

French preschoolers' use of *et pis* ('and then')*

HARRIET JISA, *University of Lyon*

ABSTRACT

This research proposes a taxonomy for evaluating children's uses of sentence connectives. It is used to examine *et pis* ('and then') in the speech of monolingual French children ranging in age from 3 to 5 years and participating in a classroom-based 'show and tell' session. The younger children are shown to encode a wider variety of logico-semantic relations with *et pis*. The older children narrow down the range of logico-semantic relations encoded by *et pis* and show an increase in other structures which accomplish the same tasks.

INTRODUCTION

In the 1960s the decontextualized sentence was considered the appropriate unit for syntactic analysis. Subsequently, many linguists turned their attention to the notion of communicative competence. Communicative competence was considered not only the ability to use grammatically constructed sentences, but also the ability to use those utterances appropriately. Changing the definition of competence entailed increasing attention to context, both non-linguistic situational and linguistic.

As the nature of linguistic analysis in general has changed, so has the nature of the study of language acquisition. In recent years there has been an explosion of interest in the child's ability to comprehend and produce linguistic structures which function across sentences boundaries (e.g. Bloom, Lahey, Hood, Lifter & Fiess 1980, Bronckart & Schneuwly 1984, Clancy, Jacobsen & Silva 1976, Crystal, Fletcher & Garman 1976, Kail & Weissenborn 1984a, 1984b, Karmiloff-Smith 1981, 1983, Rutter & Raban 1982, Scott 1984). It has been shown that as early as two years children are sensitive to a notion of conversational coherence and encode it in across-speaker contexts through, for example, juxtaposition and sequencing (Foster 1981, 1982, Keenan & Klein 1975, Scollon 1976), repetition (Keenan 1974, 1977), and topic collaborating structures (Keenan & Schieffelin 1976).

* Address for correspondence: UER Sciences du Langage, Université Lyon 2, 69500 Bron, France.

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to refer to structural indexes of that potential coherence.

Semantic and Pragmatic et pis

The Semantic connective *puis* marks a relation of order, most usually temporal (van Hout 1974), defined by Posner (1980) as successivity; the event in the first conjunct happened prior to the event described in the second conjunct. If the speaker intends the events to be interpreted otherwise and does not give further temporal signals, s/he is violating the order of mention contract (Clark & Clark 1977, Grice 1975, Posner 1980).

Other semantic meanings can be combined with the Sequential meaning of *puis*. For instance, in the following example, based on Auchlin (1981b, p. 146), the relationship between the two prepositions is one of cause-consequence, implying necessarily a temporal order. In Example 1a the order of the events is reported in the order in which they occurred. In Example 1b, the order of mention is reversed.

Example 1

a. T'es pas venu avec nous *et pis* tu n'auras pas de dessert.
You didn't come with us *and then* you won't have any dessert.

b. *Tu n'auras pas de dessert *et pis* t'es pas venu avec nous.
*You won't (can't) have any dessert *and then* you didn't come with us.

Because *pis* requires that the second proposition temporally follow the first, Example 1b is unacceptable if the two events are intended to be related causally. In order to reverse the order of mention the speaker must use other connective devices, eg. *parce que* ('because').

Pragmatic (*et pis* functions to string propositions together in terms of their text structuring value. Chafe (1979) addresses the use of sentence connectives in recounting past experience, considering conjunctions such as *and*, *but*, *so*, or *then* as structural cues of the strategies that speakers use to conjoin a series of phrases or thoughts to create a coherent verbal text.

Auchlin (1981b), based on adult spoken French, classes *pis* as a marker of conversational constituent structure which connects propositions on the same level of textualization, i.e., the propositions introduced by *pis* do not usually open or close conversational exchanges, neither do they signal a change in level of textualization by introducing asides, new topics, refutations or reinitions of old topics.

In her study of spoken French, François (1974) points out the importance of considering *et pis* and *et puis* as functioning as pause fillers. Schiffrin (1982) also discusses the use of connectors in adult spoken English to signal that the speaker is not ready to relinquish his turn.

This paper attempts to begin the examination of one monologue strategy, examining specifically the French child's use of *et pis* ('and then'), a piece of grammar which must necessarily be treated in terms of function within a linguistic context. It describes and employs a taxonomy for categorizing children's uses of *et pis*. The specific questions which this paper asks are (1) how and in what contexts do children use *et pis*?; and (2) what are the differences in the use of *et pis* with age?

In the particular situation examined here, the children are narrating past events which they themselves experienced. Producing non-situated personal narrations requires that the child recall and report a series of related events and organize them into a comprehensible whole. Halliday (1975) suggests that enlarging functions change formal features of a child's linguistic system. One of the hypotheses that served as a catalyst for this research is that sentence connectors, such as *et pis*, should be a necessary piece of linguistic structure for learning a new function, i.e., to narrate in monologue texts.

The acquisition of sentence connectors deserves attention because in natural language they function as plurifunctional morphemes (Ducrot 1980a, 1980b, Judge 1975, Moeschler 1981, Roulet 1981, Schiffrin 1982, Scott 1984, van Dijk 1979, Zenone 1981a, 1981b, 1983). They have both a logical semantic value (Posner 1980, Quirk, Greenbaum, Leech & Svartvik 1976, van Dijk 1977a 1977b) and a pragmatic value, functioning to organize ongoing discourse into comprehensible structures (Auchlin 1981a, 1981b, Gulich 1970, Halliday & Hasan 1976, Moeschler 1981, Roulet 1981, Schiffrin 1982, Stubbs 1983, van Dijk 1977a, 1977b, Zenone 1981a, 1981b).

Consider, for example, the connector *alors* ('so') in French. In her analysis of spoken French, Judge (1975) found that *alors* functions semantically as an adverbial, meaning 'in this case' or 'at that moment', as a marker of sequence or consequence, as well as pragmatically as a marker of a speaker attitude (exclamative), of summarization, and as a marker of a return to the topic of discourse after a digression. One morpheme, then, accomplished logico-semantic tasks as well as discourse organizing tasks.

Another reason that connectives are interesting to examine in acquisition is because they are most often optional. The presence of the connector *et pis* is neither sufficient nor necessary to insure coherence between propositions. It is not the presence of the connective which makes two sentential conjuncts cohere; propositions cohere with or without explicit mention of the sentence connective (Auchlin 1981a, Schiffrin 1982, van Dijk 1977b). This optionality is important in understanding the difference between cohesion and coherence. Just as two propositions can cohere without the explicit use of a connective, two propositions can be marked as cohesive by the use of a connector, but lack coherence in their semantic content. In this study I use coherence to refer to semantic relationships between sentences and cohesion

Viewed from the perspective of production time, sentence connectives have an important function in the organization and production of discourse by a real speaker in real time. Viewed from the perspective of comprehension, *et pis* aids a listener to assign a constituent structure to ongoing discourse.

Specific goals of this study

Clark (1973) and Clark & Clark (1977) have shown that English-speaking children use *and then* to string events together, each event necessitating a new token of *and then*. The present study investigates French children's use of this strategy, considering *et pis* as a routine structure for monologue continuation; once a child begins to narrate, s/he can attempt to continue by using *et pis* to string together coherent or non-coherent propositions. The child may not know what the content of her/his next propositions will be, but s/he can continue the narrative routine by using *et pis*. In Karmiloff-Smith's (1983) terminology, the child uses *et pis* as a connective between outputs, between clauses not necessarily conceived of as forming a single unit or text.

In this study I will attempt to demonstrate a change in the children's use of *et pis*. Younger children should use *et pis* routinely to conjoin non-coherent propositions more than older children. Younger children should also use *et pis* to relate a larger variety of semantic relations than older children. The older children should rely less on *et pis* than on other strategies, either semantically more appropriate connectives or other syntactic structures, in their narratives.

METHOD

Description of the study

The data upon which this study is based consist of audiotape recordings of roughly three hours of interaction during eight 'show and tell' sessions recorded in two preschools in Lyon, France. During these sessions the children are asked to tell what they did over the weekend or the previous Wednesday (Children's Day in France). The data were collected on audiotape and supplemented by notes taken during the time of the recording.

The children are divided into two age groups: Group (1) 3;2-4;3 (6 girls, 5 boys; Mean age 3;10); Group (2) 4;6-5;0 (7 girls, 4 boys; Mean age 4;9). All of the subjects in both schools are middle-class children of white collar/professional parents (see Jisa 1985 for further description of the classroom situations).

The coding system

The coding system used in the analysis draws a structural distinction

between sentence connectives used in monologue contexts (Individual) and sentence connectives used in dialogue contexts (Linked). Following Scott (1984), the C-unit (Loban 1976) was used to isolate units considered as sentential utterances. Main clauses initiated with *et pis* were counted as separate utterances except where there was coreferential subject deletion (extremely rare in spoken French, see Lambrecht 1981). Simple *oui/non* ('yes/'no') responses were not counted as utterances.

An important functional distinction is drawn between Semantic and Pragmatic uses of sentence connectives (Halliday & Hasan 1976). Semantic uses refer to connectives which conjoin sentences in terms of logico-semantic content. Pragmatic uses refer to connectives which introduce propositions which *do* something in the interaction, *i.e.*, conjoin propositions in terms of their conversational act value. These coding distinctions will now be treated separately.

1. Structural Index

a. Individual/Linked

The term Individual is intended to capture the differences between the uses of the sentence connectives in monologue and dialogue. For the use of the sentence connective to be categorized as Individual, both conjoined constituents were contained within an individual child's single turn. If a child used a connective to begin an utterance following a teacher's question or comment, the use of the connective was considered Linked. However, it was considered Individual if the two utterances conjoined were separated only by a simple back channel turn (Schegloff 1972) or 'prise en compte' (Auchlin 1981a) of the teacher, defined here as 'utterances' such as *oui*, *yes*, *hm*.

b. Cohesive/Retropective

Cohesive uses of sentence connectives are cases in which both conjuncts coordinated by the sentence connective are full sentences. Non-sentential utterances (conjoined NP or VP) were coded as Retropective, a term adapted from Halliday & Hasan (1976). Retropective uses are not considered further here.

c. Other

In addition to those categories already discussed there is a category Other, which includes a variety of structures: the child was interrupted during the production of the conjunct introduced by the connective; the connective alone constitutes the turn; the utterance introduced by the connective was uninterpretable; the connector was followed by a repair; and finally, the conjunct introduced by the connective was conjoined to an action or a state in the non-verbal situation. Uses encoded as Other will not be considered further.

2. Functional index: Semantic/Pragmatic relationships

The logico-semantic relationships examined in this study are based largely upon those used by Bloom *et al* (1980) and upon the work of Halliday & Hasan (1976) and van Dijk (1977b). Table 1 lists the Semantic relationships which were examined in this study.¹

TABLE 1. *Semantic relationships*

<i>ADDITIVE</i> In Additive Semantic relations two conjoined events or states are simultaneous and are often enumerations of members of a same class.	Je suis allé au magasin <i>et pis</i> ma maman est venue aussi. I went to the store <i>and then</i> my mummy came too.
<i>SEQUENTIAL</i> In Sequential Semantic relations the two conjuncts share a consecutive temporal relation.	Je suis allé chez le médecin <i>et pis</i> il m'a donné une piqûre. I went to see the doctor <i>and then</i> he gave me an injection.
<i>CAUSAL</i> In sentences related causally there is a relationship of cause and consequence or effect. The cause is a sufficient cause of the consequence.	Il pleuvait <i>et pis</i> on pouvait pas jouer dehors. It rained <i>and then</i> we couldn't play outside. Jean m'a frappé <i>et pis</i> j'avais un bleu. John hit me <i>and then</i> I got a bruise.
<i>ADVERSATIVE</i> The two events or states sharing an Adversative relationship are those related by contrast or opposition; what is most expected as a conclusion of what is stated in the first conjunct is contrary to what is stated in the second conjunct.	Le chien aboyait <i>et pis</i> il était pas méchant. The dog was barking <i>and then</i> he wasn't bad tempered.
<i>SPECIFICATION</i> Clauses related through Specification are those in which the second clause describes an object or a person mentioned in the first clause.	Le Père Noël il était là <i>et pis</i> il avait une barbe blanche. Santa Claus he was there <i>and then</i> he had a white beard.
<i>NO RELATION</i> No Relation uses of sentence connectives conjoin conjuncts between which no coherent relationship could be established.	J'ai vu le Père Noël <i>et pis</i> ma soeur elle a des sandalettes. I saw Santa Claus <i>and then</i> my sister she has some sandals.

The Pragmatic functions include cases in which the sentence connective introduces a conjunct that shapes the discourse situation, i.e., to conjoin a Bid for a turn (*et pis moi je veux parler*, 'and then me I want to talk'): to

1. The Semantic relationships listed on Table 1 are a subset of the relationships studied in Jisa (1985). For the present study, I am considering only the semantic relationships encoded by *pis* in the data.

TABLE 2. *Pragmatic Functions*

<i>Bid</i>	An utterance which functions to solicit a turn is considered a Bid.
<i>Break/Stall</i>	Break/Stall uses of connectives are cases in which the child ends his turn with at least two tokens of <i>et pis</i> and is subsequently interrupted by another child or by the teacher. From the speaker's point of view these uses of sentence connectives can be considered as potential floor holders. From the listener's point of view they can be considered as potential breaks during which one can attempt to take the floor.
<i>Coda</i>	Coda uses of <i>et pis</i> conjoin an explicit signal that the child speaker's turn is finished, e.g., <i>et pis j'ai fini (and then I've finished)</i> .

TABLE 3. *Total uses of et pis*

	Number of Utterances	Number of uses of <i>et pis</i> Total	Semantic		Pragmatic
			Individual	Linked	
<i>Group 1</i> (11 subjects)					
Mean	54.72	7.27	4.09	1.72	0.27
SD	29.82	5.92	3.21	1.33	0.39
Range	50-142	1-23	0-14	0-4	0-1
<i>Group 2</i> (11 subjects)					
Mean	58.18	4.54	1.54	1.45	1.18
SD	39.68	2.96	1.21	1.03	0.98
Range	70-811	1-11	0-5	0-4	0-4

explicitly encode the completion of a speaker's turn (Coda) (*et pis c'est tout*, 'and then that's all'); or is repeated at least twice in turn-final position (Break/Stall). Table 2 gives definitions for Pragmatic uses of *et pis*.²

To summarize, the coding system employs two structural distinctions, Individual and Linked, each further subdivided into Cohesive and Retrospective and two functional distinctions, Semantic and Pragmatic. In Individual uses both conjuncts are contained within a child's single turn. In

2. Again, the Pragmatic uses defined on Table 2 are a subset of the Pragmatic uses studied in Jisa (1985). Only the Pragmatic uses encoded in the data by *pis* are considered here. There may be some possible confusion between Pragmatic uses and Semantic No Relation uses of *et pis*. Unlike Pragmatic uses, No Relation uses of *et pis* introduce a conjunct which reports an event or a fact that is neither related to the discourse situation nor to the previous proposition.

Linked uses the sentence connective conjoins an utterance across-speaker turns. Only sentential, Cohesive uses are reported on here.

RESULTS AND DISCUSSION

1. *Total uses of et pis*

Table 3 lists the total uses of (*et pis*) found in the data.

Neither the mean number of utterances nor the mean number of total uses of *et pis* differ significantly between the two groups. The biggest difference between the two groups is in the distribution of uses. The older children tend to use *et pis* in Linked contexts as often as they do in Individual contexts. The younger children used more Individual than Linked *et pis*. This finding is in line with the argument given by Bloom *et al* (1980): children first use sentence connectives in their own individual production before they use them in across-speaker contexts. The older children also use more Pragmatic *et pis* than the younger children. Each of these uses will now be examined individually.

2. *Individual Cohesive uses of et pis*

Table 4 shows the Individual Cohesive uses of *et pis*.

Group 1 subjects use *et pis* in total Individual Cohesive contexts significantly more than Group 2 subjects (two-tailed *t*-test = 2.64, $P > 0.02$). The fact that Group 1 uses *et pis* cohesively does not mean, though, that all of the

TABLE 4. *Individual Cohesive uses of et pis*

	Total	Sequen- tial	Additive	No Rela- tion	Specifi- cation	Causal	Adverts- ative
<i>Group 1</i> (7 subjects)*							
Total	45	17	12	7	5	3	2
Mean	6.42**	2.42	1.71	1.0	0.71	0.42	0.17
SD	3.91	1.79	0.81	1.14	0.81	0.60	0.24
Range	1-14	0-6	1-3	0-4	0-3	0-2	0-1
<i>Group 2</i> (7 subjects)*							
Total	17	7	6	0	0	4	0
Mean	2.42**	1.0	0.85			0.57	
SD	0.89	0.57	1.21			0.48	
Range	1-5	1-2	0-5			0-1	

*Subjects using *et pis* in Individual Cohesive context

**Total Mean based on 11 subjects in each group.

instances of *et pis* used to conjoin two sentential conjuncts within one turn should be considered to display meaningful coherence between the two sentential constituents.

The most frequently encoded semantic relationship for both groups is Sequential. The next most frequently used meaning relationship is Additive, followed by No Relation. There is no significant difference between the two groups in the use of *et pis* to encode Sequential or Additive relations.

The number of No Relation routine uses of *et pis*, those which connect utterances as pieces of output, rather than as pieces of a coherent whole diminishes with age. The children in Group 2 did not use *et pis* as a routine narrating strategy in Individual Cohesive contexts, while the children in Group 1 did (two-tailed *t*-test = 2.38, $P > 0.05$).

A pattern similar to that for sentences which have No Relation between them is found in the use of *et pis* to mark a Specification relationship. Children in Group 1 used *et pis* to encode Specification relationships while children in Group 2 did not (two-tailed *t*-test = 2.36, $P > 0.05$).

A relevant question at this point is how do children in Group 2 encode Specification relations? In Individual contexts, older children preferred relative clauses to further specify noun phrases. Table 5 lists the strategies children used to mark Specification relationships in Individual contexts. *Connector* refers to the use of *et* or *et pis*. *Juxtaposition* refers to simple juxtaposition of the first clause in which the noun phrase is mentioned and the second specifying clause. *Relative Clause* refers to the use of a relative clause to embed a specifying clause.

TABLE 5. *Strategies for marking Specification relationships in Cohesive contexts*

<i>Connector</i>	
CE/girl/4:0	
CE:	y a une porte <i>et pis</i> la moitié elle est cassée la porte there's a door <i>and then</i> half the door it is broken the door
<i>Juxtaposition</i>	
H/boy/3:4	
H:	j'ai joué avec ma soeur () elle s'appelle Stephanie I played with my sister () her name is Stephanie
<i>Relative Clause</i>	
CE/girl/4:0	
CE:	moi j'ai joué dans une une mai une maison <i>qui</i> a pas de fenêtres me I played in a house house <i>that</i> doesn't have any windows

Table 6 shows the figures for marking Specification relationships between propositions in monologue.

TABLE 6. *Strategies for marking Specification relationships in Cohesive contexts*

	Connector and Juxtaposition	Relative Clause	Total
Group 1	13 (59%)	9 (41%)	22
Group 2	9 (28%)	23 (72%)	32

Connector and Juxtaposition have been collapsed. The children in Group 2 show more use of Relative Clauses and less use of Connectors (Chi Square, Yates corrector factor = 3.97, $P > 0.05$).

It has been argued (Ochs 1979) that relative clauses demand more pre-planning than coordination or juxtaposition. The fact that the older group uses a higher percentage of relative clause structures for Specification can be interpreted as evidence that they are monitoring their monologues at a textual level during production more than the younger groups. In marking specification relationships between successive propositions, the older children show evidence of replacing the *et pis* strategy with a relative clause strategy.

The encoding of Adversative relationships was rare in the data. To mark Adversative relationships the older children used *mais* ('but') while the younger children used *et*, *et pis* or *et pis après* ('and then after') (see Jisa 1985 for details). In the case of Adversatives, the older children seem to have replaced *et pis* with the semantically more appropriate *mais*. For Specification and Adversative relationships there is, then, some evidence that the children have replaced an *et pis* strategy with other structures, as was expected.

The data for Causal relationships, however, is not clear. In a longitudinal study of four children, ages 3-6, Chambaz, Leroy & Meseant (1975) studied the interaction of coordinating *alors* ('so') and the subordinating conjunction *parce que* ('because'). They found that *parce que* occurred before *alors* for three of the four children. For one child *alors* and *parce que* occurred at the same time. Despite the fact that *parce que* requires reversing the order of mention there was no evidence in their data to support that it was a later acquisition. They point out that, on the basis of their data, it would be premature to conclude that subordination with *parce que* appears before or at the same time as coordination. I was hoping that by collapsing the connectors *et pis* (*après*) (and then (after)) and *alors* ('so') I would find

TABLE 7. *Individual Cohesive Causal semantic relationships*

Total	Connector (<i>et, et pis</i> (après), alors)	Subordinating Conjunction (<i>parce que</i>)
<i>Group 1</i> (5 subjects)*		
Mean	1.81**	1.8
SD	2.13	1.76
Range	0-9	0-6
<i>Group 2</i> (9 subjects)*		
Mean	2.63**	1.88
SD	2.07	1.20
Range	1-7	0-4

*Subjects encoding Causal relationships in Individual Cohesive contexts

**Total Mean based on 11 subjects in each group

evidence that the conjoining strategy would precede the reversed use of the subordinating conjunction *parce que*. The results shown on Table 7 show no significant difference between the two groups in the use of either a connector or a subordinating conjunction in encoding Causal relationships between propositions.

It was expected that the younger children would use *et pis* to encode more Semantic relations between propositions than older children. Children in Group 1 used *et pis* to conjoin sentential conjuncts sharing six Semantic relationships: Sequential, Additive, No Relation, Causal, Specification and Adversative. Children in Group 2 conjoin sentential conjuncts sharing three Semantic relationships: Sequential, Additive and Causal. For the older group, then, there is a narrowing down of the semantic relationships encoded by *et pis*. The older children replace *et pis* with subordination in the case of Specification relationships and with *mais* for Adversative relationships.

3. *Linked uses of et pis*

Table 8 presents the Cohesive Linked uses of *et pis*.

As was seen in Individual Cohesive uses, there is no significant difference between the two groups in total mean number of Linked uses. The only significant difference between the two groups is in No Relation uses. Group 1 uses No Relation *et pis* in Linked contexts more than Group 2 (two-tailed t -test = 3.23 $P > 0.02$). In Cohesive contexts, No Relation tokens are found in Group 1 only. In Linked contexts, No Relation *et pis* was used by Groups 1 and 2.

TABLE 8. *Cohesive Linked uses of et pis*

	Total	Sequential	Additive	No Relation	Causal
<i>Group 1</i> (4 Subjects)*					
Total	11**	1	2	7	1
Mean	1.0	0.25	0.50	1.75	0.25
Standard Deviation	1.18	0.37	0.75	0.75	0.37
Range	0-3	0-1	0-2	0-3	0-1
<i>Group 2</i> (7 Subjects)*					
Total	11**	1	4	3	3
Mean	1.0	0.14	0.57	0.42	0.42
Standard Deviation	0.72	0.24	0.65	0.48	0.61
Range	0-2	0-1	0-2	0-1	0-2

*Subjects using *et pis* in Cohesive Linked contexts

**Total Mean based on 11 subjects in each group

In across-speaker Linked contexts, then, both groups show more non-meaningful uses of *et pis* to explicitly link their contributions to the first pair-part of an adjacency pair. In across-speaker contexts the connective is used to mark an adjacency pair relationship in structure, but not in propositional content.

4. *Pragmatic uses of et pis*

The Pragmatic uses of *et pis* are presented on Table 9.

TABLE 9. *Pragmatic uses of et pis*

	Total	Break/Stall	Bid	Coda
<i>Group 1</i> (3 subjects)*				
Total	3**	1	1	1
Mean	0.27	0.33	0.33	0.33
Standard Deviation	0.39	0.36	0.36	0.36
Range	0-1	0-1	0-1	0-1
<i>Group 2</i> (7 subjects)*				
Total	13**	10	1	2
Mean	1.18	1.42	0.14	0.28
Standard Deviation	0.98	0.89	0.24	0.40
Range	0-4	0-3	0-1	0-1

*Subjects using *et pis* in Pragmatic contexts

**Total Mean based on 11 subjects in each group

that they are beginning to understand that what is marked as cohesive should also be coherent.

CONCLUSION

In this examination of French children's uses of *et pis* I have attempted to use a taxonomy for categorizing uses of *et pis*. I argued that older children narrow down the range of logico-semantic relations encoded by *et pis* to include those relations which entail a consecutive temporal component. Older children also replace earlier uses of *et pis* (i.e., Specification, Adversative) with other strategies for encoding the same semantic information. It was also argued that older children use Pragmatic Break/Stall *et pis* to preplan subsequent coherent propositions. The changes in the older children's performance with *et pis* were related to Karmiloff-Smith's (1983) notion of top-down control in monologue production. The older children show more evidence of cohesively and coherently organizing their monologues as wholes than the younger children.

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Group 2 uses *et pis* in Pragmatic functions significantly more than Group 1 (two-tailed *t*-test = 3.03, $P > 0.01$). Bid and Coda are used infrequently by both groups and there is no significant difference between the two groups for either function.

The most frequent use of Pragmatic *et pis* is Break/Stall in which the child ends his/her turn with at least two tokens of *et pis* and is subsequently interrupted by another child or by the teacher. In these cases the speaking child is using *et pis* to mark time while s/he searches for the next idea unit or piece of information. The listening children and the teachers are aware that the speaking child is using *et pis* as a floor holder and use it as a potential place to take the floor. Group 2 uses Break/Stall *et pis* significantly more than Group 1 (two-tailed *t*-test = 2.86, $P > 0.05$). The older children seem to have latched on to this function of *et pis* for attempting to keep the floor.

A question which needs to be addressed is why does Group 2 show so many Pragmatic Break/Stall uses of *et pis* and so few Semantic No Relation uses of *et pis*? Semantic No Relation uses of *et pis* introduce sentential conjuncts which are not meaningfully related to the preceding proposition. Younger children were observed to use more No Relation uses of *et pis*. Pragmatic Break/Stall uses are turn-final repetitions of *et pis* which are subsequently interrupted by another speaker. Whereas Semantic No Relation uses can be considered a routine strategy for turn continuation, Break/Stall cases would seem to be an indication that children realize that because they have used *et pis*, they are obliged to continue with a *coherent* proposition. Break/Stall uses gain time during which children can formulate a next proposition already marked as being cohesive with *et pis*. It would seem, then, that Break/Stall uses should be considered as evidence of preplanning for coherence, even though the preplanning is not successful.

The children who used No Relation cohesive ties extensively can be considered, in Karmiloff-Smith's (1983) terminology, to be 'data driven' in that their monologues are constructed not as a whole but as separate, even, in this study, unrelated events, each event in the monologue tied cohesively, though not necessarily coherently, through the use of a connector. The sentences conjoined by *et pis* form, in the child's system, a *structurally* cohesive whole, even if the coherence between the conjoined propositions, the meaning between them, is missing.

The older children, who show fewer No Relation uses of sentence connectors, are attending to a 'top-down control' process through which the separate micro-components of the monologue are organized semantically for content and tied structurally with sentence connectors. Older children show other evidence of 'top-down control': relative clauses for marking Specification relations; uses of semantically more appropriate *mais* for Adversative relations; and uses of Pragmatic Break/Stall *et pis*, evidence

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NOTES FOR CONTRIBUTORS

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