The development of discourse markers in peer interaction

Amy Kyratzis and Susan Ervin-Tripp

Abstract

Discourse markers are linguistic elements that signal relations between units of talk, relations at the exchange, action, ideational, and participation framework levels of the discourse (Schiffrin, 1987). To what extent do young children use markers in these ways, indexing their ability to differentiate these levels of talk? Four- and seven-year children were paired in best-friend dyads and observed interacting in two activity contexts: pretend play with a scenario toy, and story re-telling, in which one child was read a story and retold the story to the friend on another day. Different activity contexts promoted different uses of markers. Moreover, children at the two ages differed in the activity contexts they preferred and experienced in their social life with peers. These two factors help explain developmental changes in uses of markers. © 1999 Elsevier Science B.V. All rights reserved.

1. Introduction

Semantic connectives have long been a focus of research in cognitive and language development. Such connectives as so, because, and but encode causal and adversative relations among events and create textual cohesion (Halliday and Hasan, 1976). Recently, however, researchers have been examining other types of relations that need to be encoded in discourse. Deborah Schiffrin (1987), for example, has focused on ‘discourse markers’, a broader category of connective or relational forms than semantic connectives. Discourse markers are “linguistic, paralinguistic, or non-verbal elements that signal relations between units of talk by virtue of their syntactic and semantic properties and by virtue of their sequential relations as initial or terminal brackets demarcating discourse units” (Schiffrin, 1987: 40).

The research reported here was supported by the National Science Foundation grant to Susan Ervin-Tripp, Pragmatic Factors in the Acquisition of Syntax (DBS-8919569) and by a post-doctoral NIMH fellowship to Amy Kyratzis (F32MH09977).
Schiffrin pointed out that in addition to conveying semantic content or ideational meanings about the real or fantasy world, discourse markers can at the same time signal relations at the levels of exchange structure, action structure, or participation frameworks within the discourse. In example (1), the discourse marker because signals a causal relationship between two real-world events, and therefore operates at the ideational level and is a semantic marker.

(1) I sprained my ankle 'cause I was hitting my father's shoe/ (7;05)¹
(2) Mei: Can I have that daddo?, because I like him (4;03)

In (2), however, the marker is functioning differently. Here, Mei is giving support for her request. When causal clauses modify or support speech acts rather than events described in propositions, we call them speech act level causals (see Kyratzis, et al., 1990; Sweetser, 1990).² In Schiffrin's terms, the relation is at the action level. These are more common in the naturalistic speech of young children than are causal constructions where the causal clause modifies an event statement (content-level or ideational causals; Kyratzis et al., 1990). Possibly controlling others' behavior and justifying requests is more functional in the social lives of young children than is describing events in the real world and providing causes for them. Using Schiffrin's terminology, speech act causals function at the action level of the discourse, serving as justifications for various speech acts. Redeker (1990) terms action level uses 'pragmatic' uses. She found that the difference between the frequency of 'pragmatic' (e.g. well) and 'semantic' (e.g. because, but) markers in groups varied on important social dimensions, like the degree of intimacy between speaker and addressee. Speakers used more 'pragmatic' in comparison to 'semantic' markers to friends than strangers. Hence, 'pragmatic' markers may serve to index friendship and intimacy. From our standpoint, the problem with this distinction by markers is that the same marker can serve different functions.

The marker but can also function at the action level of the discourse.

(3) Mei: My girl's gonna sit up here *too/
    Eve: But there's only two people down there/ (4;03)

In (3), the marker indicates that there is an adversative relation between two speech acts, Mei's proposal that her girl figure will sit high up in the bleachers and Eve's cited reason, which implicitly rejects this plan.

At the exchange level, the discourse markers of the youngest children introduce turns, so they do turn-marking. While Eve's but also marks a new turn, these uses are more clearly seen when there is no additional meaning at the ideational or action levels of the discourse. In (4), the because functions at the level of talk only to

¹ Examples are from Kyratzis' database unless otherwise indicated. Age is in parentheses in years and months.
² Speech act level causals occur only when the utterance is not serving as a description or narration, but as a request, promise, warning and so on. This difference may suggest either that descriptive acts are the default speech act, or that the ideational function of causal clauses is their default use.
appropriate a turn and is not justifying a (described) event or speech act, (though it could be seen as justifying a non-verbal act).

(4) A: It’s mine [reaching for toy that B is holding]/
B: Because it’s mine [keeping toy out of A’s reach]/ (Sprott, 1992)

Although markers used by children often appear at the beginning of turns, those used by children aged four years and older tend to have additional functions at other levels of the discourse, ideational or action, as well as the turn-marking function. We decided to code turn-marking only as a residual category, that is, when that was the unique function the marker served. We did not double-code in this analysis.

Markers, according to Schiffrin, can also function at the level of participation frameworks. Here, the marker serves to shift the roles in the talk of participants, or introduce upcoming talk as relating to concerns or questions raised in prior talk. This shift can sometimes be seen as suggesting a new episode or phase in an exchange or activity. The marker well is often used locally in this way, and acts particularly to signal upcoming talk as contradicting expectations raised in prior utterances or questions. In question–answer sequences, for example, well has been characterized in analyses of adult talk as one of the common markers of dispreferred responses in adjacency pairs (Pomerantz, 1984).³

(5) Tra: uh now *pretend he doesn’t have a broken *arm/
    [[low] well, we were *wrong about the broken *arm] (7;08)

In (5), the child speaker uses well in the character of doctor⁴,⁵ to signal the fact that what’s coming speaks to the patient’s concerns and is contrary to what she expected.⁶

In addition to functioning at different levels of discourse – ideational, action, turn, and participation frameworks – markers can operate locally or globally. All of the uses seen in (1) – (5) are local, in that relationships are drawn between two adjacent utterances, albeit at many different possible levels of discourse. However, markers can signal relations between larger units of talk. In (6), the marker okay functions to signal the relationship between two large episodes in the circus script, the seating of the audience (where audience figures buy tickets and get seated) and the beginning of the circus show proper (music starting, Ringmaster coming on and announcing the first act, etc.).⁶ Each episode consists of several actions and utterances.

³ Dispreference in conversational analysis refers not to dislike, but to marking second turns by delays, elaboration or accounts.
⁴ Children engaged in puppet or doll play can be heard in three voices, that of the child, the director or planner, and that of the characters. These voices are differentiated by such choices as will vs. gonna (Gee and Savasir, 1985) or imparfait in French, as well as by vocal and lexical features (Andersen et al., 1999).
⁵ It is possible that the capacity to act contrary to expectation, and at the same time indicate one is doing so, implies power or situational control. See Andersen et al. for well as a social index.
⁶ Elena Escalera has analyzed changes in children’s use of okay with age, from local to global, from agreement to other functions. (Pak et al., 1996).
Schiffrin (1987) and Polanyi and Scha (1983) have described a global use of so as a 'pop-marker' or marker of return to prior topic. Here, so functions to return the discourse to a main topic after some digression or side sequence, as in the return to a main search sequence in a narrative after an intervening problem has been resolved. We shall call such global uses to mark changes in topics or episodes boundary marking.

In all of our discussion here, it is assumed that markers can be plurifunctional, the same marker functioning at more than one level of discourse structure at a given time. However, there is some limitation in the functions given markers assume. For example, well, okay, and now only function at the turn, action, and participation framework levels of the discourse, and do boundary marking, but do not serve as markers of ideational structure. Because functions at the turn, action, and ideational levels of the discourse, but participation framework uses are hard to find for this marker. Boundary marking uses are difficult to identify for because, though they are possible; a speaker could use because to return to a complex, ongoing argument justifying a claim or request after continual digression, but such uses were not common in our children and boundary marking uses were more often seen for now, so, and okay.

In child language, discourse markers can help reveal the levels of discourse structure that a child differentiates in talk, as well as whether the child represents and demarcates (in language) global discourse relations. Prior research in our lab has revealed that, at least for the marker because, there is a developmental shift from predominantly action level uses to more ideational uses (Kyratzis et al., 1990). We speculated that persuasive uses of language, uses at the action level, were more frequent in the practical lives of these young children than ideational/descriptive uses because they were more useful for their conversational goals, and hence we would expect them to emerge early for the other markers as well. To what extent can this shift be seen with other markers? What about the other levels of discourse – e.g., participation frameworks – do young children differentiate these? We speculated that such uses are quite subtle; tracking addressees' expectations for their own sake – independent of instrumental needs of the speaker related to requests – requires a level of perspective-taking and orientation to others that young children may not possess. To what extent are global relations revealed and marked in the discourse of young children? Research by Bamberg (1987) and by Berman and Slobin (1994) on narratives suggests that the ability to track such relations is relatively late-emerging, so we would expect boundary marking uses to come in rather late. These were the questions we sought to answer in the present research.

---

7 Guo has shown that for all modal auxiliaries present in Mandarin child speech, the interpersonal structure of the ongoing discourse provides input and helps frame the meaning and use of the linguistic form for the child. Only at later stages does the linguistic form get used in the decontextualized situations, encoding information at the propositional level (Guo, 1996).
2. Method

2.1. Subjects

Ten same-sex pairs of children at each of two ages, 4 and 7 years, were videotaped interacting in different activities. There were five boy-boy and five girl-girl dyads at each age. The preschool children were recruited through a university preschool in California. Most were children of university faculty, students, and staff and were predominantly middle class. They were 67% white and 33% Asian, Latino, African-American, and other ethnicities. The elementary school-aged children were recruited through a public elementary school in the same neighborhood as the preschool. Children were middle-class and lower-middle class. They were 60% white and 40% Asian, Latino, African-American and other ethnicities.

The children within each dyad were best friends in their class, as determined by information provided by parents on the parental consent form. Best friends were used in the study because friends share common ground and common goals, and conversation and interaction are enhanced.

2.2. Procedure

One activity was a doll play situation, where the children were presented with an elaborate Playmobil scenario toy (e.g., circus, medical) and asked to play freely for twenty minutes. The other was a story retelling situation. Here, an adult read one child in each dyad a story (Little brother and little sister), and asked the child to tell the story to the friend on another day.8

2.3. Analysis

In addition to the two contexts that were set up experimentally, the children themselves made another breakdown – within the doll play situation. There were three activity types in the doll play. There was a difference between negotiating what would happen in the scenario and who would get what toys, planning the plot, and enactment or carrying out of the scenario. Emplotment is a term taken from Gee and Savasir (1985), designating planning in the voice of directors or scriptwriters of a sequence of dramatic actions, independent of negotiation or argument (e.g., narrating the actions of the dolls in conformance to a circus script) and of enactment of the plot in the voice of actors. Younger children often spend much more time negotiating who would get what, and sometimes the play ends there, never getting to emplotment or enactment of the sequence of events. This phase is also the site of many disputes. This was particularly true of the four-year-old boys in this study.

---

8 In this type of interactional work, we use stationary, separated, monophonic microphones to allow voice identification, or if the children are in motion, radio transmitters from each child to different stereo receiver inputs.
Doll play transcripts were coded into segments or voices of negotiation, emplotment, or enactment. Segments were coded as negotiation when interactants were engaged in dyadic problem-solving, trying to reach a determination about what an object should be or do or what should happen in the play. Utterances in these segments tended to be in the first and second person (e.g., *I need this*). Segments were coded as emplotment (narrative) when interactants were articulating a sequence of actions as if in accordance with a prescribed sequence, without negotiation, or when they spoke for characters and the speech occupied a canonical place in an event sequence. Sequenced actions tended to be described in the third, rather than first or second, person tense, in segments of emplotment.

All uses of the discourse markers *because, so, but, well, okay,* and *now* were identified and coded for various features. These included the level of discourse structure at which they operated (turn, action, ideational, participation frameworks). If two levels were used at once, the hypothetically more advanced one was used—e.g. a turn-initial *but* which both marked a turn initiation and a challenge would be coded at the action level. Our treatment of expected order is based on a developmental hierarchy indicated in our and others’ research—turn level uses precede action level uses, which in turn precede content level and participation framework uses in development. Global uses of the markers, as markers of boundaries between chunks of talk larger than the utterance, were also noted. Global uses succeed local uses in development and hence boundary marking uses were considered as more advanced than other (i.e., local) uses.

Turn marking was coded when a marker began a turn and had no other function. Such uses never occurred with the children in our study, who were at least four years of age. The marker was coded as functioning at the action level if it conjoined two clauses in a speech act-level relation. A speech act-level relation was counted if one of the clauses modified (i.e., gave the reason for or countered) the speech act of the other clause rather than a possible event described in the other clause.

In the case of causals, a speech act-level causal was counted when the action clause was a request or other speech act other than narration or description (e.g., promise, greeting, warning, threat, etc.) and the reason clause gave a reason why the speech act was appropriate in that context. In our data base involving children, speech act-level causals almost always contained instrumental requests in the main clause rather than other speech acts (information requests, warnings, greetings, etc.). The reason clause gave the reason why the addressee should comply with the request. All causal constructions that had third person event descriptions in the main clause were coded as content level, or ideational.

The markers *ok, now, so,* and *well* often did boundary marking, particularly for the older children. In the pretend play, these uses marked a shift between the different phases of the play—negotiation, emplotment, and enactment. In example (7) below, *now* signals a return to the emplotment (director’s narrative) after an intervening negotiation has been resolved.

(7) *Circus doll play*

Zin: wait, pretend you got off the rink to watch for a while/

[Z grabs J’s toy and places it in front of her]
Jan: okay. I got off it/[picks up a piece]
Zin: >now, no/ somebody's on the iceskate rink/

Well and so also had boundary marking functions in the story retellings. Here, they indexed shifts between episodes or between stative, background information and action. In example (8) below, the second so serves to mark the shift from a stretch of background information to action.

(8) Gabriella’s Story retelling
>so he drank it and turned into a deer/
and um, she never left the deer/
and then they, walked a lot,
then they found a house/
and they went {[high] in the house/}
and then, the deer ...um..
there was like this----um deer hunting/
>so he wanted to go out/
with- um go out with them/

Boundary marking uses always involved participation frameworks. The markers well, ok, now, and so often did boundary marking. On our tables, participation framework implications of boundary marking are not indicated separately. This because boundary markers, in indexing returns to a main theme, always concern addressee expectations and participant roles, and therefore implicate participation frameworks.

Participation framework uses not bound up in boundary marking did occur for well. While well was sometimes used to mark a boundary, it often was not. Examples of well occurred during enactment particularly for speech produced in the doctor role in the medical scenario. Here, the doctor would answer questions, implicitly or explicitly posed by other protagonists (nurse, patient), as in example (9) below.

(9) Tra: uh now *pretend he doesn’t have a broken *arm/
>[[low] well, we were *wrong about the broken *arm/]

Participation framework uses of okay, now, and so were always also boundary marking uses.

3. Results

Results are reported in three categories: age changes, context differences, and age by context interactions. There were age changes in the use of discourse markers. As can be seen in Table 1, there is a move from marking at the action level to marking at the levels of ideational structure and participation frameworks. Well was used at the level of participation frameworks to mark answers to questions (either explicit or
implicit) during in-character or enactment speech (see example 5). *Well, so, okay,* and *now* functioned at the level of participation frameworks in another way; as global boundary markers. Boundary markers, we argue, always operate at the level of participation frameworks because, by marking returns to a main topic, they make reference to a shared concern of both speaker and hearer. Table 1 also shows that, with age, there is a move to markers operating globally rather than locally; this is seen in the use of boundary markers at age seven but rarely at age four. Note that *well, okay,* and *now* do not do ideational marking at either age, perhaps due to the limitations in the functions given markers can serve.

Table 1
Age changes in marker functions

<table>
<thead>
<tr>
<th>Marker</th>
<th>Four years</th>
<th>Seven years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Because</td>
<td>Action, Ideation*</td>
<td>Action, Ideation</td>
</tr>
<tr>
<td>But</td>
<td>Action, Ideation*</td>
<td>Action, Ideation</td>
</tr>
<tr>
<td>So</td>
<td>Action, Ideation*, Boundary*</td>
<td>Action, Ideation, Boundary</td>
</tr>
<tr>
<td>Well</td>
<td>Action</td>
<td>Action, Boundary, PFs</td>
</tr>
<tr>
<td>OK</td>
<td>Boundary*</td>
<td>Boundary</td>
</tr>
<tr>
<td>NOW</td>
<td>Boundary*</td>
<td>Boundary</td>
</tr>
</tbody>
</table>

* Infrequent usage, occurs only in one context

There were context differences in the use of discourse markers. As Tables 2 and 3 reveal, negotiation yielded predominantly action-level uses.

Table 2
Context differences in marker functions

<table>
<thead>
<tr>
<th>Negotiate</th>
<th>Retell Story</th>
<th>Emplot/Enact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action</td>
<td>Ideation</td>
<td>Action</td>
</tr>
<tr>
<td>Boundary</td>
<td>Ideation</td>
<td>Boundary</td>
</tr>
<tr>
<td>PFs</td>
<td>Boundary</td>
<td>PFs</td>
</tr>
</tbody>
</table>

Table 3
Context differences in marker functions shown by marker

<table>
<thead>
<tr>
<th>Marker</th>
<th>Negotiate</th>
<th>Retell Story</th>
<th>Emplot/Enact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Because</td>
<td>Action</td>
<td>Ideation</td>
<td>Action, Ideation</td>
</tr>
<tr>
<td>But</td>
<td>Action</td>
<td>Ideation</td>
<td>Action, Ideation</td>
</tr>
<tr>
<td>So</td>
<td>Action</td>
<td>Ideation, Boundary</td>
<td>Action, Ideation, Boundary</td>
</tr>
<tr>
<td>Well</td>
<td>Action</td>
<td>Boundary, PF's</td>
<td>Action, Boundary, PF's</td>
</tr>
<tr>
<td>OK</td>
<td>___</td>
<td>___</td>
<td>Boundary</td>
</tr>
<tr>
<td>NOW</td>
<td>___</td>
<td>___</td>
<td>Boundary</td>
</tr>
</tbody>
</table>

Negotiation took up more of the doll play sessions for younger than older children (see results reported below) and for boys than girls (Kyratzis, 1993); some 4-year-
old boys failed to ever get to emplotment and did negotiation almost exclusively. The action-level uses of markers in negotiation are illustrated in example (10), the negotiation of two four-year-old boys over who will get which circus objects.

(10) *Negotiation with circus toys (4-year-old boys)*

1. Carl: you need him? (refers to musician)
2. John: yeah/
3. Carl: no, no, no, no- no, I *need him/
5. Carl: okay/
6. John: that’s mine/
7. Carl: I need-.. I need. . =some of=.
8. John: =I don’t need this//= [musician]
9. I need--.. I’ll need the hole/[= seal hoop]
10. Carl: <4> hey John, this is a good guy/ [=clown]
11. that boy could play and play/
12. >he could play all the way *home// 'cuz *that’s his home//= [= concession stand]
13. John: a clo::wn//= [taking clown from C]
14. >guess what I think, 'cuz I have a clown/
15. (so) this is mine/
16. I got an exciting show/
17. you need these, Carl?
18. Carl: yeah, (I) need ’em/
19. John: no, I need, umm/
20. Carl: what?
21. John: I need, umm. . . this/ [=seal hoops]
22. >so they could go through// 'cuz this is a hoop/
23. no, I need *both of them//= (=both hoops)
24. Carl: here! no, here//= [handing J seal stool]
25. John: I don’t need this [throws the seal stool down]
26. I need . . . um. . a big one and a little one/ [=both large hoop and small hoop]
27. Carl: oh/
28. John: (xxxx) (a big round)
29. Carl: (I think) this for him/ [picks up seal].
30. look what *he has/ (sings)
31. John: >well, I have- I’m gonna put everything in here/ [J starts putting all the figures and objects into the concession stand, humming] [C tries to grab the concession stand]
32. John: this. . no, Carl! this is mine/ [J pulls concession stand out of C’s reach]
33. Carl: no/ no, that’s a *clown, see, there’s a *clown/ that’s the boys *home/
34. [=concession stand with clown picture on it]
35. John: these are *all the boys’ homes and this guy’s home/ see, he put-. . . he put-. . .
he goes with, even his stuff that he brought/
>but he- he goes with these guys// aak! . . . and his home/
[J shoves all the figures and objects into the concession stand]
[John: and this-. and this/. . . come-on *dolphin! urgh!]
[John: [tries to shove seal in] awww! I can’t get it in!]
[J forces seal into concession stand]
[Carl: [laughs]
[John: can you see, we put this guy on here?]
[pointing to roof of concession stand]
[John: can I have one of the music stands?]
[J reaches into C’s pile, pulls out a music stand]
[Carl: no, no (because). . .]
[John: Carl, no/ Carl/
[Carl: (what!)]
[John: this is where I ’sposed to (’was supposed to’) start/
[J pours everything out of the concession stand onto the Ring, where C had put one of his figures]
[John: I don’t need this/ you can have this if you want/
[J gives C the concession stand]
[Carl: (oh), *thank you /
[starts to put the concession stand into the Ring]
[John: this,. . . no, Carl, this isn’t your place, it’s mine/
[Carl: I know, but *that’s *mine/
[=bleachers surrounding the Ring]
[Carl: hey, I need *that/
[John: then, *here/[sounding upset, he moves away from the part of the Ring that C wanted to use]
[John: and I need this/
[J spreads his toys out so that they cover almost all of the Ring]

Action-level uses of because/cuz occur in lines 12, 14, and 22. In line 12 (he could play all the way home/cuz that’s his home), Carl uses cuz to justify his proposal that the clown play all the way to the concession stand (home refers to the concession stand). (In addition, the proposal is itself a justification for why he should get the concession stand). In line 22-23 (I need, umm...this [the hoop]/ so they could go through/cuz this is a hoop), the facts that the object is a hoop that seals can go through and that he is holding the seal justify why he should get the hoop.

Line 38 contains an action-level use of but. The boys are engaged in a dispute over the concession stand. Carl wants it because he has the clown and the concession stand, he argues, belongs with the clown (since there’s a clown pictured on it). John uses but to counter C’s claim, saying that the stand belongs to all the guys rather than to just C’s guy. But is operating at the action level because it marks an adversative relation between implied speech acts rather than a contrast in propositions.

The well in line 31 is also being used at the action level (well, I’m gonna put everything in here). It serves to introduce J’s refusal to go along with the reasoned distribution of toys the boys had been (somewhat!) adhering to up to this point. Though C has tried to limit J’s possessions to the seal and hoops, J here takes over all the toys.
We stated earlier that negotiations do not promote the use of boundary markers by children; in this exchange, there is no narrative or jointly produced story-line the children are returning to so there is no need for boundary markers like *so, okay, or now* separating episodes. Negotiations promote mostly action-level uses of markers because much of what is going on is challenging one another’s proposals and giving reasons for the challenge.

Example (11) is a story retelling which exemplifies some very different uses of the same markers. This involves two seven-year-old girls so it will also help illustrate some of the age changes.

(11) *Story retelling (7-year-old girls)*

[Lyn is telling story of Little Brother and Little Sister to Lily]

1. and he says I don’t care I’m so thirsty/
2. >so he just goes ahead and drinks it/
3. and at the first drop he turns he turns into a deer/
4. and the little sister... really... uh...
5. you know, she cries
6. >because her brother turned into a little deer/
7. and she takes and she makes a leash/
8. you know, and a little collar and takes him to a cottage,
9. which doesn’t... which nobody’s lived in/
10. since probably a year/
11. and um... you know, something like that/
12. >and so she gives him a bed and she makes food for him/
13. and now she’s no longer *so little/
14. she’s probably about 20 or something/ you know, 19/
15. >so then it turns on that in the same woods,
16. the king is having a hunt/
17. and the little deer* wants to join/
18. and so and... little sister pleads/
19. and goes no, no they’ll surely catch you and tear you/
20. and then they’ll find me and tear me up to pieces/
21. and he goes, but I must sister/
22. you know, so they start to... you know/
23. >well little sister pleads,
24. and little brother begs,
25. and finally she decides to let him go/
26. >but before that, she says be home before it gets dark/
27. and say the secret password/
28. which is little sister let me in/
29. or I will not let..or I will not let you in/
30. and you will be caught by the hunters/
31. and little brother says okay/
32. >and so he goes off to join the hunt/

In lines 4–6 (*and the little sister really .. uh, she...uh, you know, she cries, because her brother turned into a little deer*), *because* marks the story-world relation between Little Brother being turned into a deer and Little Sister crying – it’s a tradi-
tional cause and effect relation. The *but* in lines 25–26 (*finally she decides to let him go but before that she says 'be home before it gets dark') marks the adversative relation between two events – Sister letting Little Brother go on the hunt and being reluctant to let him go. Both of these uses mark ideational structure, that is, semantic relations between propositions.

In line 23, *well* operates at the level of participation frameworks. Lines 17–21 describe a dispute between Little Sister and Little Brother over whether Little Brother should go on the hunt. The *well* marks the fact that the utterance presents the answer to the question raised in lines 17–21 – how will the dispute be resolved? It also marks the beginning of the resolution proper, therefore functioning as an episode marker indicating a global boundary.

In lines 2, 12, 15, 18, and 22, *so* is used for marking global boundaries. In 15, for example, the *so* returns the talk to the overall story line – what will happen to Little Brother and Little Sister now that they are out alone in the woods? This return comes after a digression in the form of background information – the description of time passage since the escape of the siblings. The *so* operates at the level of participation frameworks because it returns the hearer to the main story-line and it is assumed that this represents a concern of the hearer. It also operates at a global level, since it marks the episode structure of the story, partitioning it into segments larger than the single utterance. The *so's* on lines 12, 15, 18, 22 and 32 serve to mark off the following sections of text, respectively: the section of background material about time passage since escaping the Stepmother; the section of background material describing the king's hunt; the episode describing the argument between Sister and Brother about Brother's joining the hunt; and the episode describing the actual hunt).

Why do ideational and boundary-marking uses of markers occur in narrative? Narrative, in contrast to negotiation, is a reflective activity. The concern is not with establishing or constituting a reality but, rather, is with representing it and understanding it (Kyratzis, 1993). Children use content-level causal and adversative constructions because they reflect on causes and adversative relations in their own right as they represent them; in negotiation, in contrast, reasons and rejections function to promote the child's desires and directives and are not interesting in their own right or for cognitive reasons.

Boundary markers are necessary in long narratives because there is a coherent problem or theme that keeps getting returned to after digressions are resolved and/or relevant background information is reported. In negotiations, at least for young children, topics shift rapidly; one moment, the issue is getting the seal hoop, the next, it's getting the concession stand.

Most interesting in terms of contextual comparison was the emplotment context in the pretend play. Here, uses of discourse markers characteristic of both narrative and negotiation were in evidence. Example (12) is such an emplotment, produced collaboratively between two four-year-old girls. The story-line constructed by the girls is as follows – a performer is putting on an ice-skating show and runs into her twin daughter and son who are sitting in the audience. (And are girlfriend and boyfriend, no less!)
(12) Emplotment with circus toys (4-year-old girls)

[J and Z are playing with circus scenario; each has a seal and is trying to bend it into sitting position]

1. **Jan:** just do it like this okay? make it like this/
   [placing seals on stools in non-seated position]
2. **Zin:** no, like this, so the seal can fit/
3. **Jan:** \textit{okay}, or how, how do we make it? [Z grabs toy from J]
4. **Zin:** like *this*, Jan [displays her piece]
5. **Jan:** okay/
6. **Zin:** there we go/ [fixes doll into sitting position]
7. **Jan:** okay. now/ oh! there he is/
   [whispers, attempts to take figure from Z who resists]
8. **Zin:** I'm supposed to *act her/
9. **Jan:** I'm supposed to act my- act myself/
   [Z grabs other human figure]
10. **Zin:** this is me. the teenager/= this is you. the teenager/= this is me. so I'm supposed to act her,
11. **Jan:** and you're supposed to act *her,
12. **Zin:** \textit{because} you're the mom/[hums]
13. **Jan:** pretend I was moving this *up and down/
14. **Zin:** pretend that I could sit= the seals on so it =was harder/
15. **Jan:** and I didn't= let the seals fall off/
16. **Zin:** and pretend somebody was ice-skating on the rink/
17. **Jan:** there was a mom/
18. **Zin:** wait, pretend you got off the rink to watch for a while/
   [Z grabs J's toy and places it in front of her]
19. **Jan:** okay. I got off it/[picks up a piece]
20. **Zin:** \textit{now}, no/ somebody's on the iceskate rink/
   [grabs J's figure again]
21. **Jan:** \textit{okay. but} *he is the audience/
   [grabs a male doll and places it in front of Z]
22. **Zin:** I'll set her up/ \textit{<7> let she be standing/|=doll]
23. **Jan:** \textit{okay. but} *he is the audience/
   [J returns to her seat] (xxx)<13>
24. **Zin:** \textit{but} she slows down when she gets to you/ okay? (xxx)
25. **Jan:** \textit{he is the audience} 
26. **Zin:** and you're sitting where the man - where the lady zooms by,
27. **Jan:** \textit{he is the audience} 
28. **Zin:** and you're sitting where the man - where the lady zooms by,
29. **Jan:** \textit{he is the audience} 
30. **Zin:** and you're sitting where the man - where the lady zooms by,
31. **Jan:** \textit{he is the audience} 
32. **Zin:** \textit{he is the audience} 
33. **Jan:** \textit{he is the audience} 
34. **Zin:** \textit{he is the audience} 
35. **Jan:** \textit{he is the audience} 
36. **Zin:** \textit{he is the audience} 
37. **Jan:** \textit{he is the audience} 
38. **Jan:** \textit{he is the audience} 

39. Zin: ==no, no, you *you ask, um, who’s that?,
and then you take a good look and it’s your mom!
40. and say that’s your mom!"
41. Jan: ==um, who’s that?
42. Zin: ==and I say, that’s my mom/
43. Jan: and he, and he says, that’s my mom/
44. Zin: >yah/ they both say that because they’re twins/
[J walks back to her side]
45. Jan: >ya, um, but they’re uh boyfriend and girlfriend too/
46. Zin: come on, say that/ say it/
47. Jan: oh, we’re brother and sis...
48. we’re twins, and um we’re girlfriend and boyfriend too/
59. Zin: hel::lo swee::tie!

Interspersed in the emplotment are segments of negotiation, as in lines 1–2, where the girls negotiate who is to take which role. In line 3, having resolved this issue, they return to the narrative with okay, which here has a boundary-marking function. Its usage can be paraphrased ‘okay, now that we’ve resolved who’s who, we can return to the story-line!’ The now in line 26 (Now, no/ somebody’s on the iceskate rink:/) is similarly used by Zinnia to return to the story-line after a digression and can be paraphrased ‘now that you’ve gotten your stuff off the rink, the performer can come on and the show can start’. These boundary marking uses show that the girls are collaboratively building a story.

Other narrative-like uses of discourse markers occur in this example. There are ideational uses of because and but. An ideational use of because occurs in line 44 (Yah/ they both say that because they’re twins/). Here the reason clause explains an event in the story-line, that both protagonists say (that’s my mom.) An ideational use of but is in line 32–33 (the lady zooms by, but she slows down when she gets to you/). It marks a contrastive relation between two events, zooming by and slowing down, hence operating at the content or propositional level.

In addition to the narrative uses of markers, emplotment also has negotiation-like uses. In line 28, (okay/ but *he is the audience/). Here but sets up an adversative relation between Z’s speech act in line 27 (let she be standing) and J’s speech act, an alternative proposal, therefore functioning at the action level. The because in line 14–15 (you’re supposed to act *her, because you’re the mom) also works at the action level; it marks the reason why J proposes (says) that Z should take on a particular role.

We view emplotment as an important scaffold or ratchet to getting children to use more narrative-like uses of markers (i.e., ideational, participation framework, and boundary marker uses). In our transcripts, such narrative-like uses occurred for the younger children only in emplotment and rarely in story retellings (see Table 4). In fact, as Table 4 indicates, story retellings were very sparse contexts for the appearance of markers of any type in 4-year-olds. Example (13) shows a typical narrative for our four-year-olds.

The reader should note the absence of markers other than and and and then in example (13) There is an aborted because in line 26. The only sophisticated marker
is the well in line 17, which appears to be elicited by the adult’s probe. It may be in such dialogic exchanges involving adult prompting that young children learn to use well to mark participation frameworks spontaneously.

Table 4
Age by context differences in marker functions

<table>
<thead>
<tr>
<th>Four</th>
<th>Retell</th>
<th>Enact</th>
<th>Seven</th>
<th>Retell</th>
<th>Enact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negotiate doll play</td>
<td></td>
<td></td>
<td>Negotiate doll play</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emplot, Enact</td>
<td></td>
<td></td>
<td>Ideation Boundary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action</td>
<td>——</td>
<td>Action Ideation Boundary</td>
<td>Action Ideation Boundary PF’s</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(13) *Story retelling (4-year-old boys)*

1. Ian: here are some parts that I can remember Patrick
2. little brother and little sister escape
3. from their wicked stepmother/
4. and then - and then they escape/
5. little brother gets real thirsty/
6. he keeps coming across all these streams/
7. drink not of me! or to - or to da da da, whatever animal he changed into/
8. and then, he finally comes to another stream/
9. drink not of me! drink not of me!
10. (or) a deer changed/
11. do you think little brother will listen?
12. you're peeping at me, aren't you [to Researcher]
13. Res: any other parts?
14. Ian: there’s one part I remember/
15. Res: go ahead, tell him [Patrick]
16. Ian: >well, little sister starts crying/
17. and then, the deer starts crying,
18. and she says little deer don’t cry/
19. then there’s one other part I ‘member/
20. she wants to take him away,
21. and she ties her golden. she takes it off her neck,
22. and puts it on his collar/
23. and then she takes her handkerchief,
24. and braids it with. .
25. >and ties it up on the neck, *cause* after <5>
27. Ian: uh, yes, uh I will/
28. they’re too long to tell Patrick/
29. what part are you remembering?
30. Ian: ( ) punishes wicked step-mother’s daughter/
How can we account for the scarcity of markers in four-year-olds’ story retellings? Our account goes along the following lines, having to do with children’s preferred discursive practices as they vary by age. (They also vary by gender; see Kyratzis, 1993.) Four-year-olds, in their dialogic experience, have to participate quite a bit in negotiation. They try to get their way with both peers and adults and their everyday talk is much taken up with this practice. In fact, in our own data base of pretend play, four year olds spent a greater proportion of their pretend play time negotiating than emplotting (71% vs. 29%) in comparison to seven-year-olds (42% negotiation; 58% emplotment). While four-year-olds are quite facile with negotiation, they are just beginning to engage in narrative practices. Story telling and retelling are discourse practices fostered in nursery school. Some of the social-interactive functions of telling stories (e.g., showing how the protagonist can come up to a challenge) may not be well understood by children. However, pretend play is a very common nursery school activity and emplotment may be a genre preschoolers have greater experience with than the retelling of stories from books and media. Also, emplotment involves some element of constitutive as well as representative reality – in jointly producing a story-line with playmates, children create and negotiate a pretend world, even if the negotiation component of it is masked or mitigated. When J in our example (8) says that both the twins say that’s my mom, she is both constituting that pretense event as a reality in the play world as well as representing it. If we see constituting reality as somehow more salient for young children as a communicative function, we can understand why uses of language which support this function (action-level uses; ideational uses embedded in emplotment) may emerge earlier than purely representational ones (ideational uses in story retellings). In this way, emplotment during pretend play may serve as a scaffold for the development of more narrative-like, representational (ideational) uses of markers. Emplotment, as a discourse type more widely practiced by preschool children than story retellings, may also serve as a scaffold for the development of uses of markers to signal participation frameworks and global units. Producing a story-line jointly with a partner and continually returning to it after digression (segments of negotiation) may be a communicative function better understood by young children than reproducing a story-line encountered in a book or seen in a movie.

4. Conclusion

We saw age changes from local to global with three markers, with okay, now, and so. There were shifts from the action level to the ideational level of operation for but
and because. In addition, we have found that activity settings have different markers, so that negotiation, because it involves persuasion, tends to have action level and participation markers, whereas story retelling has ideational, participation, and global boundary markers, and emplotment/enactment of doll play has all four types of markers. The youngest children, when they tell a story have very few markers; they don’t yet know how to do global marking, and they don’t do ideational marking, so you see a lack of markers in young children’s story retelling. Also, when they do doll play emplotment, the younger children lack global and ideational marking. In addition, there is some sex difference. The girls, during doll play, spend more time in emplotment and enactment and less time in persuasive negotiation over goods and space. Because of this difference in their focus of activity, we saw them beginning to display global marking and ideational marking before the boys in our sample, in these two types of contexts.

In this paper, we tried to relate the uses of discourse markers as described in the literature to children’s discursive practices. These vary widely by age and gender (as well as by other social categories not examined here!) To the extent that different functions of markers are necessary in different discursive or activity types (e.g., negotiations, emplotments, story retellings), and girls and boys at different ages have different degrees of exposure to and practice with these activity types in their dialogic experience, we may expect that dialogic experience will have some predictable influences on children’s uses of markers. The results seen here seem to support that expectation. Preschoolers, particularly boys, mark relations at the level of action structure while older children mark relations at the levels of ideational structure and participation frameworks more often in discourse.

Appendix: transcription conventions

/ Falling intonation
? Rising intonation
, Holding intonation
* Stressed syllable
( ) Undecipherable word or stretch of words
{[speech feature] scope of speech affected}
... Pause
<seconds of pause>
== Fast response, latching
= segment overlapped=in one speaker’s turn
= by another speaker =

References


Amy Kyratzis received her doctorate in 1989 from the City University of New York in Developmental Psychology. She trained with Katherine Nelson in the areas of language and cognitive development and her dissertation research was on the role of language in superordinate category formation. She did post-doctoral research at the University of California, Berkeley’s Department of Psychology with Susan Ervin-Tripp on conversational development, the interface of grammar and discourse, and gender differences in language. She is currently Assistant Professor in the Graduate School of Education at the University of California, Santa Barbara, where she works on gender differences in language and cognition and the socialization of gender through language.

Susan Ervin-Tripp received a doctorate in Social Psychology at the University of Michigan in 1955, studying adult bilinguals’ contrasted content in two languages. From the Harvard School of Education, she came to the University of California at Berkeley. Her early work was published in Language acquisition and communicative choice. In the early sixties she undertook with Wick Miller longitudinal study of children’s syntactic development, and at the same time began work on situated requests in adults and later in children, as the focus of a type of syntactic/pragmatic interaction. Recently her focus has been on how pragmatic context affects syntactic development, and on the development of conversational structure.