# *Episodic boundaries in conversational narratives*

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ABSTRACT This study attempts to integrate linguistic and discourse analysis to investigate the way narrators demarcate episodic boundaries in conversational settings and hypothesize about the kind of cognitive processes that might be involved in such an activity. In contrast to previous research in this area which predominately relies on experimentally designed text, this study draws on naturalistic data and relies on the notion that narrators in conversational setting interactionally create narrative by recruiting discourse skills that are most readily available to them. The study reveals that narrators in conversational settings employ reference (i.e. use of noun phrases and anaphors) and macropropositions following a general pattern. Generally, episode boundaries are marked both by macropropositions and full noun phrases. Noun phrases are often used to indicate the beginning of an episode, whereas pronominals are often used within episode boundaries suggesting the continuation of the current episode. The co-occurrence of macropropositions and NPs in demarcating episodic boundaries reflects the bidirectional process operating simultaneously within the linguistic and conceptual domains that is involved in the production of narratives. The use of pronominals within the episode boundaries indicates that cognitive mechanisms such as sustaining attention is also involved in demarcation of episodic boundaries.

KEYWORDS: *anaphora, attention, cognition, conversational narrative, episodic boundary, macroproposition*

## *Introduction*

The production of a narrative involves a bidirectional process operating simultaneously within linguistic and conceptual domains. On the one hand, the com-

pleted text is the end result of a constructive process of fitting information together from bottom-up, forming local defined units and establishing their relationships through sequential connections (Labov and Waletzky, 1967; Labov, 1972; Miller and Sperry, 1988; Ochs et al., 1992). On the other hand, narratives by definition also process a global structure which presumably is manifested in an underlying conceptual representation. This representation acts as the conceptual starting point from which information is organized into the complete narrative whole, typically arranged in a hierarchical fashion from the most global to the most local units (Hinds, 1977; Bamberg, 1987). Taking these two perspectives together, producing any kind of narrative is the result of mapping two aspects of narrative structure onto the linguistic code: linking together pieces of information in a linear fashion, while simultaneously organizing and interconnecting information within the overall representational hierarchy along a vertical dimension (i.e. syntagmatic vs paradigmatic organization of narrative).

Investigations of narrative have a rich history, more recently including the fields of psycholinguistics and cognitive and developmental psychology. Yet few of these studies manage to capture the bidirectional nature of narratives, and the interactive role of both local and global pressures in the production and comprehension of narrative. For example, the distinction made by Labov and Waletzky (1967) between narrative and the free clause, renders difficult to pinpoint how the conceptual organization of narrative information at the global level is integrated into and coordinated with descriptions of the various linguistic means adopted for tying sentences together into linearly defined units or blocks. Others (Chvany, 1985; Tomlin, 1987) have investigated how linguistic forms serve to heighten or de-emphasize information that is more or less relevant within a scene, or even within the overall plot of the narrative. However, while the organizational role of representational structures is acknowledged, global references are generally subordinated unless they directly relate to the identification of linguistic realities that establish locally defined cohesive ties between propositions in a text.

The integration of conceptually driven global organization and local, bottom-up process is, at least implicitly, acknowledged within cognitively oriented approaches, such as the work on story grammars and/or schemata (Rumelhart, 1977; Stein and Glenn, 1979, 1982). In contrast to the work in the linguistic tradition (Grosz and Snider, 1986; Cohen, 1987; Grosz et al., 1995), these approaches do not generally examine the nature of linguistic devices themselves. Rather, language is considered to be a 'window, albeit sometimes opaque, into the nature of underlying representation itself' (French, 1986: 119). Indirectly, however, this work has contributed to our understanding of several types of devices, those ones which serve to establish local cohesive ties (e.g. anaphora, definite reference), and those which mark overarching structural relationships (e.g. summary statements, pronominal/nominal shifts) in a text (Hinds, 1977).

A related but interestingly different perspective within the cognitive domain aims at a level somewhere between the linguistic, bottom-up, and the top-down,

hierarchical analysis of episodes. The fine-grained approach developed by Trabasso et al. (1984) attempts to quantify the degree of 'causal cohesiveness' between propositions in a text and thus to ascertain the contribution of local, bottom-up relationships to the establishment of top-down coherence. The objective of such work is to determine the extent to which globally defined organizational structures can be derived from relations between information at the local level. In other words, to what extent do text-wide structures exist 'independently' of the demands placed by local (and thus linguistic) constraints on the expression and organization of pieces of information?

Cognitively oriented research is typically not concerned with the variety of linguistic forms available to the narrator for serving local and/or global text functions, nor do they examine the in situ interactional process of narrative construction. They generally utilize experimentally designed texts that vary in conceptual form (and hence in linguistic form as well) across experimental conditions involving comprehension, recall, or judgments for text organization. Naturally produced narratives are rarely used as primary data bases. As a result, detailed analysis of the range of what speakers will do in order to meet the bidirectional demands of text construction are also rare within this perspective of experimental cognitively-oriented research. Reliance on comprehension, rather than production data, may be attributed to the difficulty of extrapolating information about which underlying representations guide the freely produced narratives of any one individual. Such difficulties have led some researchers to conclude that production data are inadequate to meet these goals since they often underestimate the underlying conceptual sophistication of storytellers (French, 1986; Mandler, 1983). In contrast, work within the cohesion perspective within linguistics relies almost exclusively on production data, since it focuses on how cohesion is established in discourse via linguistic means.

Fusing top-down and bottom-up analyses is used to unravel the kind of mechanisms that are involved in signaling the beginning and the end of an episode. The present study examines both local cohesive devices and the global aspect inherent in narrative production in order to substantiate the claim that local/linguistically driven and global/conceptually driven processes interact simultaneously during the production of narrative, and hence the marking of episode boundaries. The notions presented, as governing the demarcation of episodes, are commensurate with Grosz and Snider's (1986) theory of discourse structure. According to their theory, discourse structure is composed of three separate yet interrelated components that include linguistic structure (i.e. structure of the sequence of utterances); intention (i.e. the relevance of the discourse purpose(s)); and attention (i.e. the focus of attention of the participants). These three components realize the interaction between the use of linguistic expressions for the creation of discourse and the cognitive aspects necessary for such creation.

## *Toward the identification of episodic boundaries*

Episodic organization has been extensively investigated in linguistic, psychology and cognitive science. Studies have shown that speakers who are constrained by limited memory capacity try to organize the overall discourse into sequences of episodes (Black and Bower, 1979; Pu et al., 1992; Pu, 1995). Van Dijk and Kintsch (1983) define an episode as a sequence of sentences dominated by a macroproposition, a proposition (often a topical expression) that is derived from a sequence of sentential propositions composing a discourse segment. Macropropositions pertain both to the global/macrostructures of the discourse as a whole and to topically coherent parts of discourse, that is, to episodes. For example, 'X is taking a plane' is the macroproposition of the following episode:

[X goes to airport, X checks in, and X waits for boarding]

The macroproposition relates sentence propositions at a higher level and thus derives the global meaning of an episode or a discourse segment from the local sentential meaning. In other words, 'the macroproposition remains in short-term memory for the rest of the interpretation of the same episode. As soon as propositions are interpreted that no longer fit that macroproposition a new macroproposition is set up' (Van Dijk, 1982: 191).

Although an episode represents a higher level unit of discourse, it is recursive in nature and 'may have several layers of macroproposition sequences' (Van Dijk, 1982: 180). An episode may consist of smaller units, for example sequences of events and actions. Each subunit is unified because it maintains the local thematic/topical continuity of the subunit. Yet, it is relatively independent because it can be identified and distinguished from other subunits of lower level of discourse. In narrative discourse, such subunits may represent a new line of action, a shift between foreground and background information (or vice versa), a change in descriptive modes and perspectives, and so forth.

Furthermore, several models emphasize, at the micro-level of narrative production, the relationship between discourse structure and the use of specific linguistic features, such as anaphora. Hinds (1977), for example, discusses how paragraph structure controls the choice of noun phrases (NPs) and pronouns. He finds that NPs are used to convey 'semantically prominent' information in peak sentences of a paragraph, whereas pronouns are used to indicate 'semantically subordinate' information in nonpeak sentences. Similarly, Fox (1987) demonstrated that structural factors of discourse establish the patterns of anaphora: NPs are generally used at the beginning of a 'development structure' to demarcate new narrative units, whereas pronominals are used within that structure.

Within this domain, Tomlin (1987) argues that an episode represents sustained attentional effort and endures until attention is diverted (i.e. until an episode boundary is reached). In his study, each episode was represented by a slide picture; the shutter release of the slide projector which imposed a sufficiently strong perceptual disruption for the subject, served as the episode boundary. He

demonstrated that NPs are used at episode boundaries when attention shifts, whereas pronominals are used within episodes when attention sustains (see also Tomlin and Pu, 1991). Along similar lines, Grosz et al. (1995) examined the interaction between the local coherence of a discourse segment (i.e. coherence among the utterances in the segment) and choices of referring expressions. They demonstrated that within discourse segments (such as episodes) pronouns are used to indicate what is talked about. That is, the use of pronouns within a discourse segment seems to reflect that focus of attention has been established and is being sustained among the participants. A shift in focus of attention then typically indicates that a new discourse segment is being formed.

However, the results obtained in these studies are limited in scope for they do not account for the complex anaphoric patterning found in spoken and written production. They also ignore the critical role played by social, interactional and affective factors in such settings. Moreover, most research on episodic boundaries is limited in its validity, for several reasons. Most notably, that research in the conceptual organization of stories has typically used comprehension and recall tasks to assess episodic structure. In such research, contrived stories are presented to subjects in either written or oral forms and conclusions about the underlying representations are drawn according to how that experimental material is read and interpreted against the background of expectations of a story schematic structure (Mandler, 1983; Stein and Glenn, 1982). In these studies, linguistic material is given definitional status in determining the episodic structure of the narrative, and hence accounts pertaining to the bidirectional process (cognitive and linguistic) inherent in the production of discourse/narrative are at best indicative of the nature of this process in naturally occurring discourse.

In contrast, the approach used in this study draws on naturalistic data and relies on the notion that narrators in conversational setting interactionally create narrative by recruiting the set of linguistic and kinesic devices (the set of semiotic modalities) that are most readily available to them. These devices in turn are constantly affected and organized by cognitive and interactional factors. From this perspective, it is safe to assume that speakers will use a variety of linguistic devices to signal episodic boundaries and transition between them, concurrent with interactional and cognitive demands.

In this study, an episode is defined as a unit of narrative production, subsumed in the flow of interaction and information processing. Within this unit, attention is sustained in an episode until an episode boundary is reached. This unit is primarily a semantic unit consisting of a sequence of sentences. This semantic unit is subsumed under a macroproposition, a proposition that is derived from the sentential propositions of the unit. The macroproposition is generally a topical expression, featuring a global predicate (that denotes a global event or actions), a specific cast of participants, and time and place coordinates. Episodes in discourse may be of varying length and scope, but the episode does not have to have an end with a solution to a certain problem or with a coda.

Both linguistic and conceptual/cognitive coordinates are simultaneously oper-

ated by narrators to demarcate episodic boundaries. This marking is manifested on three levels: the macroproposition; the use of anaphora and other linguistic markers; and the establishment of conceptual frames. First, at the macroproposition level, the beginning and end (i.e. boundaries) of episodes are defined in terms of propositions subsumed under the same macroproposition, whereas the propositions preceding the first and following the last proposition of an episode would be subsumed under different macropropositions. Second, the transition between macropropositions represents episode boundaries, irrespective of the transition *inducer* (distraction, interruption, shift in attention or whatever), and is often marked by expressions (such as full NPs and temporal markers) denoting changes in time, place, scenery, participant, perspective, possible world, and so forth. This is based on the rationale that when setting up a new macroproposition the encoding load is much heavier, the reference under concern is less accessible for the listener, and hence, a more explicit referent form (e.g. an NP) is required to code the referent. Within an episode, when the macroproposition is maintained, the referent under consideration is more accessible, hence a less explicit referent form (e.g. a pronominal) is sufficient to code the reference. Third, boundaries of episodes can be marked by the introduction of what Andersen (1999) calls 'frames'. He contends that in spontaneous verbal interaction participants establish at the beginning of a new discourse topic or sub-topic a frame of reference which minimally includes locative, temporal and human attributes. These three levels are simultaneously recruited by narrators to set up episodic boundaries.

## *The study*

The data used for this study are drawn from a larger study of family dinnertime conversations among 20 white, English-speaking, American families (principal investigators: E. Ochs and T. Weisner), each with a 5-year-old child who has at least one older sibling. Each family was videotaped over two evenings in a 2-week period from about 5 pm until the 5-year-old child was in bed.

Drawn from four family dinnertime conversations of two families, a total of 14 narratives produced by various family members were analyzed. Both families have three children each (3;1, 5;11 and 8;11 year olds; and 3;7, 5;11 and 8;7 year olds, respectively).

### ENCODING OF EPISODIC BOUNDARIES IN CONVERSATIONAL NARRATIVES

The analysis of the data shows that narrators in conversational narratives employ certain distinct discourse features to denote the beginning of an episode. These features are manifested at both the macro-level, i.e. the use of macropositions, and the micro-level, i.e. the use of linguistic devices such as anaphora, inceptive and temporal markers.

The following excerpt in which a mother and a father talk about a mutual friend illustrates this hypothesis (see Appendix for transcription conventions used in this study):

**Excerpt (1)**

| | | |
|---|---|---|
| 1 | Mother: | **Bev** walked up? and handed me three twenty? |
| 2 | Father: | mhm |
| | | (0.6) |
| 3 | | ((*Mother holding corn, looking at Father as she talks*)) |
| 4 | Mother: | And I !thought! **she** only owed me eighty. – and **she** said **she** didn't |
| 5 | | want a receipt – and I went in and got the: receipt book n: **she** only |
| 6 | | owed me ((*nodding yes*)) eighty= |
| 7 | Father: | =hmmhm. |
| | | (0.4) |
| 8 | | ((*Mother keeps nodding yes*)) |
| 9 | Mother: | n **she** was really happy about that |
| | | (1.0) |
| 10 | | ((*Mother starts to eat corn, then stops*)) |
| 11 | Mother: | **She** says "No no no no no:: !I! don't need a receipt." |
| | | (0.8) |
| 12 | Dick: | !Mom! Did **Bev** – (!tch!) |
| | | [ |
| 13 | Mother: | and just hands me three twenty |
| | | (2.0) |
| 14 | | ((*sounds of eating corn on the cob*)) |
| 15 | Mother: | I – took my !book! out though – cuz **she** hardly !ever! – makes |
| 16 | | mis!ta:h:kes! *((laughing))* – I thought maybe I wrote it wrong but I |
| 17 | | went back and got three receipts |
| 18 | Dick: | (N:ah::) ((*to cat*)) [ |
| 19 | Mother: | and they all were |
| 20 | Father: | mhm= |
| 21 | Mother: | =in – you know – What do you call that? |
| 22 | Dick: | Daddy? is – the cat's still hungry. |
| | | [ [ |
| 23 | Father: | consecutive order? |

Based on Van Dijk and Kintsch's (1983) definition of an episode, the interaction between the mother and the father in Excerpt 1 constitutes a sequence of sentences dominated by the macroproposition, 'a problematized exchange of money between Bev and mother', which is derived from the following sequence of sentential propositions:

**[X handed me $320, X only owed me eighty, X didn't want a receipt . . . X hardly makes mistakes]**

This macroproposition relates sentence propositions at a higher level and thus derives the global meaning of an episode from the local sentential meaning.

The boundaries of this episode are additionally marked by the following utterance: '**Bev** walked up? and handed me three twenty?', introduced at the outset of the episode. The function of this utterance as a marker of an episode boundary, which also constitutes part of the semantic meaning of the macroproposition dominating the episode, can be attributed to the mother's use of the full NP 'Bev' in line 1. 'Bev' is the protagonist of the story and the mother refers to her by using

TABLE 1. *Percentage of noun phrases (NPs) pronominals of the total anaphoras used at episode boundaries and within episodes*

| | *Full NPs* | | *Pronominals* | | | |
|---|---|---|---|---|---|---|
| | | | *1st/2nd person* | | *3rd person* | |
| | *n* | % | *n* | % | *n* | % |
| At episode boundaries | 123 | 89 | 9 | 7 | 5 | 4 |
| Within episodes | 83 | 21 | 35 | 9 | 273 | 70 |

an explicit noun, the person's name. The mother in lines 4–11 uses the referent '*she*' which suggests that attention to the topic is being sustained. On line 12, the episode was interrupted by her son, Dick. Dick's utterance '!Mom! Did **Bev** (!tch!)' in line 12, can be viewed as an attempt to initiate a second episode. In doing so, Dick too uses a full NP, 'Bev'. His attempt, however, was unsuccessful for it did not establish the frame necessary for a successful communication (Andersen, 1999) – the utterance was sequentially deleted.

In line 15, the mother continues to use the pronominalized form of the protagonist since attention is still sustained. The father is still cooperating and hence she need not make any attempt to explicate the reference, i.e. use a full NP, despite the interruption caused by Dick.

Quantitative analysis affirms this impression. NPs and pronominal referents were counted at the predetermined episode boundaries and within episodes attributed by the three criteria mentioned earlier. The overall rate in which NPs occurred was calculated as a proportion of the total anaphoras (NPs and pronominals combined) used at episode boundaries, and compared to the rate at which pronominals occurred within episode boundaries. The results, summarized in Table 1, show that NPs are predominantly used at episode boundaries at a rate of 89 percent, while they are only used at a rate of 21 percent within episodes. Pronominals, on the other hand, are predominantly used within episode boundaries at a rate of 79 percent, and much less (11%) at episode boundaries.

However, it should be noted that most pronominals (7%) used at episode boundaries are either the first person singular 'I' or the first person plural 'we'. These pronominals are used at episode boundaries when the narrative is about the self, that is, when the protagonist is the narrator himself as the following example shows:

**Excerpt (2)**

**E1** 1 Mother: I !asked! Adam's Mom? – to barter with me? – for the two
2 days I did care for her? – to give Rita a day off?
(0.4)
3 Father: Oh yeah?

| | | | |
|---|---|---|---|
| | 4 | Mother: | Yeah – on Monday? – with pay? |
| | | | (0.4) |
| | 5 | Father: | Why ((*sniffs*)) |
| | 6 | Mother: | Why? Well !that's! what I thought about after I got the |
| | 7 | | response from Rita. |
| **E2** | 8 | | She was like – you know "Forty some hours a week" |
| | 9 | | !I! don't know if – It s:ounded like she had worked it out all |
| | 10 | | in her !mind! – "Forty five hours a week? Is !too:! much |
| | 11 | | work" .h I felt like – tur- I had to kinda !hold! my temper |
| | 12 | | down because she pushed a !but!ton. – Instead of somebody |
| | 13 | | – I mean !I! did her did her a !fa!vor. |

At the onset of episode E1 the narrator is presented as the protagonist of the story and hence the first person singular 'I' is used. Third person singulars (he or she) are also used at episode boundaries, but only on relatively rare occasions (4%). In such occasions they are used when they are easily retrievable from text or context as is the case for 'she' in episode E2 of Excerpt (2). A second example on the use of pronouns at episode boundaries is provided in the following excerpt:

**Excerpt (3)**

| | | |
|---|---|---|
| 1 | Father: | ((*to Mother, barely looking up from eating*)) (Did you talk to Pam |
| 2 | | lately?) |
| 3 | Mother: | ((*looking at Father, shakes head no*)) |
| | | (1.0) |
| 4 | | ((*Father resumes eating*)) |
| 5 | Mother: | but she's going to see: u:m |
| | | (0.6) |
| 6 | | ((*Mother wipes mouth; Father looks up at Mother*)) |
| 7 | Mother: | uh – Nadia who's the reading specialist? She's doing really well. |
| 8 | Father: | yeah? ((*looking down at plate*)) |
| | | (0.4) |
| 9 | Mother: | 'n she started seeing um |
| | | (0.4) |
| 10 | Zoha: | (a spa- ) |
| | | [ |
| 11 | Mother: | an Elena Marcos. A speech therapist. |

In lines 5–7, the pronoun 'she' is used at the episode boundary. The pronoun 'she' is used instead of the full NP, and refers here to 'Zoha', their daughter. However, since the father introduced the topic by mentioning 'Pam', the mother assumed that he need not be explicitly introduced to the protagonist, and hence chooses the anaphoric form which requires the least encoding effort. This choice is also reinforced by the fact that the anaphoric reference 'she' is easily retrievable from the context, which is established by the father's mentioning of 'Pam'.

In general, we may summarize that the data presented in Table 1, as well as the illustrations made with Excerpts 1–3, suggest that pronouns are the most informative indicators of marking episode boundaries. Hearing a pronoun predominantly signals to the hearer that the same episode is still going on, whereas

hearing a full NP would simply alert him/her to the strong possibility that a new episode has occurred. But what accounts for the not so unnoticeable 21 percent of full NPs used within episode boundaries?

The use of full NPs within a discourse segment can be explained in terms of the Centering Theory (Grosz et al., 1995), which is a tractable computational model of attention of referents within a discourse segment. Based on this theory, it is possible to use a full definite NP or a proper noun within a discourse segment, in our case an episode, not necessarily to indicate the instantiation of a new episode, but rather to 'convey some additional information, i.e., lead the hearer or reader to draw additional inferences' (Grosz et al., 1995: 216) – that is, to create a specific discourse effect, or to minimize misunderstandings due to ambiguity in referencing. For example, in the following Excerpt 4, the mention of 'Rita' on line 7 was used to avoid what could have been an ambiguous reference had the mother used the pronominal form 'she', for which 'Rita' as well as 'Adam's Mom' would have been possible candidate referents.

**Excerpt (4)**

| | | | |
|---|---|---|---|
| **E1** | 1 | Mother: | I !asked! **Adam's Mom**? – to barter with me? – for the two |
| | 2 | | days I did care for her? – to give **Rita** a day off? |
| | | | (0.4) |
| | 3 | Father: | Oh yeah? |
| | 4 | Mother: | Yeah – on Monday? – with pay? |
| | | | (0.4) |
| | 5 | Father: | Why *((sniffs))* |
| | 6 | Mother: | Why? Well !that's! what I thought about after I got the |
| | 7 | | response from **Rita**. |

The use of full NP within discourse segments has also been accounted for in terms of the distance model (Givón, 1989) which argues that the use of full NPs within a discourse segment is a manifestation of short-term memory decay. According to this model, the longer the distance, the harder it is for the hearer/reader to identify the referent and therefore a more explicit referential form is required. However, this model overemphasizes the linear nature of discourse and fails to account for instances of long-distance pronominalization and short-distance nominalization. The general functions of NPs within discourse segments such as episodes, however, still remain open.

### TRANSITION ACROSS EPISODES

In the single narrative, boundaries of subsequent episodes are marked by a change of macropropositions. The new macropropositions form new frames that include new agents or topics often combined with times (denoted by temporal markers) and places (denoted by locatives). A new macroproposition is set up as soon as propositions are interpreted that no longer fit the macroproposition of the previous episode (Van Dijk, 1982). Breaking the sustained attention, at a particular moment of the narrative production, may also encourage the beginning of

a new episode (Gernsbacher, 1990). New propositions are also set when either the narrator or the co-narrator disengages from the telling activity and moves into the present. That is, a new macroproposition of a subsequent episode is set up either at the completion of the previous episode, when the current episode is interrupted (say, due to a shift in attention of either the storyteller or the listener), or when narrators move into the present.

The following excerpt illustrates cases in which an episode boundary is marked by the introduction of a new macroproposition after the completion of the previous episode:

**Excerpt (5)**

| | | | |
|---|---|---|---|
| **E1** | 1 | Daniel: | =I like gr- – I like (Rabi Yossi) but not h. Mrs (Koren) |
| | 2 | Mother: | Why not. |
| | 3 | Daniel: | ((*muttering, rubbing forehead*)) (I don't know) |
| **E2** | [4 | Father: | ((*to Daniel without looking up, mouth full*)) How're you !do?ing in |
| | [5 | | (Mrs Koren's) class. |
| | 6 | ((*Father looks at Daniel*)) | |
| | 7 | Daniel: | ((*with single nod yes*)) good? |
| | 8 | Mother: | He's doing very well. |
| | | | [ |
| | 9 | Father: | (yeah?/good?) ((*nodding yes, facing Daniel*)) |
| | 10 | | ((*a constant tapping sound begins – Sol tapping foot against table* |
| | 11 | | *leg?*)) |
| | 12 | Daniel: | yeah (and I-) ((*mumbling*)) I'm very g- well (in there) – ((*more* |
| | 13 | | *articulate*)) I'm one of the top two – I'm one of the top (kids) |
| | | | [ |
| | 14 | Father: | ((*to Daniel, nodding?*)) ( ) |
| | 15 | Daniel: | me and another kid. |
| | 16 | Father: | ((*nodding once?*)) (how)= |
| | 17 | Daniel: | =in the class |
| | 18 | Mother: | ((*to Daniel*)) top two kids – in what. |
| | | | [ [ |
| | 19 | Daniel: | ((*to Father*)) huh? ((*to Mother*)) ( ) |
| | | | [ |
| | 20 | | ((*Father looks at Daniel*)) |
| | 21 | Father: | in Hebrew ((*nodding to Mother and pointing at Daniel*)) |

Lines 1–3 compose the first episode in which Daniel and his mother discuss the way he feels about his teachers. At the end of this episode, a new macroproposition is introduced, Daniel's performance in Mrs Koren's class, forming the boundary of the next episode. The episode begins in lines 4–5 with '*How're you !do?ing in (Mrs Koren's) class*' and sets up a new topic, i.e. performance in school, and introduces a new context, i.e. Mrs Koren's class.

### INTERRUPTION OF EPISODES

In conversational narratives, episodes are often interrupted and resumed later by narrators. This phenomenon can be accounted for in terms of shifting in background and foreground information, shifting in attention, and interruption.

A continuation of Excerpt 1, the following Excerpt 6 illustrates a case in which a macroproposition is set up after an episode has been interrupted (not completed) due to a shift in attention.

**Excerpt (6)**

| | | |
|---|---|---|
| 23 | Father: | consecutive order? |
| 24 | Mother: | Yeah mhm |
| | | (0.6) |
| 25 | Father: | (Cat) Are you hungry? – Has he been fed today? |
| 26 | Mother: | mmhm? – Twice |
| | | (0.4) |
| 27 | | ((*eating corn? eating holds floor for her?*)) |
| 28 | Mother: | Once just about an hour ago |
| | | [ |
| 29 | Father: | Don't worry about him |
| | | (2.2) |
| 30 | | ((*sounds of eating corn*)) |
| 31 | Father: | What's he been eat?in – ((*clears throat, chokes*)) |
| 32 | Mother: | his cat food – um – the Nine Lives? |
| 33 | | ((*Father still choking*)) |
| 34 | Mother: | u:m |
| | | (2.6) |
| 35 | Evan?: | mhm? ((*said while drinking glass of water?*)) |
| 36 | Mother: | Suh'm I was going to tell you !Oh! She got the letter from the |
| 37 | | school that said Misha's accepted in September so |
| | | (0.4) |
| 38 | Mother: | it's kinda good it's all worked out= |

The father, the listener, on line 25, shifts attention and conducts an exchange with the cat as focus which causes a suspension of the mother's story. A few turns later, the mother (lines 36–7) resumes the story and initiates a new episode, by setting up a new macroproposition which introduces a new topic, *Misha's acceptance to school*; a new participant, *Misha* (Bev's daughter); and a temporal marker, *in September*. This '*cat*' exchange also illustrates the point in which the narrator or the co-narrator disengages from the past and moves into the present. This temporal shifting amidst the telling activity induces narrators to set up new macropropositions once they resort to the telling of the past. Visiting the present can be brief, yet enough to encourage setting up a new macroproposition to demarcate the boundary of the next episode as the following excerpt shows:

**Excerpt (7)**

| | | | |
|---|---|---|---|
| **E1** | 1 | Mother: | I !asked! Adam's Mom? – to barter with me? – for the two |
| | 2 | | days I did care for her? – to give Rita a day off? |
| | | | (0.4) |
| | 3 | Father: | Oh yeah? |
| | 4 | Mother: | Yeah – on Monday? – with pay? |
| | | | (0.4) |

| | | | |
|---|---|---|---|
| | 5 | Father: | Why ((*sniffs*)) |
| **Bridge** | 6 | Mother: | Why? Well !that's! what I thought about after I got the |
| | 7 | | response from Rita. |
| **E2** | 8 | | She was like – you know "Forty some hours a week" |
| | 9 | | !I! don't know if – It s:ounded like she had worked it out all |
| | 10 | | in her !mind! – "Forty five hours a week? Is !too:! much |
| | 11 | | work" .h I felt like – tur- I had to kinda !hold! my temper |
| | 12 | | down because she pushed a !but!ton. – Instead of somebody |
| | 13 | | – I mean !I! did her did her a !fa!vor. |

Lines 5–7 form a temporal shift from the past into the present. This shift in time, though brief, encourages the mother on line 6 to set up a new macroproposition that introduces a new topic, Rita's response. Note that not every utterance into the present induces setting up a new episode boundary. It appears that only utterances which are attended to by the conversational participants have the potential to set up an episode boundary.

### MACROPROPOSITIONS WITHIN EPISODES

The multi-layered nature of macropropositions (Van Dijk, 1982) results in cases where macropropositions do not set up an episode boundary, rather they set up a subunit within the master episode. They are considered part of the master episode since they maintain the thematic/topical continuity of it. The following excerpt illustrates this point:

**Excerpt (8)**

| | | |
|---|---|---|
| 14 | Father: | If Rita's working too mu- feels she's working= |
| | | [ ] |
| 15 | Mother: | (I'm) giving her |
| 16 | Father: | =too many hours a week? she doesn't belong here. |
| | | [ |
| 17 | Mother: | ((*nods, wags finger to concur*)) |
| 18 | Mother: | That's what I- ((*nodding yes*)) – !That's! how I !felt! especially |
| 19 | | the amount of money she's making |
| 20 | Father: | She's ma- !That! was our deal in the beginning n she she's |
| 21 | | leaving at !five! instead of five= |
| | | [ |
| 22 | Mother: | Yeah |
| 23 | Father: | =thir?ty – My original agreement was |
| | | [ |
| 24 | Mother: | !I know! ((*pointing at Father, then open left* |
| 25 | | *hand up and down as she talks, elbow on table*)) |
| 26 | Father: | eight to five thirty ((*as he resumes eating*)) |
| | | [ |
| 27 | Mother: | My – my !point! is: is that – the= |
| | | [ |
| 28 | | ((*Evan?, youngest child, starts coughing*)) |
| 29 | Mother: | =response that would have made me feel like my effort had been |
| 30 | | worthwhi:?:le would be – uh "!Gee:! thanks – you know the: – I |
| 31 | | !ril!ly could use the day off It's nice to have a break" whatever |

32 whatever
33 Father: Yeah of course (she should) be thankful=

This excerpt starts with an episode whose onset boundary begins with the following exchange:

14 Father: If Rita's working too mu- feels she's working=
[ ]
15 Mother: (I'm) giving her
16 Father: =too many hours a week? she doesn't belong here.

On lines 20–21 the father, the co-narrator, forms a subunit within the larger episode which is subsumed under the macroproposition, 'The father's agreement with Rita':

20 Father: She's ma- !That! was our deal in the beginning n she she's
21 leaving at !five! instead of five=

Macropropositions, as we have seen earlier, are good candidates for marking an episode boundary. However, the case we have here is different. This macroproposition, 'The father's agreement with Rita', does not form a new episode, rather a subunit starting on lines 20–21, subsumed under the master episode starting on line 14; this in turn is subsumed under the narrative started earlier. The macroproposition, 'The father's agreement with Rita', is treated in this way since it maintains the thematic/topical continuity of the master episode. It is only distinguishable on the local level of the episode from other lower units of discourse, since it induces a change in both the descriptive and the perspective modes of the problem being dealt with, that is of 'Rita'. This change in modes is triggered by the introduction of a new concept '*our deal*', yet this concept is not powerful enough to launch a whole new episode. Based on the data used for the purposes of this study, these cases are not common, but they must be attended to.

## *Conclusion*

Generally, the use of NPs and the use of macropropositions co-occur to denote the the boundaries of an episode, and embody the simultaneous bidirectional process that operates in the production of a narrative. The use of NPs represents the local/linguistic level, while the use of macropropositions represents the use of the more global/conceptual level involved in the production of the narrative, and in particular in demarcating and marking episodic boundaries.

Subsequent episode boundaries (after the first) are marked by setting up new macropropositions. A new macroproposition is set up at the completion of the previous episode. The setting up of new macropropositions may also be encouraged if current episodes are interrupted or if there is a shift in attention. However, such deviations have to be acknowledged and ratified by co-participants to warrant setting up a new episode boundary. A new macroproposition is set up even if the resumed episode has the same thematic continuity as the one interrupted

earlier. The first sequence of utterance exchange among participants often includes a full NP with temporal and/or locative markers.

More specifically, the analyses presented in this study demonstrate that narrators in conversational settings manage reference in discourse production (at episode boundary vs within an episode) following a general pattern. First, their choice of anaphoras (using NPs as opposed to pronominals) reflected their discourse organization, which indicates that cognitive mechanisms such as sustaining attention are involved in demarcating episode boundaries, and perhaps more generally discourse segments (Tomlin, 1987; Gernsbacher, 1990; Tomlin and Pu, 1991, Grosz et al., 1995). Second, first person pronominals are used at episode boundaries when the narrative is about the self. Third person singulars are also used, though not typically, when they are easily retrievable from the text or context shared by the participants.

This study warrants further research on episodic boundaries in conversational narratives, and a moving away from artificially designed experiments. In studying episodic boundaries in conversational narratives, researchers are urged to relate to the cognitive faculties employed by narrators in demarcating episodic boundaries, in addition to, and in connection with, the linguistic/discourse features they utilize.

APPENDIX

The transcription conventions used in this study are:

| | |
|---|---|
| [ | open brackets indicate the start of an overlap between the utterances of two speakers |
| ] | close brackets indicate the end of an overlap between two speakers |
| = | equal signs appear at the end of a line to indicate continuous speaking and at the end of a line to indicate that no pause or silence has intervened; this device allows the insertion of other turns or comments where the width of the page does not permit a line to be continued |
| - | a single hyphen attached to a word- indicates a cut-off utterance |
| – | a dash with a space on both sides indicates an extremely brief pause: word – word |
| ( ) | single parentheses are used for two purposes. When they enclose a number they represent a silent pause in tenths of a second: (0.4) represents a silence lasting 4 tenths of a second. Otherwise, parentheses enclose uncertain transcriptions |
| (( )) | double parentheses are used to enclose ((stage directions and other comments by the transcriber)): the comments are *italicized* to indicate that they are not spoken by the participants |
| : | a single colon indicates a lengthening of one conversational beat |
| :: | a double colon indicates a lengthening of two conversational beats |
| .h | a period preceding a breath marker indicates an in-breath |
| ! ! | exclamation marks are to bound a word(s) or a segment of a word uttered in a soft tone |
| CAPS | CAPITAL LETTERS are used to mark loudness |
| **bold** | **bold typeface** indicates information referred to in the text. |
| “” | quotation marks indicate one speaker quoting another. |

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REFERENCES

Andersen, R.W. (1999) 'Temporal Frames in Spoken Papiamentu Discourse'. In J. R. Rickford and S. Romaine (eds) *Creole Genesis, Attitudes and Discourse*, pp. 351–69. Philadelphia/Amsterdam: Benjamins.

Bamberg, M. (1987) *The Acquisition of Narratives*. Berlin: Mouton de Gruyter.

Black, J.B. and Bower, G.H. (1979) 'Structural Equivalent Stories in Movies and Text and the Effect of the Medium on Recall', *Journal of Learning and Verbal Behavior* 18: 333–56.

Chvany, C. (1985) 'Background Perfectives and Plot Line Imperfectives', in M. S. Flier and A. Timberlake (eds) *The Scope of Slavic Aspect*, pp. 247–73. Columbus, OH: Slavica.

Cohen, R. (1987) 'Analyzing the Structure of Argumentative Discourse', *Computational Linguistics* 13: 11–24.

Fox, B.A. (1987) 'Anaphora in Popular Written English Narratives', in R. S. Tomlin (ed.) *Coherence and Grounding in Discourse*, pp. 121–67. Amsterdam: Benjamins.

French, L. (1986) 'The Language of Events'. in K. Nelson (ed.) *Event Knowledge*, pp.119–36. Hillsdale, NJ: Erlbaum.

Gernsbacher, M.A. (1990) *Language Comprehension as Structure Building*. Hillsdale, NJ: Erlbaum.

Givón, T. (1989) *Mind, Code, and Context: Essays in Pragmatics*. Hillsdale, NJ: Erlbaum.

Grosz, B.J. and Snider, C.L. (1986) 'Attention, Intention and the Structure of Discourse', *Computational Linguistics* 12: 175–204.

Grosz, B.J., Joshi, A.K. and Weinstein, S. (1995) 'Centering: A Frame for Modeling the Local Coherence of Discourse', *Computational Linguistics* 21: 203–25.

Hinds, J. (1977) 'Paragraph Structure and Pronominalization', *Papers in Linguistics* 10: 77–99.

Labov, W. (1972) *Language in the Inner City*. Philadelphia: University of Pennsylvania Press.

Labov, W. and Waletzky, J. (1967) 'Narrative Analysis', in J. Helm (ed.) *Essays on the Verbal and Visual Arts*, pp. 12–44. Seattle: University of Washington Press.

Mandler, J. (1983) 'Representation', in P. Mussen (ed.) *Cognitive Development*, Vol. III, pp. 420–94. New York: Wiley.

Miller, P. and Sperry, L. (1988) 'Early Talk about the Past: The Origins of Conversational Stories of Personal Experience', *Journal of Child Language* 15: 293–315.

Ochs. E., Taylor, C., Rudolph, D. and Smith, R. (1992) 'Storytelling as a Theory-Building Activity', *Discourse Processes* 15: 37–72.

Pu, M.M. (1995) 'Anaphoric Patterning in English and Mandarin Narrative Production', *Discourse Processes* 19: 279–300.

Pu, M.M., Prideaux, G.D. and Stanford, L.M. (1992) 'Episodes as Memory Units in Discourse Production', *Linguistica Atlantica* 14: 89–102.

Rumelhart, D. (1977) 'Understanding and Summarizing Brief Stories', in D. L. Berse and S. J. Samuels (eds) *Basic Processes in Reading: Perception and Comprehension*, pp. 265–303. Hilldsale, NJ: Erlbaum.

Stein, N. and Glenn, C.G. (1979) 'An Analysis of Story Comprehension in Elementary School Children', in R. O. Freedle (ed.) *New Directions in Discourse Processing*, pp. 53–120. Norwood, NJ: Ablex.

Stein, N. and Glenn, C.G. (1982) 'Children's Concept of Time: The Development of a Story Schema', in W. J. Friedman (ed.) *The Developmental Psychology of Time*, pp. 255–82. New York: Academic Press.

Trabasso, T., Secco, T. and Van Den Broek, P. (1984) 'Causal Cohesion and Story Coherence', in H. Mandl, N. L. Stein and T. Trabasso (eds.) *Learning and Comprehension of Text*, pp. 83–111. Hillsdale, NJ: Erlbaum.

Tomlin, R.S. (1987) 'Linguistic Reflections of Cognitive Events', in R. S. Tomlin (ed.) *Coherence and Grounding in Discourse*. Norwood, NJ: Ablex.

Tomlin, R.S. and Pu, M.M. (1991) 'The Management of Reference in Mandarin Discourse', *Cognitive Linguistics* 2: 65–93.

Van Dijk, T. (1982) 'Episodes as Units of Discourse Analysis', in D. Tannen (ed.) *Analyzing Discourse: Text and Talk*, pp. 177–95. Washington, DC: Georgetown University Press.

Van Dijk, T. and Kintsch, W. (1983) *Strategies in Discourse Comprehension*. New York: Academic Press.

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