding of the patient — then it needs to rely less on passive constructions than languages which lack such options. Moreover, the same crosslinguistic trends were revealed across the Age groups in our sample; this fact supports the idea that children are attuned from an early age to the typological properties of their native languages. Thus even the children in our younger Age groups used passives more in Dutch and English than in Spanish or Hebrew.

The factor of Age and level of schooling revealed shared developmental trends in the use of passive constructions across all five languages in our sample. Typically, children in the two younger groups — grade-schoolers and junior high-schoolers — used passive less than the two older groups of subjects: high-school students near the completion of their formal schooling, and university graduate adults. This suggests that reliance on passive constructions in monologic texts is a function of (a) increased exposure to written language, as a special discourse style, and of (b) further experience with literacy-related activities at the more advanced stages of formal school study. This ties in with findings from a range of other, unrelated linguistic and discourse features, as analysed for the same project in other articles in this collection — including the development of lexical density and diversity, the use of complex nominals, and differentiation between spoken and written language use.

Finally, a consistent finding across text Genres, Age groups, and Languages in the present sample is the very high favoring of agentless passives, ranging from nearly 80% (French and Spanish) to almost 100% (Dutch and Hebrew). Our analyses of “authentic” discourse, in the form of specially elicited monologic narrative and expository texts produced by children and adults writing in different languages, thus provide strong empirical support for typologically motivated linguistic analyses of passive constructions across the languages of

the world (as in Keenan 1985). Where passive constructions are used, they will not only downgrade agency, but will typically avoid overt explicit mention of a (human) agent.

## Notes

\* This paper has benefited from extensive discussion and feedback provided by Ruth Berman and Denis Creissels; their input is most gratefully acknowledged. Janet van Hell, Moniek van Oosterhout, and Marjan Tak are acknowledged for their support in collecting and analyzing the Dutch data.

1. There is considerable variety in the terms used to refer to “participant,” including “thematic role” (Levelt 1989), “participant role” (Croft 1991, 1994, Goldberg 1995), “semantic case role” (Lakoff 1977), and “thematic relation” (Foley & Van Valin 1984, Van Valin 1993). The terms themselves are relatively unimportant. There is, however, another kind of variation which does seem relevant: the fact that some researchers focus on lexical (verb) selection as critical in assigning perspective, while others focus on selection of syntactic constructions.

2. The status of French subject pronouns is particularly troublesome, since they are often considered as clitic affixes attached to the verb (Creissels 1995, p.c.) Their combinatorial properties differ considerably from Germanic subject pronouns. For instance, as shown below (exx. a–b) in conjoined noun subjects, the disjunctive pronoun is required. Exx. c–d show that, when a scope particle such as *aussi* ‘also’ is inserted between the subject and the verb, the subject pronoun is disallowed.

- (a) \**Jean et il sont venus* ‘John and he came.’
- (b) *Jean et lui sont venus* ‘John and him came.’
- (c) \**Il aussi est venu* ‘He also came.’
- (d) *Lui aussi est venu* ‘Him also came.’

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