ABSTRACT

This study examines the effects of utterance form and appropriateness on how children report conversations. Children between 7 and 9 years were asked to narrate filmed dialogues that contained two types of target utterances: (a) declaratives, interrogatives, or imperatives that were used appropriately as directives; (b) declaratives and interrogatives that were inappropriate from the point of view of information exchange, i.e., that should not have been used by the interlocutors as means of giving or requesting information, given background knowledge conditions. When reporting the appropriate directive targets, the 7/8-year-olds frequently transformed declaratives into more explicit imperatives, while the 9-year-olds' reports did not vary systematically with directive types. With respect to the inappropriate targets, omissions were more frequent at 7/8 years, transformations at 9 years. Transformations consisted most often of changing the mood or modality of inappropriate declaratives to make them appropriate. Some role reversals also occurred with inappropriate interrogatives. Finally, children of all ages omitted or transformed other events preceding or following the target utterances, so as to make the dialogues coherent more globally. These findings show children's sensitivity to the forms and functions of utterances in conversations, but they also suggest developmental changes in their reporting strategies. The younger children prefer functionally transparent reports and they omit utterances in cases of inadequate conditions of use. With increasing age, children use more complex strategies to adapt some inappropriate utterances locally by transforming systematically their form, their conditions of use, and/or their functional value.

1. Introduction

Multifunctionality and contextdependence are two central properties of language use that must be confronted
by children during their development. Thus, the same type of utterance can serve several functions, e.g., declarative utterances describing states of affairs can be the means to phatic contact, directives, jokes, insults, or accusations. Conversely, we can use different types of utterances as means towards particular goals, e.g., imperatives, interrogatives, and declaratives can all serve to direct others to do something. The aim of the present study is to examine children's sensitivity to such relations among forms, functions, and contexts as it is reflected in how they report conversations. For this purpose, the analyses below focus on narratives that were elicited systematically with filmed dialogues. Particular attention is placed on whether both the forms of utterances and their appropriateness from the point of view of information exchange affect children's reporting strategies.

Developmental research in psycholinguistics and sociolinguistics has shown a growing interest for the study of pragmatics. Over the years this interest has resulted in a large and heterogenous set of writings concerning very diverse components of children's linguistic competence and implications for social and cognitive aspects of development. Domains of study have included politeness, modality, direct and indirect speech acts, stylistic registers, deictic and anaphoric reference, etc. (e.g., Bates, 1976; Ervin-Tripp and Mitchell-Kernan, 1977; Ochs and Schieffelin, 1979; Karmiloff-Smith, 1979; Bruner, 1983; Hickmann, 1987; Andersen, 1990). Despite the great diversity among them, all these studies share a common interest in multifunctionality and context dependence during language development. Indeed, children's ability to relate forms, functions, and contexts is an essential pragmatic component of the competence they must acquire to become native speakers. Thus, children must learn that, given particular speech situations, the same utterance form can have several functions and different utterance forms can have the same function.

Children's developing pragmatic knowledge has been examined on the basis of different kinds of data, ranging from naturalistic observations of children's productions to more controlled experimental situations. According to a number of such studies, young children seem to have some surprisingly precocious knowledge -- and perhaps even some "awareness" -- of language use, e.g., they use and respond effectively to "indirect" directives, adjust their speech
as a function of role relations (e.g., age and status), and judge which utterances would be politer and/or more appropriate for a specific speaker (e.g., some reviews and discussions in Clark, 1980; Tunmer et al., 1984; Gombert, 1990).

For example, Andersen (1990) shows that children between 4 and 7 years of age use appropriately different types of utterances when they act out roles in play situations (e.g., father, mother, and child in a family context). Children of all ages displayed a complex set of sociolinguistic skills, although some developmental differences were also found. For example, children relied at first more on voice quality, on phonological markings and on prosody, but with increasing age they relied more on the content talked about and on lexical items, then on the forms of utterances such as directives. The oldest children used the widest and most differentiated range of directive forms, but even the 4-year-olds varied these forms systematically, e.g., using more imperatives when playing the role of parents addressing children than vice versa.

More research is necessary, however, to determine the precise nature of such skills. Thus, it is not clear whether children who vary utterance forms as a function of roles are able to talk about these form-role relations explicitly. More generally, surprisingly little is known about how children represent different speech events linguistically not only when they talk about them, but also when they simply report them. Analyses of children’s reported speech could provide evidence concerning various aspects of children’s pragmatic knowledge. For example, the verbs of saying they use to quote different types of speech events (e.g., asking, telling, promising) could indicate how they classify speech events and variations in their reporting strategies (e.g., omissions, transformations) could indicate their sensitivity to utterance form, function, and/or appropriateness in context.

Some indirect evidence concerning children’s representations of speech events comes from experimental studies focusing on children’s interpretations of verbs of saying. These studies, however, have made different claims with respect to the factors determining children’s performance. Thus, Chomsky (1969) interprets her results as showing children’s gradual acquisition of syntactic rules (the "Minimal Distance Principle"). In this study
utterances consisted of assertions with or without the modal verb CROIRE ("think, believe"), e.g., "it's the monkey that spilled the cup" versus "I think/believe it's the monkey that spilled the cup". If the speaker had not witnessed the event, in principle he was not in a position to assert who had done the deed without qualifying his assertion by means of a modal device. Conversely, if he had witnessed the event, he was in a position to produce a nonmodalized assertion, so that his use of a modal device was at best odd. Children at all ages were sensitive to mismatches between the speaker's epistemic state and his utterance. For example, when the speaker had witnessed the event, but produced a modalized utterance, they often omitted the modal device in their reports and invented events during the interview or attributed to the assertion some additional functional value which made it appropriate. However, only the older children were able to differentiate situations and utterance types explicitly in their metalinguistic judgments. For example, when the speaker had not been a witness and had produced a nonmodalized assertion, they stated that he should not have made the accusation because he could not have known who had done the deed.

Related findings come from Aksu-Koç's studies (1988) of the production and comprehension of "evidentials" by Turkish children from 3 to 6½ years. These obligatory modal markers in Turkish indicate whether the propositional content of declarative utterances corresponds to information that has been directly witnessed by the speaker ("direct evidence") or that is known from indirect sources, including inference and hearsay ("indirect evidence"). Aksu-Koç's studies show an early ability to differentiate the two epistemic perspectives of witnesses versus nonwitnesses. However, children first reject the possibility that a speaker could talk about events he has not witnessed. In addition, it is not until later that they can relate both perspectives to the corresponding linguistic devices available in their native language. For example, children were asked in one study to identify the speaker of modalized declarative utterances, i.e., to attribute them to witnesses vs. nonwitnesses. Before 5 years, children thought "assertions" to be appropriate only for witnesses, but could not say what utterances would be appropriate for nonwitnesses. Between 5 and 6 years, they attributed to nonwitnesses questions or declaratives that were modalized periphrastically ("it seems"). Finally, by 6;4 years children were able to attribute correctly to witnesses vs.
nonwitnesses declaratives that were modalized by means of both types of evidential inflections. Among all appropriate uses of the evidentials with nonwitnesses, the quotative function is the latest to be acquired.

In summary, then, when young children are presented with isolated sentences instructing them to perform a speech action (to tell, to ask) or to identify the appropriate speaker for such an action given background conditions, their performance indicates that they are sensitive to the contexts in which utterances constitute appropriate requests for information or assertions of facts. Other results show that they may not be able to associate particular linguistic devices to different espitemic perspectives, particularly at a metalinguistic level, even if they show some sensitivity to the relation between utterances and epistemic states. Children’s performance in narrative situations also suggests that this sensitivity to contextual factors leads them to transform inappropriate assertions when reporting them, even before they can produce explicit metalinguistic judgments about them. It is not clear, however, whether children transform not only inappropriate declaratives, but also other types of inappropriate utterances, such as interrogatives, when reporting conversations in narrative form or when judging them. More generally, it is difficult to further compare the results of these studies, given the very different nature of the tasks and stimuli involved.

The study below further examines how children report dialogues, with particular attention to whether their reports vary as a function of utterance form and appropriateness. For this purpose, children were asked to narrate filmed dialogues in which several types of target utterances had been inserted. These dialogues contained utterances of different forms (imperatives, declaratives, interrogatives), all of which were used appropriately as directives to get someone to fetch something during the dialogues. They also contained declarative and interrogative utterances that were inappropriate from the point of view of information exchange, i.e., they constituted inappropriate assertions or requests for information, given the background knowledge of the participants. The analyses focus on children’s recall, omissions, or transformations of these targets, as well as on more global narrative strategies involving other events which preceded and followed them in the dialogues.
the interlocutor to know it.

With the exception of the targets, the conversations were made to be as similar to each other and as natural as possible. The utterances surrounding the targets included a variety of other types of speech events which were all appropriate and which were distributed randomly across dialogue versions. However, with materials of this kind, it is of course difficult to ensure that degree of inappropriateness is totally identical across conversations. As is typical of all language use, it is always possible to imagine some context, even a far-fetched one, in which an utterance that is inappropriate strictly from the point of view of information exchange can be interpreted as appropriate, given some other functional value(s). Thus, an assertion that is inappropriate from the point of view of information exchange because of insufficient background knowledge on the part of the speaker can be interpreted as a "strong" or "lucky" guess, especially if it is possible to assume that the speaker either has a high degree of certainty on the basis of some imagined source of background knowledge (including world knowledge). It can therefore become appropriate, even if the guess turns out to be wrong. Similarly, inappropriate questions can be interpreted as attempts to "cover up" (i.e., pretending not to know the requested information).

Table 1 illustrates the properties of the materials with one of the filmed dialogues (the other dialogues are discussed in detail in section 4 below). The dialogue in Table 1 (CHEESE I) contained an inappropriate question (Ken's question in the fourth speaking turn "What is there to eat?") and a declarative directive (Fiona's utterance in the ninth speaking turn "The knife is in the dining room").

In summary, three separate versions (I, II, and III) of each of the three scenarios (CHEESE, PRESENT, and BIKE) were prepared. Five target utterances (three appropriate, two inappropriate) were inserted in the dialogues for each scenario, distributed across the three versions. The distribution of these target utterances is shown in table 2.
TABLE 1: EXAMPLE OF DIALOGUE WITH INAPPROPRIATE QUESTION

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fiona:</td>
<td>(on the phone) <em>Okay. Bye.</em> (puts phone down)</td>
</tr>
<tr>
<td>2. Ken:</td>
<td>(enters with bag) <em>Hi, Fiona. How are you?</em> (sits down)</td>
</tr>
<tr>
<td>3. Fiona:</td>
<td><em>Hi, Ken. Are you hungry?</em> (Ken nods) <em>I'm afraid there's nothing to eat tonight. I forgot to go to the shop.</em></td>
</tr>
<tr>
<td>4. Ken:</td>
<td><em>Never mind. I went to the shop and bought some food. What is there to eat?</em></td>
</tr>
<tr>
<td>5. Fiona:</td>
<td><em>Well, you're the one who went to the shop!</em></td>
</tr>
<tr>
<td>7. Fiona:</td>
<td><em>Oh thank goodness! I shall make cheese sandwiches.</em></td>
</tr>
<tr>
<td>8. Ken:</td>
<td><em>I'll help you make them.</em></td>
</tr>
<tr>
<td>10. Ken:</td>
<td><em>Okay. I'll get it.</em> (leaves while Fiona unpacks bread, then returns with knife)</td>
</tr>
<tr>
<td>11. Fiona:</td>
<td><em>Well, cut the cheese.</em> (Ken cuts the cheese, Fiona puts cheese on bread. They eat with obvious hunger)</td>
</tr>
</tbody>
</table>
**TABLE 2: TARGETS INSERTED IN THE DIALOGUES**

<table>
<thead>
<tr>
<th>SCENARIO</th>
<th>VERSION</th>
<th>PART</th>
<th>UTTERANCE TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEESE</td>
<td>I</td>
<td>B</td>
<td>Inappropriate question</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C</td>
<td>Declarative directive</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>B</td>
<td>Inappropriate assertion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C</td>
<td>Wh-directive</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>C</td>
<td>Imperative directive</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>B</td>
<td>Inappropriate question</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C</td>
<td>Declarative directive</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>B</td>
<td>Inappropriate assertion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C</td>
<td>Wh-directive</td>
</tr>
<tr>
<td></td>
<td>I</td>
<td>C</td>
<td>Imperative directive</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>B</td>
<td>Inappropriate question</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C</td>
<td>Declarative directive</td>
</tr>
<tr>
<td></td>
<td>I</td>
<td>B</td>
<td>Inappropriate assertion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C</td>
<td>Imperative directive</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>C</td>
<td>Wh-directive</td>
</tr>
</tbody>
</table>

*Directives were always appropriate. Targets were only inserted in Parts B (core exchange) and C (closure), never in Part A (background at the beginning of the filmed dialogue).*
2.2 Procedure

Children were shown films on a television set and they were asked to report what had happened in each film. The retelling task took the form of a game, in which the narrator was a witness telling what had happened to the police. Children were tested in pairs and took turns in being witness and policeman/woman: child 1 narrated the first film, child 2 the second one, and child 1 the third one. The child acting as witness heard the dialogues through headphones which were connected to the television set, so that the child acting as policeman/woman could not hear the dialogues. In addition, the child acting as policeman/woman sat behind a blackboard where he/she could not see the TV screen. This child was equipped with a portable tape-recorder, which she switched on when the witness made the report.

The presentation of the experimental films was preceded by a practice session during which the nature of the task was explained to the children. For this purpose, they were shown a short video consisting of a series of brief episodes, each one of which contained one appropriate utterance. Children took turns as witness and policeman/woman for each episode. These episodes contained instances of the following types of events, illustrated in (3) to (7): questions seeking information (cf. (3)), assertions providing information (cf. (4)), directives of various forms (cf. (5) to (7)).

(3) A: What time is it? (B shows him)

(4) A: My mother is coming to visit tomorrow. B: Oh!!!!

(5) (A is pouring a cup of tea for self and B) A: The sugar is in the cupboard. (B gets it)

(6) (A sitting at table with sheet of paper on table) A: Give me a pen (B does it)

(7) (A puts cigarette in mouth) A: Where are the matches? (B gives them)
2.3. Subjects

The main data base consists of 42 narratives produced by 28 9-year-old children of equivalent background from two Glasgow primary schools. All 28 children were in their fifth year of primary school. Five pairs of children worked with Version I films, four pairs with Version II films, and five pairs with Version III films. For comparative purposes, a total of 32 narratives were also collected from 16 children of 7/8 years using Version II films. Among these children, 8 were in their third year of primary school and 8 in their fourth year (there were a total of 16 narratives in each school grade).

3. Recall of the target utterances

3.1. Response categories

Children's reports of the target utterances were coded in terms of three main categories: (a) omissions, (b) verbatim reports, and (c) transformations. Omissions included cases where the children left out the entire target utterances from their narratives. Verbatim reports included cases where they reported the original utterance exactly or with minor changes. With imperative directives, verbatim reports included mostly imperatives such as (8), as well as a couple of you-imperatives such as (9).

(8) She went "go and get the knife."
(Target: "Get me the knife")

(9) And she said "...you better go and get me the pump."
(Target: "Get me the pump")

The third response category consisted of cases where children transformed the utterance and/or some aspect of the situation in some significant ways. When these transformations occurred with reports of the directive target utterances, they were of the following four types: (a) indirect ask-reports, (b) more transparent reports, (c) directives with will and could, (d) role reversal. Examples of each are shown in (10) to (20) below.

(a) indirect reports with the verb ask, e.g., (10) to (12));
(10) The lady asked the man to get the knife out of the dining room.
(Target: "The knife is in the dining room")

(11) She asked Charlie to go and get the scissors.
(Target: "Get me the scissors")

(12) She asked for the scissors.
(Target: "Where are the scissors?")

(b) Declarative directives transformed into more transparent wh-questions (e.g., (13)), imperatives (e.g., (14)), or sequences combining imperatives with other utterance types (e.g., (15) to (17));

(13) And the lady said "Where's the scissors?"
(Target: "The scissors are in the cupboard")

(14) She says "Go and get me the knife."
(target: "The knife is in the dining room")

(15) She went "go and get the pump, it's in the cupboard."
(Target: "The pump is in the drawer")

(16) The woman says "Where's the scissors?" and was like that "In the cupboard" "Go and get them"
(Target: "The scissors are in the cupboard")

(17) And she said "Get me the scissors." And he said "Where is the scissors?" And she said "In the cupboard."
(Target: "The scissors are in the cupboard")

(c) Modalized question directives of the type will-you or could-you (e.g., (18) and (19));

(18) She said "Will you get me the pump?"
(Target: "Get me the pump")

(19) She said "Could you get me the scissors?"
(Target: "Where are the scissors?")

(d) A role reversal, whereby the target is reported verbatim, but attributed to the wrong character, as shown in (20).
(20) He says "Oh dear, where's the pump?"
(Target: "Where is the pump?" uttered by W)

Transformations of the inappropriate questions and assertions were of three types: (a) role reversals, (b) mood changes, (c) modality changes. In all cases, the transformations lead to more appropriate speech events. Examples of each type are given in (21) to (23) below. Example (21) was elicited with the dialogue shown in table 1, in which M asks a question to which he but not W -- obviously has the answer. Examples (22) and (23) were elicited with another version of this scenario, in which W asserts that M bought eggs, although she obviously does not have information concerning what M bought (which turns out to be bread and cheese). We return to these transformations in more detail below.

(a) role reversals, whereby children reported the target verbatim, but attributed it to the wrong character, thereby making it appropriate, given the background knowledge of the two interlocutors (e.g., (21));

(21) She said "What have you got to eat?"
(Target: "What is there to eat?" uttered by M)

(b)mood changes, whereby they transformed an inappropriate assertion into a question that was more appropriate, given the background knowledge of the two interlocutors (e.g., with clear rising intonation in (22));

(22) And the woman said "You bought eggs??"
(Target: "You bought eggs")

(c)modality changes, whereby they used a modal device which transformed an inappropriate factive assertion into an appropriate nonfactive one, thereby making the utterance more appropriate (e.g., (23)).

(23) And she said "I hope you haven't bought eggs"
(Target: "You bought eggs")

3.2. Recall of the appropriate directives

As shown in table 3, children's reports of the appropriate directives are more or less evenly distributed across the three response categories, with one notable exception at 7/8 years: at this age children rarely
recalled verbatim or omitted declarative directives, producing instead utterances of other types. Among the transformations that were produced at 7/8 years, the majority (8 instances) consisted of reporting declarative directives in the form of imperatives and/or of question-answer sequences as in (13) to (17) above. A few transformations of this kind were also found at 9 years, but they were less frequent (3 instances). At this age, most of the children's transformations consisted of indirect reports containing the verb ask (cf. (10) above), particularly with imperative directives (4 instances) and less frequently with question directives (2 instances) or with declarative directives (1 instance). Such reports also occurred with question directives at 7/8 years (4 instances). Few of the remaining types of transformations occurred, i.e., could- and will-directives (2 instances at 9 years with question and imperative directives, respectively) and role reversals (only 1 instance at 7/8 years with a question directive).

### TABLE 3: REPORTS OF TARGET DIRECTIVES*

<table>
<thead>
<tr>
<th>AGE</th>
<th>REPORT</th>
<th>WH-QUESTION</th>
<th>DECLARATIVE</th>
<th>IMPERATIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 yrs</td>
<td>Verbatim</td>
<td>43%</td>
<td>37.5%</td>
<td>33%</td>
</tr>
<tr>
<td></td>
<td>Omission</td>
<td>36%</td>
<td>37.5%</td>
<td>33%</td>
</tr>
<tr>
<td></td>
<td>Transformation</td>
<td>21%</td>
<td>25%</td>
<td>33%</td>
</tr>
<tr>
<td>7-8 yrs</td>
<td>Verbatim</td>
<td>29%</td>
<td>9%</td>
<td>(n.a.)</td>
</tr>
<tr>
<td></td>
<td>Omission</td>
<td>48%</td>
<td>18%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transformation</td>
<td>24%</td>
<td>73%</td>
<td></td>
</tr>
</tbody>
</table>

*Percentages are based on nine films for the 9-year-olds (cf. table 2) and on three for the 7/8-year-olds (Versions II of the scenarios).

3.3. Recall of the inappropriate questions and assertions

As shown in table 4, verbatim reports of inappropriate questions and assertions are relatively infrequent. In
addition, some variations occur with age. In particular, the 7/8-year-olds frequently omitted both types of inappropriate utterances. In contrast, the 9-year-olds omitted inappropriate questions more frequently than inappropriate assertions, which they also reproduced verbatim or with significant transformations. With inappropriate questions, all transformations (3 instances at 9 years, 3 at 7/8 years) consisted of role reversals, such as the one in example (21) above. Such transformations were rare with inappropriate assertions (2 instances at 9 years), these utterances being mostly transformed by means of mood changes (4 instances at 9 years), as shown in example (22) above, or modality changes (4 instances at 9 years, 2 instances at 7/8 years), as shown in (23) above. We return to these different types of transformations below.

### TABLE 4: REPORTS OF INAPPROPRIATE QUESTIONS AND ASSERTIONS

<table>
<thead>
<tr>
<th>AGE</th>
<th>REPORT</th>
<th>INAPPROPRIATE QUESTIONS</th>
<th>INAPPROPRIATE ASSERTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 yrs</td>
<td>Verbatim</td>
<td>6%</td>
<td>27%</td>
</tr>
<tr>
<td></td>
<td>Omission</td>
<td>75%</td>
<td>33%</td>
</tr>
<tr>
<td></td>
<td>Transformation</td>
<td>19%</td>
<td>40%</td>
</tr>
</tbody>
</table>

| 7-8 yrs| Verbatim| --       | 15%                      |
|        | Omission| 73%      | 69%                      |
|        | Transformation| 27%       | 15%                      |

*Percentages are based on six films for the 9-year-olds (cf. table 2) and on two for the 7/8-year-olds (PRESENT II and CHEESE II).

### 3.4. Summary of children’s recall

In summary, children in both age groups omitted and transformed both appropriate and inappropriate target utterances, although some age differences emerged in this respect. In the case of the appropriate directives, some
Children reporting speech events

The effect of form was found at 7 and 8 years, but not at 9 years. Thus, no systematic pattern was found in how frequently the 9-year-olds recalled, omitted, and transformed different types of directives. In comparison, the 7 and 8-year-olds frequently transformed declarative directives, but not interrogative directives. These transformations consisted mostly of replacing these declarative utterances (e.g., "the knife is in the dining room") into more transparent utterances of the following types: (a) simple imperatives, in which the expected action was mentioned explicitly (e.g., "Get the knife"); (b) sequences of utterances that decomposed the declarative into an imperative and one or more utterances specifying the location of the requested object either within a speaking turn (e.g., "Get the knife, it's in the dining room") or across speaking turns (W: "Get the knife" M: "Where is it?" W: "It's in the dining room"). These transformations clearly show that these children understand the functional value of these utterances in the context of the dialogues, but prefer to report them by means of transparent utterances that present this functional value explicitly.

In the case of the inappropriate target utterances, there were more transformations at 9 years and more omissions at 7/8 years. This age difference resulted mainly from the older children's tendency to transform inappropriate assertions, while omitting inappropriate questions, in comparison to the younger children, who tended to omit both types of utterances. In contrast to the directives, then, some effect of form appears at 9 years with these targets. In all age groups, children's omissions and transformations of these inappropriate utterances show their sensitivity to the contextual relevance of utterances. In addition, both types of strategies are part of their attempts to create global narrative coherence when reporting the conversations as a whole.

In order to further interpret children's omissions and transformations of the inappropriate targets in terms of global coherence, it is necessary to examine the larger context of their narratives. In particular, children often omitted and transformed not only the inappropriate targets, but also other speech events which preceded and followed them. Thus, if a dialogue contained a question-answer sequence in which the question was inappropriate, children's omissions or transformations of this question had consequences for how they reported the answer, as well
as for the previous events that established the relevant background conditions for the entire question-answer sequence. We therefore turn to more qualitative analyses which examine whether children used more global strategies when reporting each one of the dialogues that contained an inappropriate utterance.

4. Narrative strategies with inappropriate targets

The qualitative analyses below focus on how children narrated the background (Part A) and core exchange (Part B) of the six dialogues that contained either an inappropriate question or an inappropriate assertion (three dialogues of each type; cf. table 2). Our interest lies in whether and how children attempt to resolve the conversational inappropriateness of the target utterances when they report the entire conversations in the form of narratives, i.e., whether and how they report not only the targets, but also the utterances surrounding them.

The children’s narratives can be roughly divided into three groups: (1) in a few cases children recalled verbatim all key background events of Part A and all key events during the core exchange of Part B; (2) in a few cases they recalled none of these events, recalling only the events during the closure in Part C; (3) in the majority of narratives, children omitted some of these events and recalled others, sometimes transforming them in significant ways. Particular attention is placed below on the third group of narratives, among which we distinguish strategies which involved reporting the target utterances with or without transformations (hereafter Strategy R) from those which involved omitting the target utterances (hereafter Strategy O). Within each of these broad strategies, there were a number of variations, which we describe below, as a function of whether children transformed and omitted other key events in Parts A and B. Table 5 summarizes how the different types of narratives were distributed in the two age groups as a function of target type.

For each of the six dialogues containing inappropriate target utterances, we first present and summarize the key events of the background and core exchange (Parts A and B), differentiating background utterances that preceded the inappropriate target and subsequent utterances that immediately followed it before the closure (Part C). We then briefly summarize the children’s reporting strategies.
TABLE 5: NARRATIVE STRATEGIES WITH ODD DIALOGUES*

<table>
<thead>
<tr>
<th>AGE</th>
<th>REPORTS OF DIALOGUES WITH ODD QUESTIONS</th>
<th>REPORTS OF DIALOGUES WITH ODD ASSERTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 yrs</td>
<td>All</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>None</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Some/Strategy R</td>
<td>25%</td>
</tr>
<tr>
<td></td>
<td>Some/Strategy O</td>
<td>75%</td>
</tr>
<tr>
<td>7/8 yrs</td>
<td>All</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>None</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Some/Strategy R</td>
<td>27%</td>
</tr>
<tr>
<td></td>
<td>Some/Strategy O</td>
<td>73%</td>
</tr>
</tbody>
</table>

*Percentages are based on six films for the 9-year-olds (cf. table 2) and on two for the 7/8-year-olds (CHEESE II, PRESENT II).

All: all key events in Parts A & B are reported verbatim. None: all key events in Parts A & B are omitted. Some/Strategy O: some key events in Parts A/B are reported verbatim or transformed, but the inappropriate target is omitted. Some/Strategy R: some key events in Parts A/B are reported verbatim or transformed, among which the inappropriate target.

4.1. Dialogues with inappropriate questions

4.1.1. CHEESE scenario (Version I). The excerpt in (24) shows the sequence of background and subsequent utterances surrounding the target question (also see table 1). Given the preceding background utterances, and as highlighted by the subsequent utterances, it is unreasonable to assume that M's question is a genuine request for information, because only M can answer it.
There is nothing to eat.
I forgot to go to the shop.

I went to the shop. I got some food.

What is there to eat?

But you're the one who went to shop!

I bought bread and cheese.

Six 9-year-old children reported this dialogue. Two of them reported the target (Strategy R) and four omitted it (Strategy O). Both of the children who reported the target resolved the problem by adopting a role-reversal solution. As shown in examples (25) and (26), this solution consisted in attributing the question to the woman, who might reasonably be seeking the information (in all examples below the reported targets are shown in bold). Both children achieved further consistency by means of additional changes in the dialogues. Both also omitted the woman's exclamation that immediately followed the target, so that the second subsequent utterance now constitutes the man's appropriate answer to the woman's appropriate question. In addition, as shown in (26), one child reported the target question twice, once with a role reversal ("What have you got to eat?") and once before without role reversal, but as part of the background conditions, where it is appropriate ("What's for dinner?").

(25) There was this man and woman and she was in the house and then she just came off the phone and a man came in and he said "I'm hungry". And she said she was hungry but there was no food left. But he had brought some food and she asked him what the food was and he said that he had bought bread and cheese. [...] [Scott/9]
(26) She's speaking on the phone and she says "bye" and then and then and then this man came in and then he went and sat down and said "What's for dinner?" and she says "I've got none, no food, so we can't have anything to eat." And he says "I went down to the shops." And then she said "What have you got to eat?" And he said "I've got bread and cheese." [...] [Suzanne/9]

Among the four children who omitted the inappropriate target, three achieved further consistency by also omitting the immediately subsequent utterance. Examples are shown in (27) and (28).

(27) Firstly, the lady was sitting at the table and the man came in and the lady said "Are you hungry?" and the man -- and the lady said there was no food left to eat and the man said he went and bought some food, bread and cheese, and they had cheese sandwiches. [...] [Jan/9]

(28) This lady was on a phone and a man came in and she says "Are you hungry?" And she says "There's no food." And then he says "That's alright, I've brought some with me" and he took cheese and a loaf out of his bag. [...] [Campbell/9]

As shown in (29), the fourth child revealed her difficulty by omitting M's odd question, but then reporting W's subsequent utterance ("I thought you were the one who went to the shop"). As a result, the narrative is odd. Note that such odd narratives were very rare in the present samples.

(29) This man Ken came in. The lady says "you must be hungry." And he says "Yes I am" and she says "Oh well there's no food." He says "It doesn't matter anyway, I've got some in the sack." She said "I thought you were the one who went to the shop." So he brought bread and cheese. [...] [Karen/9]

4.1.2. PRESENT scenario (Version II). The sequence of background and subsequent utterances surrounding the target question in this scenario is shown in (30). Once again the question is inappropriate, since it is unreasonable to suppose that the man does not know what present he has bought and/or that he expects the woman to know.
Sixteen children narrated this film, five 9-year-olds and eleven 7/8-year-olds. Four children reported the target question "What is it?" with a significant transformation (Strategy R) and the remaining twelve children omitted it (Strategy O). All the children who used Strategy R reported the question with a role reversal, whereby they ascribed this utterance to the woman, and they maintained further coherence by omitting her subsequent utterance "I have no idea". Examples are shown in the excerpts (31) and (32) produced by a 7-year-old and a 9-year-old, respectively.

(31) She said "Hallo, Charlie" and he said "I've got a surprise present for you." She said "What is it?" and he said "It's a present for your birthday." And she took it. [...] [Peter/7]

(32) A man came in with a present and the lady said "What is it?" And then the man said "Open it" and she opened it and it was a beret. [...] [Laura/9]

All of the twelve children who used Strategy O omitted both M's inappropriate question and W's subsequent reply ("I have no idea"). This strategy is illustrated in the 7-year-old's narrative (33) and in the 8-year-old's narrative (34).
(33) It was the lady's birthday and the man got her a surprise present and she said "The scissors are in the cupboard" and the man said "I'll go and get them." So he went and got them and the lady opened up her present. Then she put it on and then she wanted a mirror so the man got it. And then she looked in it and that was all. [Julie/7]

(34) They were in this kind of room thing and there was this man and the lady. It was the lady's birthday and the man was hiding a present behind his back and gave it to the lady. The lady said "Thank you" and thingmy. And the man said "Open it" and she said -- and the lady said "Where's the scissors?" and the man went and got them. She opened it and it was a hat, a black hat and she put the black hat on and she looked really funny and the man went and got the mirror to see -- for the lady to see what she looked like. [Debbie/8]

4.1.3. BIKE scenario (Version III). The sequence of events and utterances surrounding the target question in this scenario is shown in (35). Given the preceding background conditions, it is unreasonable to assume that the man's question "How did that happen?" is a sincere request for information, since he knows quite well what happened. This question is therefore inappropriate from the point of view of information exchange, although one possible interpretation is that the man is "covering up" for his earlier deed by feigning ignorance. In this case W's subsequent assertion can be interpreted as an accusation based on a good guess and M's subsequent question as an implicit denial of this accusation.

(35) BIKE III

BACKGROUND 1  [M deflates tyre on W's bicycle in W's absence]

BACKGROUND 2  W: My bike has a flat tyre.

TARGET  M: How did that happen?

SUBSEQUENT 1  W: You let the air out.

SUBSEQUENT 2  M: Who, me?
Five 9-year-olds narrated this film. Only one of them reported the target question (Strategy R) and the remaining four omitted it (Strategy O). As shown in (36), the child who used Strategy R seems to convey the notion of defense and prosecution in the dialogue, i.e., the man's feigned ignorance ("How's that?") is followed by an accusation from the woman ("Because you let the air out of it").

(36) The man was, I think, was letting the air out the wheels. And the wife came in, the lady came in and she had a plant and she put it down and I think it was on top of a cupboard. And then he was gonny go out a ride, a ride and she asked him could she go with him and then, and then, and then he said "I'm going to the river" and she said "I'll come, I'll come with you." She goes "I've got a flat tyre." He goes "How's that?" She goes "Because you let the air out of it." [...] [Karen/9]

The common strategy among the children who used Strategy O was to report some or all background events, to omit M's question, and to proceed immediately with W's subsequent utterance. In the excerpt (37), W's background and subsequent utterances become part of the same speaking turn, forming together an accusation ("she said her tyre was let down and it was her husband who let it down"), which is followed by a denial on the part of M ("Who me?").

(37) The man was fixing... letting the air out of the bike and he went off to get his bike and the lady came in with a plant, put it on the table. And the man came in with his bike, said he was going to the water and the lady said she'll come too. And she said her tyre was let down and it was her husband who let it down. And the husband said "Who me?" [...] [Robert/9]

In the excerpt (38), the child resolves the problem due to M's odd question by omitting not only this question, but also all key events with the exception of W's subsequent utterance. For example, the child does not mention the fact that M deflates W's tyre at the beginning of the film and does not report his denial after W's utterance.
(38) Well there was this man and he was looking at this bike. And the woman came in with a plant and put it over on the table. The man went and brought another bike and he said he was going to the river. And then the woman said "Can I come with you?" And then she went and looked at her bike and she says "You let out the air." The woman says "The pump's in the drawer."...Then she asked the man to pump up the tyre. [Michelle/9]

4.2. Dialogues with inappropriate assertions

4.2.1. CHEESE scenario (Version II). As shown in (39), this version of the CHEESE scenario begins in the same way as Version I in (24). In this case, however, Part B contains a speaking turn in which W asserts that M bought eggs. Given the background conditions, it is unreasonable for W to inform M of what he bought. This assertion is therefore inappropriate, unless one assumes either that W is guessing what M bought or expressing the hope that he did not buy eggs. The second interpretation is encouraged by her subsequent assertion that she does not like eggs. M then denies having bought eggs and informs W that he has bought bread and cheese.

(39) CHEESE II

BACKGROUND 1  W: There is nothing to eat.  
                      I forgot to go to the shop.

BACKGROUND 2  M: I went to the shop.  
                      I got some food.

TARGET  W: You bought eggs. I don't like eggs.

SUBSEQUENT  M: No, I didn't.  
                       Actually, I bought bread and cheese.

A total of 18 narratives were elicited with this film from five 9-year-olds and thirteen 7/8-year-olds. Four children reported the target assertion with some transformations (Strategy R), and six children omitted it (Strategy O). The remaining children either recalled all key events (four cases) or none of them (four cases). The children who reported the target assertion transformed it
in two ways that made it appropriate. One type of transformation, that was used by two 9-year-olds, consisted of changing the assertion into an interrogative by means of a wh-question in (40) ("What did you buy?") or by means of rising intonation, as shown in (41) ("You buy eggs?? I don't like eggs"; also shown in (22) above).

(40) Well, the woman was in her house and she put down the phone and the man came in from work and the woman said "Sorry, there's nothing for your tea." But the man said "Don't worry, I bought some." And the woman said "What did you buy?" And the man said he bought some bread and cheese. [...]
[Ann/9]

(41) The woman was on the phone talking to somebody and the man came in and the woman said "I never went to the shops." And the man said "I went to the shops." And she said "You buy eggs?? I don't like eggs." And the man said "I've not bought eggs, I've bought cheese and bread." [...]
[Peter/9]

The other type of transformation, that was used by two 7-year-olds, consisted of adding modal devices to the factive assertion in order to change it into a nonfactive one. These devices mark the expression of a false belief in (42) ("the lady thought it was eggs" in (42)) and of a hope in (43) ("I hope you haven't bought eggs cos I don't like eggs"; also shown in (23) above).

(42) The lady was on the phone and she said "All right, cheerio" and a man comes in and says "Hullo, Fiona." He was hungry but the lady had nothing to eat. So - he had brought some things in and the lady thought it was eggs and he said it wasn't, he said it was bread and cheese, and it was. [...]
[Audrey/7]

(43) The man came in and she said "are you hungry?" and he said "Starving!" And she said "I'm sorry, but I'm afraid there's nothing to eat." And the man went "Oh well, never mind, I bought some.... I went shopping" and she said "I hope you haven't bought eggs, 'cos I don't like eggs" and he said "I haven't, I bought some bread and cheese." [...]
[Catherine/7]

Note that children also changed other aspects of the dialogues to achieve further coherence. For example, in
(40) the child omits M's subsequent denial, resulting in an appropriate question-answer sequence. Similarly, in (42) M's subsequent utterances are followed by a comment on the part of the child concerning the truth value of this reply in relation to W's false belief ("he said it wasn't, he said it was bread and cheese, and it was").

When children omitted the target assertion (six 9-year-olds and four 8-year-olds), they also omitted the denial in M's subsequent utterance. As illustrated in examples (44) and (45), the resulting sequences are appropriate, i.e., M's subsequent speaking turn becomes a continuation of background utterance 2: in example (44) the utterance "I've already got food in the bag" is followed by "I've got bread and cheese"; in example (45) the utterance "That's OK cos I've bought some food" is followed by "he had brought bread and cheese."

(44) There was a woman and thingmy, she was just after being on the phone when this man came over to her and she said "Oh no, I forgot to go to the shops." He said "Never mind, I've already got food in the bag." And he then said "I've got bread and I've got cheese" and then he put them out on the table. [...] [Marilyn/8]

(45) This lady was sitting in the house and she was phoning and this man came in. She said to him "I haven't been to the shops today" and he says "That's OK cos I've bought some food." And he had brought bread and cheese. [...] [Jackie/9]

4.2.2. PRESENT scenario (Version III). As shown in (46), Part A of this film begins in the same way as Part A of version II in (30) with the exception that M's inappropriate question "What is it?" in (30) becomes an appropriate background utterance in (46), when uttered by W. In her next speaking turn, however, W produces the target utterance "It's a pink dress", which is an inappropriate assertion of fact, unless it is interpreted as a (wrong) guess on her part.
(46) PRESENT III

BACKGROUND 1. [M comes in holding a present behind his back]


BACKGROUND 3. W: I'm so curious. What is it? What is it?

BACKGROUND 4. M: Open it.

TARGET W: It's a pink dress.

SUBSEQUENT M: But you haven't seen what's inside!

Five narratives were elicited from 9-year-olds with this dialogue. Two children reported the target assertion with some transformation (Strategy R) and three omitted it (Strategy O). Both of the children who adopted Strategy R transformed the assertion into a question ("Is it a pink dress?") thereby making it more appropriate, given the background conditions. Note that, unless this question is interpreted as the expression of a hope on the part of W, it presupposes that she has some background knowledge, i.e., some reason to make such a specific guess (as opposed to a wh-question). As shown in (47), one of the children felt the need to draw attention to the disparity between this guess and the woman’s knowledge by modifying subsequent events in the dialogues, i.e., with a sequence consisting of M’s question ("How do you know?") and W’s answer ("I don’t know").

(47) There was a man and he brought this lady a present. The lady says "What is it?" and the man says "Open it up." So the lady said "Is it a pink dress?" And the man says "How do you know?" and the lady said "I don’t know." So she said to the man "Could you get me the scissors?" So he went and got the scissors and she cut the paper up and it was a hat. [Greg/9]

When children omitted the target assertion, they also omitted other key events in Parts A and B. As illustrated in examples (48) and (49), these narratives began with background conditions (M giving the present to W), then proceeded immediately with the closure in Part C of the
dialogue (in which W opens the present).

(48) Charlie came in and he gave the lady the present and she said "Thank you very much, Charlie." And then she asked for the scissors and Charlie went and got the scissors. And she cut it open and Charlie said "Happy birthday" to her. [Lynn/9]

(49) There was a man and a lady and the man's name was Charlie and the lady's name was ehm... I think it was Sylvia. And the man came in with a surprise birthday present. And the lady said "I'm so curious." And she went Where's the scissors?" And the man -- and Charlie said "I'll just go and get them." And Charlie got the scissors and she opened it up. [...] [Pamela/9]

4.2.3. BIKE scenario (Version I). As was the case with Version III in (35), Part A of (50) establishes that M deflates W's tyre. In contrast to (35), however, W's question "How did that happen?" in (50) is now an appropriate part of the background. M's assertion that W's tyre has a puncture is inappropriate, given that he is responsible for the deed, unless it is assumed of course that he is "covering up" for his deed and intentionally lying. W then denies M's assertion, but without checking its validity (e.g., she has not yet looked at the tyre), so that this denial is also inappropriate, unless it is assumed that she has guessed M's deed.

(50) BIKE I

BACKGROUND 1. [M deflates tyre on W's bicycle in W's absence]

BACKGROUND 2. M: Your bike has a flat tyre.

BACKGROUND 3. W: How did that happen?

TARGET M: I don't know. It's a puncture.

SUBSEQUENT 1. W: No, it's not a puncture.

SUBSEQUENT 2. M: How do you know?
Five narratives were elicited from 9-year-olds with this dialogue. All of the children reported the target assertion (Strategy R) and omitted the subsequent utterance 2. However, with the exception of these regularities, children's strategies in reporting the target and other key events of the background and core exchange (Parts A and B) varied somewhat. An example is shown in (51). This child adopts a role reversal strategy, attributing the target assertion to W ("she said she had a puncture") and omits all background events and all subsequent utterances, proceeding directly to the closure (Part C). The result is somewhat odd.

(51) There was this lady and she came in with this plant and she was shivering so she took off her coat and put the plant down and then -- and then this man came. He was called Hamish. And he brought his bike and he says "I'm going down to the river and-- and-- and I think he said "Would you like to." No. She said she had a puncture. And she said "Will you get me the pump" and she was pumping it up. That's it. [Suzanne/9]

The narrative (52) shows a different strategy. The child describes the first background condition (M deflates tyre), attributes the target assertion and background utterances 2 and 3 to M, all within the same speaking turn, then proceeds with W's subsequent utterance 1, omitting M's subsequent utterance 2.

(52) There was this man and he was putting down a tyre. And this lady Patricia came in. And the man's name was Neesh. And she came in with a plant. And he came back and he said "I'm just going down with his own bike" and he says "I'm going down just to the river for a ride on my bike. She says "Oh I'd like to come with you." And he says "Well, you see, you've got a puncture on your tyre. It's down, see. However can that be?" And she says "Oh that's not a puncture." So he gave her this big thing over and she put it up and that was the last I seen of it.

The remaining three narratives consisted of reporting the target assertion, but omitting W's preceding background question. This strategy is illustrated in (53). A variation consisted of transforming the target slightly with a modal construction, as shown in (54) ("It looks like a puncture"). Another variation consisted of
attributing M's background utterance 2 to W ("She said 'Oh it's got a flat tyre").

(53) The man came in and he let the lady's tyres down on her bike. And then the lady came in with a plant and put it on the table. Then the man said "I'm going on a bike ride, would you like to come?" And the lady said "yes". And then the man said "Oh no you can't, you've got a flat tyre." And then the lady felt the tyre and she saw it was a flat tyre. And the man said "It's a puncture." And the lady said "No, it's not, bring me the pump." [...] [Craig/9]

(54) There was this man and he was beside this bike and he let down the front tyre on the bike. Then he went away. [...] He said "Your bike's got a flat tyre." He said "It looks like a puncture." And she said "No, that's not a puncture. You better go and get me the pump." [Scott/9]

5. Discussion

The aim of this study was to examine variations in how children between 7 and 9 years of age report conversations in narratives as a function of the forms and appropriateness of the reported utterances. Analyses of the narratives were presented, with particular attention to whether children reported, transformed, or omitted appropriate and inappropriate utterances, as well as other events that preceded and followed them. The results show that the children are sensitive to the functional value of utterances and to their appropriateness, although their reporting strategies change with age.

The effect of form on children's reports can be first examined by comparing their reports of three types of appropriate directives: imperatives, declaratives, and questions. The 9-year-olds' reports, omissions, and transformations were randomly distributed among imperatives, declaratives, and questions. In contrast, the 7/8-year-olds tended to transform declarative directives ("The knife is in the dining room") mostly by reporting them as imperatives ("Get the knife"), in which the requested action was mentioned explicitly, or sometimes in conjunction with other utterances, which requested or provided the location of the requested object ("Get the knife, it's in the dining room"). Although these
transformations show that children understood the functional value of declarative directives, they also indicate their preference for more transparent reports of these utterances. Some additional evidence from children's recall of utterances other than the targets (which randomly included imperatives among other speech events) indicates that imperatives were frequently reported verbatim, occasionally omitted, but rarely transformed. If this pattern is confirmed with a larger sample of narratives, it would indicate young children's reluctance to report relatively nontransparent directives as such and their preference for reports that present their functional value more transparently.

The effects of both form and appropriateness can be also examined by comparing children's reports of the following types utterances, both of which were inappropriate from the point of view of information exchange: declaratives which were inappropriately used to make an assertion (e.g., because the speaker could not know the asserted information) and questions which were inappropriately used to seek information (because the speaker already knew the information and/or could not expect the interlocutor to know it). The results concerning these inappropriate target utterances can be summarized as follows. First, there was a general tendency to omit questions more frequently than assertions when they were inappropriate. Second, this tendency was more marked among the 9-year-olds than among the 7/8-year-olds, who tended to omit both types of utterances. Third, when inappropriate questions and assertions were reported, they were often transformed by means of various transformations. In this respect, inappropriate questions tended to be transformed more often by means of role reversals, while inappropriate assertions tended to be transformed more often by changes in mood or modality. Finally, children often omitted or transformed not only the inappropriate targets, but also other events that preceded and followed them in the dialogues, in such a way that the resulting sequence was appropriate.

The specific strategies used with each dialogue indicate that, when confronted with declarative and interrogative utterances that are odd from the point of view of information exchange, children between 7 and 9 years of age make the dialogue appropriate in one of two ways. Some strategies consist of adapting the speech event so that it is appropriate from the point of view of information exchange (e.g., by changing the form of the
Children reporting speech events

utterance or its conditions of use). Other strategies consist of attributing to the speech event another functional value instead of—or in addition to—information exchange. This second type of strategy involves subordinating the representative component of utterances to other functions of language (e.g., playing a trick, accusing, guessing, directing, expressing a fear).

These strategies show a certain sensitivity to the relations among forms and functions in context at 7 to 9 years of age. The data also show that the 9-year-olds tend to transform odd utterances more often than the younger children, who tend to omit them. Relative cognitive complexity might explain to some extent this differential uses of omission vs. transformation strategies at 7/8 versus 9 years. Thus, omissions surely constitute a simpler type of strategy than transformations, since they do not require changes from one type of form-function-context relation to another more appropriate one. This result, then, would suggest that the younger children can be sensitive to the oddness of some utterances in context before they are able to transform them in order to make them more appropriate.

Relative complexity might also be related to the differential pattern that was found with inappropriate assertions versus questions. Thus, children’s strategies when reporting inappropriate targets varied not only with age, but also with utterance types. In particular, the fact that there were fewer omissions and more transformations at 9 years than at 7/8 years is mainly due to the older children’s tendency to transform inappropriate assertions, while they omitted inappropriate questions like the 7/8-year-olds. These transformations mostly operated on mood and modality, both of which require fairly complex notions and linguistic devices related to both presupposition and subjectivity, such as the factive vs. nonfactive properties of utterances and speakers’ expression of their attitudes, including their assessments of truth in relation to their epistemic states. As discussed previously, such notions have been shown to develop gradually and to be fully acquired at a relatively late age.

In addition to cognitive complexity, a number of other factors may play a role in how children select various narrative strategies. Among them, the extent to which different utterances advance the plot line may account
for the likelihood with which they will be omitted from children's narratives. This factor may indeed account not only for the relatively high frequency with which children omitted inappropriate questions in comparison to assertions, but also for their omissions of other utterances in the narratives, including some appropriate questions. For example, the appropriate version of the CHEESE scenario (Version III) contained the following sequence of events: the man asserted "I went to the shop, I got some food", then the woman asked "What did you buy?", to which the man replied "I bought bread and cheese." Although W's question was an appropriate utterance seeking information, children often omitted this question, reporting only the man's utterances. As is often the case in many everyday conversations, the question in this exchange is not essential for the referential content or plot line per se, but rather acts as a link between two assertions across speaking turns and thereby maintains interpersonal contact between the two interlocutors. It was therefore quite natural for children to omit the question. More generally, it is probable that the extent to which utterances are central to the main story line and contribute new information will affect what children report and omit, particularly when the narrative situation focuses on completeness and accuracy of content (in this case, a situation involving a witness and the police).

The degree to which utterances are informative and contribute to the unfolding of the plot line in a narrative may also partly account for why children's transformations differ with inappropriate questions and assertions. Thus, since assertions bear more weight for propositional content in narrative situations such as the present one, it is probable that they involve a stronger association with their speaker. That is, in comparison to questions, assertions might be more strongly associated with the person that has the necessary background knowledge and therefore role reversals might be awkward with these utterances. Indeed, recall that children's modifications of the inappropriate assertions consisted of changes in mood and modality, while their modifications of the inappropriate questions (which were relatively infrequent) always consisted of role reversals. The former type of transformation involves a modification in the linguistic form of the utterance (intonation, word order, wh-element, matrix clauses with modal verbs, etc.). In contrast, role reversals do not involve such changes, but rather a sort of "perspective shift", whereby the utterance itself remains unchanged, but is attributed to
the interlocutor who has the appropriate epistemic state.

An overall pattern that emerges from the present study is that children show both some sensitivity to contextual relevance when confronted with inappropriate speech events and some ability to create narrative coherence when they are asked to report such speech events. Thus, children will endeavour to have their reports "make sense" during the narratives and consequently they will omit or transform utterances to that end, including not only the inappropriate targets, but also various utterances surrounding them in the filmed conversations. In this respect, we saw that omissions and transformations of these surrounding utterances occurred in the narratives of children of all ages, regardless of whether children omitted or transformed the targets. With very few exceptions, the great majority of the resulting sequences indeed made more sense than the original ones and no age differences were found in this respect in the samples considered.

The qualitative analyses showed children's attempt to create narrative coherence by various means involving what might be called both "local" and "global" strategies. Such notions have been invoked in other studies of narrative skills (e.g., Bamberg, 1987). We might use them here to describe children's narrative strategies as follows: given a particular conversation with an inappropriate target utterance, local strategies correspond to what children do to the target itself when reporting the conversation, while global strategies correspond to what they do to the utterances surrounding this target. Using the terms in this way, then, most children used both local and global strategies. However, transformations of the targets involved much clearer local modifications than omissions, that did so only by default. Thus, the younger children, who tended to use omission as their sole strategy, can be described as using mostly a global strategy. In comparison, the older children, who used both omission and transformations, can be described as using both local and global strategies.

While these results are suggestive, further data collection is necessary to complement the available data base and to answer questions which arise therefrom. In particular, more data is necessary to confirm whether differential strategies across age groups correspond to a developmental progression. Thus, at one extreme, more narratives should be elicited systematically from children
under 9 years, including not only children in the early years of primary school, but also preschool children. At the other extreme, narratives produced by adults would provide a comparative reference point for developmental claims. On the basis of this more complete data base, it would be possible to determine the following: whether omissions of inappropriate assertions characterize the strategies of young children, while transformations characterize those of older children and adults; how early such omission strategies begin and whether they are accompanied by other changes in the conversations surrounding the targets; whether adults also transform inappropriate assertions, but omit inappropriate questions.

We also need to explore further the parameters of "oddness" for children at different developmental stages. In the present study, the "oddness" of utterances in the stimuli was defined merely by virtue of their appropriateness in context from the point of view of information exchange, particularly by virtue of the speakers' background epistemic states. There are of course numerous other ways in which utterances might be odd. For example, directive utterances can be more or less appropriately used as a function of the interpersonal roles in the situation, as they might be defined by virtue of variables such as age and status. These particular variables were purposefully held constant in the materials of the present study, but they could be manipulated systematically in a further study of children's reported speech. Other variables that may influence how children report speech events and that should be further examined include the perceived relevance, comprehensibility, and salience of various speech events, as well as the extent to which alternative interpretations are possible for inappropriate speech events in dialogic contexts.

Finally, although children's performance in the present narrative task shows that they are sensitive to the appropriateness of utterances embedded in dialogues, it does not show as such whether they are able to reflect on the particular properties of these utterances in relation to their contexts. It is furthermore possible that different strategies vary with respect to level of awareness, e.g., local transformations of targets and/or of surrounding utterances, whereby children select new and more appropriate linguistic forms, might involve a higher level of awareness than omissions. Additional information concerning children's ability to provide
judgments about more or less appropriate speech events is therefore necessary to further explore the nature of children's strategies and of their linguistic knowledge.
Footnotes

*We thank the anonymous reviewer who thoroughly commented a previous version of this paper.

1. Surprisingly few naturalistic observations relevant to *verba dicendi* are available, e.g., early spontaneous "errors" such as (a) and (b) (from Bowerman, personal communication):
   (a) Mother: Alright, sit down now.
   Child: Don't ask me! (1;10)
   (b) Child 1: "what's Daddy doing?"
   Child 2: "I'll go tell Daddy what he's doing" (2;7)

2. The factors affecting the uses of different directives, such as the setting and role relations between the dialogue participants, were held constant across all films. All dialogues took place in a home environment. When children specified a role relation at all, they reported the dialogues as involving a husband and wife.

3. In this respect, some variation might have occurred across the scenarios, despite our efforts to control their properties. For example, alternative interpretations of the inappropriate targets might be more readily available in some cases than in others. Such variations do not seem to have affected the overall pattern of data, but should be further examined systematically.

4. One pair of 9-year-olds who worked with Version II films had to be left out of the sample, because the narratives produced by one child were clearly insufficient. As for the sample of 7/8-year-olds, the data collection was meant to provide exploratory pilot data and it was not done as systematically as with the 9-year-olds: each child produced one, two, or three narratives, not always to the same child, but never to a child who had already seen the film or heard about it.

5. Omissions of directives included cases in which no mention was made of the utterance at all, regardless of whether children did mention that one of the participants went to fetch the object ("he went to get the knife") and/or quoted one of them as saying that he/she would do so ("I'll get the bicycle pump"). Included among the omissions was one 9-year-old's report containing the verb *forget* ("She forgot the
6. The extent to which "indirect" quotations "transform" utterances depends on numerous factors (cf. Hickmann, 1985; 1991; in press). The following decisions were made concerning children's direct and indirect reports with the verbs say and ask in the present corpus. Verbatim reports of the directives included only direct quotations, with one exception: an indirect quotation containing say and reporting a declarative directive ("the lady said that the pump was in the drawer" as a report of the target "the pump is in the drawer"). Indirect reports containing ask were all included among transformations, although the significance of these transformations depends a great deal on the original utterances reported. Thus, such reports do not transform question or imperative directives as much as declarative ones. However, in contrast to indirect reports with say, they all involve some interpretation of the type of speech event reported, i.e., they represent the event as an instance of a type called "asking".

7. Most of the 7/8-year-olds' omissions of Wh-questions occurred with CHEESE II, rather than with BIKE II. Note that the question directive in CHEESE II ("Where is the knife?") was followed by the interlocutor's statement of his intent to act ("I'll get it"), whereas the one in BIKE II ("Where is the pump?") was followed by a statement describing the location of the object ("It's in the drawer"). In both cases, the interlocutor fetched the object just after this response. Further data collection would be necessary to determine whether this variable has any effect on how frequently children omit question vs. declarative directives (cf. table 3).
References


