# Form and Function in Introducing Narrative and Expository Texts: A Developmental Perspective

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This article considers how children and young people conceptualize and construct different types of texts. The initial parts of narrative and expository texts written by grade-schoolers, adolescents, and adults were analyzed, on the assumption that the opening to a piece of discourse serves as a window on the text as a whole. Analysis was conducted on 3 dimensions: discourse functions—providing background in narratives and introducing the topic in expository texts; organizational pivot—temporality in narratives and generality in expository texts; and linguistic forms—verb tense and semantics in narratives and nominal structure and content in expository texts. The openings to narrative texts emerge as better constructed at an earlier age than in expository texts, but fully proficient openings are a late development in both cases. We attribute this to the fact that, for younger children, the spoken modality and narrative mode of discourse predominate; however, with age and greater literacy, expository discussion increasingly shapes the way people think and give written expression to their thoughts.

This study concerns how school children of different ages, compared with adults, conceptualize and construct different types of texts. Its overall goal was to characterize the global organizational structure of different types of texts across development. Text openings appeared to be good indicators of overall text construction,

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because they serve to establish the initial context within which a text unfolds, and they affect the production of everything that follows. They also serve as important starting-points and hence guidelines for readers, because they set up expectations about what kind of text they are confronting and what it is about (Hoey, 2001). To this end, we analyzed the initial parts of personal-experience narratives and expository discussions, with the aim of demonstrating whether and how text openings differ across development and across genre. The analytical strategy we adopted reflects the assumption that the opening constituent of a piece of monologic discourse serves as a window on the text as a whole—in global text structure, thematic content, and linguistic expression. Another assumption guiding this study is that genre plays a critical role in shaping text openings, and that these will reveal both shared, genre-neutral and distinct, genre-specific features in narrative compared with expository discourse.

In *narrative* research, scholars working in different frameworks agree that the opening of a story typically relates to the state of affairs existing prior to the onset of the plot. Thus, the initial part of a story provides the hearer–reader with a backdrop to the ensuing chain of events and plays an important role in the organizational structure and communicative function of the narrative, because it orients the addressee toward what is to come by specifying the who, when, where, and why of the events to be recounted. In literary studies, the "exposition" is recognized as a critical component of narrative fiction (Oz, 1996; Sternberg, 1978). As a psychological counterpart to this notion, the "setting" is analyzed as an integral part of narrative structure in cognitively oriented story grammar analyses (Rumelhart, 1975; Shen, 1988). Discourse linguists have also paid attention to elements that set the narrative scene, defined as orientation in Labov's (1972) study of personal-experience narratives, and as initial background information in Reinhart's (1984, 1995) discussions of literary and other types of narrative texts. Labov (1972) identified the orientation as belonging to the narrative, rather than to the evaluative elements that constitute a story, whereas Reinhart (1984) proposed that setting elements constitute part of the narrative background, as distinguished from its foreground. In line with Reinhart's (1995) proposal, Berman (1997, 2001) noted that narrative scene-setting may include both interpretive, evaluative elements and descriptive, informative material as background to the sequential events that make up the story plotline.

Opening elements have a special status in constructing the temporal texture of narratives, in which sequentiality plays a crucial organizing role. Thus, the state of affairs that exists prior to the events to be recounted may be related from a different "discourse stance," to include a more detached perspective that is relatively removed in time and place from the events themselves (Berman, 1997, in press; Berman, Ragnarsdóttir, & Strömqvist, 2002). This yields two temporal axes or "pivots" to narrative discourse: the pivot of *story-time*, via which the events that make up the story are reported sequentially from first to last (Labov, 1997), and the

pivot of *story-telling time*, which provides background information from a perspective outside of the events themselves (Goldsmith & Woisetschlager, 1982).

The ability to provide the addressee with adequate background information is of interest for the study of narrative development, because it requires command of both "narrative knowledge" and "storytelling performance," (Berman, 1995; Reilly, 1992) as well as the capacity to take into account the audience's needs and shared knowledge (Berman & Slobin, 1994; Menig-Peterson & McCabe, 1978). Providing one's story with a suitable setting also means that the narrator can construct a text autonomously, by means of a self-sufficient monologic narrative, rather than through interlocutor queries, prompts, and other scaffolding devices (Tolchinsky, Johannsson, & Zamora, 2002). Further, it demands preplanning of the text as a whole, which—in the case of narrative discourse—implies a hierarchical, global view of the chain of events that are about to be related. These are complex cognitive demands that take a long time to evolve (Berman, 2001; Katzenberger, 1994; Peterson & McCabe, 1983).

*Expository* discourse has generated rather less research than narrative, including in psycholinguistics (exceptions are Britton, 1994; Scinto, 1986) and functional linguistics (such as Fox, 1987; Matthiessen & Thompson, 1988). Developmentally oriented studies have been concerned mainly with text comprehension (e.g., Meyer & Poon, 2001; Pappas & Pettigrew, 1998), although there is rather less work on developing text production abilities (e.g., Crammond, 1998, on persuasive argumentation; Caswell & Duke, 1988, on genre distinctions; and Scott & Windsor, 2000, on spoken and written narrative and expository discourse of normally developing compared with language-impaired school children). This study adopts a deliberately broad definition of expository discourse, as suited to the task presented to its participants (see Description of Study section). Our goal was to elicit discussion of ideas concerning a socially relevant topic in a context that might, but did not necessarily, include informative and argumentative elements. Thus, for us, expository discourse constitutes a genre that is clearly distinct from what Bruner (1986) called "the narrative mode" (p. 13). However, the expository discussions we analyzed also differed markedly from other non-narrative discourse such as descriptions (Pappas & Pettigrew, 1998; von Stutterheim & Klein, 1989) and persuasion (Crammond, 1998; Nippold, 2003).

The part that opens an expository text, its introduction, has received considerably less research attention than the setting element in narratives. Yet it, too, is recognized as a critical component of nonnarrative discourse: It has been characterized as involving the "text topic" in informative discourse (Giora, 1990) or as serving as the "text organizer" in discussion of a topic, such as in this context (Katzenberger, submitted). In narratives, as noted, openings allow for interplay between the two pivotal facets of temporality (storytelling time vs. story time). The opening to an expository text, in contrast, serves to establish a pivot of *generality,* along which the flow of information proceeds from general to specific and back to

general (Mosenthal, 1985). Thus, in expository discourse, generalizations are explicitly articulated in the opening and then elaborated by specific commentary in the form of anecdotal or historical illustrations, subcategorizations, and so on. However, like construction of expository discourse in general, providing an adequate introduction to such texts places heavier cognitive demands on the speaker–writer than in the case of narratives (Berman & Katzenberger, 2001; Caswell & Duke, 1998; Scott & Windsor, 2000; Tolchinsky et al, 2002). Consequently, the opening element of expository texts constitutes a challenge for research from a developmental perspective, as well as for cross-genre comparisons.

The opening element of each type of text, narrative and expository, thus imposes its own genre-specific demands along with the shared requirements of text preplanning and autonomy of monologic text construction. Tolchinsky et al's (2002) analysis of the opening and closing elements of narrative and expository texts produced by children and adults, native speaker–writers of three different languages, focused on the way speaker–writers create the text "frame," in the sense of the territory within which the text unfolds as a semantic unit (Scinto, 1986). They found that across both types of texts, with age and increased schooling, participants were better able to construct more autonomous texts by creating well-defined text boundaries to demarcate their discourse from the text-external situation in which texts were elicited.

They also found that this ability emerged earlier in the written than in the spoken modality. The authors interpret this as due to the fact that in writing, physical boundaries are established between text and nontext (a sheet of paper, the computer screen) and the linguistic forms of expression used in verbalizing the text serve to support these physical boundaries. In contrast, speaking is inherently interactive, so that even in monologic text elicitation, the presence of the investigator establishes an implicitly interactive context (Strömqvist, Nordqvist, & Wengelin, 2004). As a result, recruiting of appropriate linguistic forms in the oral production of monologic discourse demands that speakers overcome the constraints of the communicative circumstances and their tendency to treat the task as interactive talk.

In general, the written mode of production is less affected by constraints of online processing (Chafe, 1994; Halliday, 1989); written texts provide well-defined text boundaries (Tolchinsky et al., 2002); and the process of writing more closely reflects metalinguistic abilities (Gillis & Ravid, 2004) and command of higher register usage (Biber, 1992). Text openings in the written modality can therefore be expected to reflect optimal abilities in different facets of text construction. Consequently, we confined our study to the written rather than the spoken texts in the larger sample on which both it and the Tolchinsky et al. study are based (see Description of Study section).

Underlying our study are several assumptions, each of which yields specific predictions. First, we assume that a well-constructed text opening provides

speaker–writers with a solid foundation for articulating their ideas clearly and flu-ently. That is, establishing the state of affairs prior to the onset of events in narra-tives and starting an expository discussion with an explicit generalized definition of the text topic provide the flow of content with an appropriate starting point (at least in the subgenre of expository text analyzed in the following). Research on later language acquisition and on developing text production leads us to expect that these abilities will have a long developmental history, and may in some cases ex-tend into and beyond adolescence (Berman & Slobin, 1994; Berman & Verhoeven, 2002; Nippold, 1988, 1998; Ravid & Tolchinsky, 2002). Second, a fully developed text opening entails preplanning of the discourse as a whole. This involves several interrelated competencies: a global, hierarchical construal of the text about to be verbalized, command of appropriate linguistic means to express the required con-tent, metatextual awareness with regard to type of discourse and the nature of its content, and self-monitoring as a control on all of these. These complex cognitive and linguistic abilities are late to develop (Bereiter, Buritis, & Scardamalia, 1988; Ravid & Tolchinsky, 2002) so that we expect our sample to show an age-related in-crement in the domains we analyzed: the relative length, the discourse function, and the linguistic content of the openings to narrative and expository texts. Third, because these narrative and expository texts manifest two clearly distinct genres, even children of young school age make clear linguistic and thematic distinctions between the two, particularly in cases where they are explicitly instructed to pro-duce different types of texts, as in this study. This was clearly demonstrated by analysis of genre-based differentiation between linguistic expression in the He-brew-language database analyzed here (Berman & Nir, in press). Similar findings for intergenre distinctiveness have emerged for a range of linguistic subsystems across the different languages in our sample—for example, on use of passive voice in Jisa, Reilly, Verhoeven, Baruch, and Rosado, 2002; on verb tense and aspect in Ragnarsdóttir, Cahana-Amitay, van Hell, Rosado, and Viguié (2002); on modal ex-pressions in Reilly, Jisa, Baruch, and Berman (2002); and on subject nominals in Ravid, Van Hell, Rosado, and Zamora (2002). On the other hand, with age, we ex-pect to find a less dichotomous distinction between the two text types. That is, ma-ture narratives will include expository-type generalizations as speaker–writers rely increasingly on generalized evaluative commentary, and mature expository texts may include narrative-type illustrative anecdotes as they learn to generalize from their own personal experiences. Fourth, overall text construction abilities are as-sumed to emerge earlier in narrative than in expository texts (Berman & Katzenberger, 2001; Scott & Windsor, 2000). Nonetheless, given the considerable cognitive and linguistic complexity of proficient text construction, we expect to find fully mature and well-developed text openings emerging late in both genres.

Next, we attempt to shed light on global text structure by analyzing text open-ings along three dimensions: (a) length of initial elements, measured by number of clauses; (b) the discourse functions of openings, as a means for anchoring what

follows, defined for both genres in terms of the two complementary notions of "discourse framing" and "organizing pivot": Narrative openings are framed by means of background information and organized around the pivot of temporality, and expository openings are framed by topic definitions and organized around the pivot of generalization; and (c) how these functions are linguistically encoded in the form of verb tense and predicate type in narratives and in nominal expressions in expository texts.

## DESCRIPTION OF STUDY

The database of this study is taken from the Hebrew-language sample of a large-scale cross-linguistic project in which directly comparable written and spoken texts were produced by school children and adults, native speakers of different languages (Berman & Verhoeven, 2002). The broad aims of the project were to shed light on the way in which children, adolescents, and adults construct texts—in the sense of monologic pieces of discourse; to examine the linguistic, cognitive, and communicative resources that they deploy in adapting their texts to different circumstances (in expository vs. narrative discourse and in writing compared with speech); and to detect shared or different trends depending on the particular target language. To this end, participants in seven countries, in the same four age groups (grade school students aged 9–10 years, junior high school students aged 12–13, high school seniors aged 16–17, and graduate-level university students) were shown a 3-min wordless video clip depicting different conflict situations in a school setting. The video clip was neutralized for cultural content—by eliminating all verbal cues, spoken or written, and having typical teenager participants clothed in "universal" jeans and tee-shirts—and proved usable across the countries in our study: France, Iceland, Israel, the Netherlands, Spain, Sweden, and the United States (California). It showed scenes of interpersonal conflict in a school setting, for example, a moral conflict of whether to cheat in an exam or return a purse someone dropped, a social conflict of how to treat a new kid who interfered in a conversation, and a physical conflict of fighting during recess. Each such situation was unresolved in the sense that it lacked the closure typical of canonical narrative structure, such as achieving a goal or solving a problem (Trabasso & van den Broek, 1985; van Dijk, 1980).

After seeing the video clip, each participant was required to produce four texts in randomly balanced order. They were asked to write and tell a story about an incident where they had been involved in a situation of "problems between people" (a personal-experience narrative) and to write a composition and give a talk in which they discuss the topic "problems between people" (an expository discussion).

Thus, both narrative and expository texts were elicited on the shared, socially relevant theme of interpersonal conflict. To elicit narratives, participants were

asked to talk and write about an incident in which they had been involved, where they themselves had experienced a situation of "problems between people." In contrast, to elicit expository texts, participants were asked to discuss the topic of "problems between people," to give their ideas and thoughts on the topic, and they were explicitly instructed not to tell or write a story, but to express their thoughts and ideas. We avoided asking participants to "express their opinion" or to "be convincing," so as not to encourage excessive reliance on personalized argumentation or persuasive rhetoric. Clearly, this introduces a potential knowledge issue that might be responsible for developmental differences.

The vast majority of participants across the different languages—around 90% from the youngest age group up—followed these instructions, in the sense that they told a story in one case (typically in past tense and perfective aspect, with highly specific, personal reference to people, times, and places) and expressed general ideas (typically in the timeless present, with mainly impersonal or generic reference to people and situations) in the other. However, as will become evident in the following, the expository texts of some of the participants were partly "argumentative" (Crammond, 1998); a few were mainly "informative" (Giora, 1990).

The study reported here analyzed the openings to narrative and expository texts produced in writing by 80 Hebrew-speaking children and adults of monolingual, middle-class backgrounds, 20 in each of four age groups: 4th grade elementary school children (aged 9 to 10 years), 7th grade junior high school students (aged 12 to 13 years), 11th grade high school students (16 to 17 years), and university graduate students majoring in the sciences or humanities (25 to 35 years). This yielded a total of 160 texts, half narrative and half expository, with half the participants first producing the narrative and then the expository, and the other half the other way around.

As background, note that in the Israeli school system, children are exposed extensively to oral narratives from early preschool (in nursery schools attended by all children from age 2), and to written texts from 1st grade, with reading and writing of nonnarrative texts in the form of short informative and descriptive paragraphs starting from around the end of 3rd grade. None of the grade schools in our sample give direct instruction in writing skills, beyond notational features such as spelling and punctuation. In junior high school, and increasingly from high school (10th grade), students are required to write extended nonnarrative texts as part of their social science studies, history, Bible, literature, and biology and other life sciences. However, there is virtually no direct and explicit teaching of composition writing in the "mainstream" schools attended by the participants of our study. The adults—graduate university-level students doing their masters or doctoral degrees in the social sciences, humanities, and physical sciences—are required to write at least two essay-type research papers, along the lines of a "qualifying paper" in the United States, before entering graduate school (see, further, Baruch, 1999; Katzenberger

& Cahana-Amitay, 1999). In general then, all of our participants, from age 9 up through adulthood, had some experience with both narrative and nonnarrative writing tasks. The extent and quality of this experience increased exponentially as a function of age and level of schooling, but they had not benefitted from direct instruction in how to formulate their ideas in writing or how to construct a well-formed composition.

## ANALYSIS AND FINDINGS

Results are presented for analyzes of opening elements in terms of length measured by number of clauses; top–down, global discourse functions; and bottom–up, phrase- and clause-level linguistic expression.

### Demarcation and Length of Openings

Both in the cross-linguistic study and the Hebrew database analyzed here, clauses served as the basic units of analysis, following syntactic and semantic criteria specified in Berman and Slobin (1994), where a *clause* is defined as "any unit that contains a unified predicate" (pp. 660–663). Division into clauses was performed by two native speakers of Hebrew with training in linguistics, yielding interjudge agreement of nearly 95%. For example, the following sentence, translated into English from an adult narrative, consists of five clauses, each marked by "]": "When I was an undergraduate ] many students, whether they were my friends or not ] used to borrow notebooks from me ] in order to make up material ] that they didn't manage to summarize during the lecture." ] Length of text openings as measured by number of clauses was determined by two complementary criteria: syntactic (in terms of "terminable"—T-units) and functional (in terms of opening segments). We adopted the T-unit as a purely structural, genre-neutral criterion, defined as a single finite verb with its associated subordinate and coordinate clauses (following Hunt, 1970; Loban, 1976; Scott, 1988). Thus all 160 texts could be counted as having an "initial T-unit"—even if this was the only clause in the entire text (e.g., in the case of two fourth-grade expository texts) or the only T-unit in the entire text (as in the case of two fourth-grade narratives). For example, the opening sentence in the previous example—starting with the clause "When I was an undergraduate"—constitutes a T-unit consisting of five clauses; the following opening sentence from the narrative of a fourth-grade girl consists of two clauses: "Once we were a group of kids ] that wanted to listen to songs ]."

Table 1 shows the breakdown for average length of initial T-unit out of total number of clauses in the texts as a whole for each age group and in each of the two types of text.

TABLE 1
Average Text Length Measured by Number of Clauses per Total Text, Average
Number of Clauses per Initial T-units, and Proportion of Clauses in Initial T-Units
out of Total Text, in Written Narrative and Expository Texts by Age

| | Clauses per Text | | | | Clauses in Initial T-Units | | | | % Clauses in Initial T-Units | | | |
| | Narrative | | Expository | | Narrative | | Expository | | Narrative | | Expository | |
| Age Group | M | SD | M | SD | M | SD | M | SD | M | SD | M | SD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Grade school: 9–10 | 7.25 | 7.07 | 7.25 | 8.05 | 2.00 | 0.79 | 2.30 | 1.38 | 36.69 | 23.46 | 50.99 | 33.21 |
| Junior-high: 12–13 | 14.85 | 9.75 | 13.05 | 9.71 | 2.10 | 1.07 | 2.60 | 1.14 | 16.96 | 11.90 | 33.21 | 28.29 |
| High school: 16–17 | 13.40 | 6.78 | 15.75 | 10.14 | 2.05 | 1.09 | 2.35 | 1.59 | 18.76 | 15.06 | 18.24 | 11.30 |
| Adults: 25–35 | 18.05 | 10.90 | 21.65 | 19.62 | 2.20 | 1.19 | 2.25 | 1.40 | 15.18 | 10.31 | 15.93 | 10.09 |

*Note.* $N = 20$ per age group.

Table 1 shows that there is a significant age-related rise with age in mean number of clauses per text in both the narrative and expository texts, $F(3, 76) = 5.29$, $p < .01$, for narratives and, $F(3, 76) = 4.42$, $p < .01$, for expository. Mean clause length ranges from around 7 in both genres in the youngest age group, rising to around 13 to 15 in the two middle age groups, and rising again among adults—where, unlike among the three groups of school children, expository texts are longer on the average than narratives. These differences are significant between Group G (grade school) compared with J (junior high) and H (high school), and between G, J, and H and the adults for narratives, $F(1, 76) = 8.13$, $p < .01$, and for expositories, $F(1, 76) = 4.41$, $p < .05$, and between Groups G, J, and H compared with adults for narratives, $F(1, 76) = 7.48$, $p < .01$, and for expositories, $F(1, 76) = 8.6$, $p < .01$. As a result, the proportion of total text length taken up by the initial T-unit, as shown in the rightmost columns of Table 1, changes significantly with age. On the other hand, the mean number of clauses in initial T-units of these texts remains constant across both age groups and genres, ranging from 2.0 to 2.6 clauses on average, irrespective of mean text length.

For our purposes, and in contrast to initial T-units, we defined *opening segments* in discourse-functional terms, taking into account thematic content, irrespective of syntactic construction. We defined as opening segments text-initial material that serves to frame the text as a whole in genre-specific terms: In narratives, they provide the background descriptive framing of the events reported in the story; in expository texts, they provide the background introduction to the discussion that follows. Specifically, as "the opening" of the text, we took all narrative clauses that appear before the initiating event (Mandler & Johnson, 1980) and all expository clauses that constitute the first "move-on" statement together with its "expands" (Britton, 1994). These definitions, unlike T-units, are critically genre-dependent; that is, they can only be specified if the text is clearly narrative or expository in

character. However, not all texts in our sample were "genre appropriate," where this is defined as having at least one episode in narratives and expressing some idea or opinion in expositories. Consequently, not all 160 texts in our database could be credited with having a discourse-functional opening segment. Division of the texts in our sample into opening segment versus the rest of the text was conducted by the two authors independently, with over 90% agreement, and led us to rule out of this analysis a total of 9 out of the total 160 texts. These all came under the heading of "nonnarrative," where participants were asked to write a story describing a personal experience: three 4th grade narratives ($N = 17$), three seventh grade narratives ($N = 17$), one high school text ($N = 19$), and two adult texts ($N = 18$). In contrast, all participants, even in the youngest age group, made some kind of general statement or expressed some opinion at the beginning of the texts they produced when asked to discuss the topic of "problems between people." Table 2 shows the number and proportion of clauses, out of total text length, constituted by what we defined as the opening segments to 71 of the narrative and all 80 of the expository texts produced by the participants in four age groups.

Table 2 shows that mean length in number of clauses of opening segments rises with age across all four age groups in both genres, contrasting markedly with the lack of age-related change noted for length of initial T-units. Again, as in the case of initial T-units, the proportion of text length taken up by opening segments changes with age in both genres, and mainly in the youngest group (where they constitute around 40% of the narratives and over half of the expository texts), due to the increase with age in mean text length. On the other hand, in marked contrast to the stability of average T-unit *length* (between 2.0 and 2.6 clauses in both narrative and expository texts, as shown in Table 1), the length of opening segments does differ with age in both genres (between 2.1 to 3.4 clauses for narratives and between 2.6 and 3.4 clauses for expository texts). In narratives, the contrast between initial T-unit and opening segment length is nonsignificant at grade school age, is nearly significant in junior high, and differs significantly in the two older age groups: for Group H, $F(1, 18) = 8.85$, $p < .01$, for adults, $F(1, 17) = 5.64$, $p < .05$. In the expository texts, the differences between initial T-units and opening segments reveal similar, but even more marked, trends: nonsignificant in Group G, nearly significant in Group J, and significant in the two older age groups: for Group H, $F(1, 19) = 12.67$, $p < .01$, for adults, $F(1, 19) = 7.12$, $p < .05$.

The findings for length of text openings shown in Tables 1 and 2 show that the proportion of openings out of total text size is affected by overall text length, which differs with age, suggesting that absolute length in number of clauses might be a better indicator of age-related changes. From this point of view, the length of what we defined as discourse-functional opening segments emerges as a better indicator of developing text-production abilities in both narrative and expository genres than the purely structural criterion of initial T-units, which remain the same in length across age groups and genres. In the following, we analyze what we defined as

TABLE 2
Average Text Length Measured by Number of Clauses per Total Text, Average Number of Clauses per Opening Segments,
and Proportion of Clauses in Opening Segments out of Total Text in Written Narrative and Expository Texts by Age

| | Clauses per Text | | | | | | Clauses in Opening Segment | | | | | | % Clauses in Opening Segment | | | | | |
| | Narrative | | | Expository | | | Narrative | | | Expository | | | Narrative | | | Expository | | |
| Age-Group | n | M | SD | n | M | SD | n | M | SD | n | M | SD | n | M | SD | n | M | SD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Grade school: 9–10 | 17 | 7.25 | 7.07 | 20 | 7.25 | 8.05 | 17 | 2.11 | 0.78 | 20 | 2.60 | 1.420 | 17 | 40.99 | 26.90 | 20 | 54.96 | 32.70 |
| Junior high: 12–13 | 17 | 14.85 | 9.75 | 20 | 13.05 | 9.71 | 17 | 2.64 | 1.22 | 20 | 2.75 | 1.164 | 17 | 20.89 | 12.91 | 20 | 34.12 | 27.92 |
| High school: 16–17 | 19 | 13.40 | 6.78 | 20 | 15.75 | 10.14 | 19 | 3.26 | 2.10 | 20 | 3.35 | 1.870 | 19 | 27.38 | 15.93 | 20 | 25.32 | 11.76 |
| Adults: 25–35 | 18 | 18.05 | 10.90 | 20 | 21.65 | 19.62 | 18 | 3.44 | 2.38 | 20 | 3.40 | 2.320 | 18 | 20.83 | 12.64 | 20 | 22.05 | 15.03 |

*Note.* n = genre-appropriate texts out of 20 texts in each group.

opening segments (descriptive setting in narratives and text-initial general state-ment in expository texts) to evaluate the content, quality, and role of these seg-ments across the variables of age and genre.

## Discourse Functions of Opening Elements

The function of text openings in relation to the text as a whole was analyzed from two perspectives: (a) *discourse framing* by means of background information in narratives and topic definition in expository texts; and (b) the *organizing pivot* of temporality for narratives and generality—in the sense defined and illustrated in the following—for expository texts. These two functional criteria are analyzed separately for the openings to the narrative and the expository texts.

*Functional analysis of narrative openings.*   Opening elements in narra-tives were analyzed, first, in terms of how they frame the discourse through the type of background they provide to the rest of the text. We established five such categories, ranked in order of relative generality or distancing from the events to be reported: stative reference to time, place, or participants; background event plus reference to time, place, or participants; description of generalized background sit-uation; text oriented, expository-like commentary; and metatextual commentary on the act of text production. These five functional categories are illustrated in the text openings translated freely from the original Hebrew in the following list:

1.   Stative narrative background—Anat, 11th grade (Clauses 1–2 of 10):

*In 5th or 6th grade of our school in Nahariya, there was a "deviant" girl in our class. She had epilepsy.*

2.   Background event plus descriptive elements—Maya, 7th grade (Clauses 1–3 of 9):

*Me and my girlfriend quarreled and we involved other girls in it. And (there) developed a conflict among the girls in our class.*

3.   Generalized setting information—This is very much like "setting" infor-mation in narratives, in that it describes habitual activities, routines, relationships, etc.
(a)   Yochai, 11th grade (Clauses 1–2 of 5):

*In my school (there) studies [= my school is attended by …] "the ethnic demon." This "charming" young man laughs at people on entirely ethnic grounds.*

(b)    Adi, 11th grade (Clauses 1–9 of 20):

*In the place where I was born, Peki'in, we grew up together a group of kids just like brothers and sisters. We used to do everything together, whether going to school, coming back home, playing outside, and sharing activities in the evenings. We were really very united as a group, boys and girls together.*

4.    Text oriented, expository-like comment (alone or in addition to other types of opening elements—Noga, 11th grade (Clauses 1–6 of 17):

*An incident that happened to me is an incident that stems from the following fact. Me and my girlfriend have been taking ballet lessons in the same place for several years. And there's always a lot of competitive tension between the girls in the group, of the kind that has (at least) a twofold impact on the tension you find between close girlfriends.*

5.    Metatextual commentary on text production (alone or in addition to other types of opening elements)—Sarit, graduate (Clauses 1–2 of 23):

*I'll write about an incident I encountered in the framework of my job.*

The overall breakdown of these five types of narrative openings is shown in Table 3. Note that figures add up to more than 100% for the total 71, because four participants included more than one type of background information in their opening element.

TABLE 3
Distribution of Types of Background Information Provided in Narrative
Openings in Four Age Groups

| Type of Background | Grade School: 9–10[a] | Junior High: 12–13[b] | High School: 16–17[c] | Adults: 25–35[d] | Total |
|---|---|---|---|---|---|
| Stative | 3 | 1 | 1 | 1 | 6 |
| Event + Descriptive | 12 | 13 | 12 | 8 | 45 |
| Generalized | 2 | 3 | 6 | 9 | 20 |
| Text oriented, expos-like comment | — | — | 1 | 2 | 3 |
| Commentary on text production | — | — | — | 1 | 1 |
| Total | 17 | 17 | 20 | 21 | 75 |

*Note.*    $N = 71$. $n$ = number of genre-appropriate texts out of total 20 per group.
[a]$n = 17$. [b]$n = 17$. [c]$n = 19$. [d]$n = 18$.

Table 3 shows that the two middle categories (reference to a background event with stative descriptive elements and description of generalized setting information) are the most favored across age groups. Only six narrative openings (half in the youngest age group) are confined to stative references to time, place, or participants. At the other end of the scale, only two adults and one high school student—in previous Example 4—make an expository type of comment on the topic of an incident they are going to tell about, and only one adult—in Example 5—makes metatextual reference to the act of writing a story. In the middle categories, starting a story by relating directly to an event with some descriptive commentary goes down from around three-quarters among school children to less than half among the adults, although generalized statements account for very few of the openings in the two younger age groups (5 out of 34) compared with the two older groups (one third in high school, going up to half with the adults). Thus, as is to be expected at these advanced stages of narrative construction, nearly all the younger children provide at least some descriptive elements at the start of their stories (Berman, 2001).

However, our analysis reveals certain age related differences in the quality and role of story-openings, with grade school and junior high students making relatively more reference to isolated background events, and high school students, and especially adults, relying on generalizations for background. The fact that older narrators, and they alone, introduce their stories by expository-like generalized statements provides further support for the idea that maturely proficient texts are relatively more varied or divergent in the sense that they are not so confined to "genre-typical" elements (sequential events in narratives, generalized statements in expository texts) than those produced by younger speaker–writers (Berman & Nir, in press). This could be because, as people understand more about generalized, constant states of affairs in the world, they also come to recognize that a story needs to diverge in some way from habitual norms, to be worth reporting and so "narratable" (Chafe, 1994; Reinhart, 1995). This might also explain the apparently anomalous fact that one high school student and two adults produced texts that we defined as "nonnarrative," preferring to comment by generalized philosophizing on the topic of interpersonal conflict and how they relate to this personally rather than reporting a specific incident in which they had been involved.

In addition to the kind of background discourse framing they provide, narrative openings were also analyzed from the perspective of the organizing pivot of temporality, defined as reference to present, past, or future time. Thus, Examples 1, 2, and 3(b) refer to past time; Examples 3(a) and 4 refer to the present; and Example 5 refers to both future and past. (See "Predicating expressions in narrative openings" section for analysis of linguistic marking of temporal relations through verb form). Three major profiles emerged. Narrative texts with a monolithic or linear temporal anchoring are constructed almost entirely in story time, with both the text opening and over three quarters of the clauses across the rest of the text couched in the past. Past-tense openings accounted for two thirds of the narrative texts across the sam-

ple (47 out of 71), decreasing clearly with age: 85% of the texts of the two younger groups (15 of 17 at grade school and 14 of 17 at junior high school), two thirds at high school (12 of 19), and only one third of the adult texts (6 of 18). (These counts ignore occasional personalized digressions that move out of the past time flow of the narrative, for example, remarks like "if my memory serves me," "I think that's what happened").

A second, rather more complex picture is yielded by a small number of texts (7 out of 71) that anchor both their narrative episodes and opening in the past, but whose opening relates to a "generalized setting information," not in story time but in storytelling time, referring to a period prior to the onset of the events related subsequently. A different, more complex type of temporal anchoring is revealed by a few high school, but mainly adult, texts, which manifest a range of different interactions between overall discourse structure and reference to storytelling versus story time (17 out of the 71 texts in our sample). Such texts are illustrated in Examples 6, 7, and 8, which follow. In 6(a), a junior high school girl adds present-time reference to an incidental piece of information, written in parentheses, as a kind of aside that digresses from the past-reference story time. In contrast, the background past reference event (where she was born) in the high school girl's opening in 6(b) is accompanied by a comment on what this might imply in general, timeless terms.

6(a)    Smadar, 7th grade [Clauses 1–3 of 30]:

*One year (in 6th grade), there was a girl in our class (she is is still in our class) that lied to us lots of times about matters of principle and other things*

(b)    Avital, 11th grade [Clauses 1–5 of 13]:

*I was born and still live on a kibbutz. And (there) are some who think that this says certain things about me.*

Excerpts 7 and 8, from adult texts translated into English, illustrate similarly interwoven types of temporal anchoring. The example in 7 opens with storytelling present-time reference to the circumstances that gave rise to the episodes to be reported, and then continues in story time with consistently past reference. The text excerpted in 8 both opens and closes with present-reference storytelling time: The opening clauses discuss the place where the events occurred and the coda provides commentary on the character of the antagonist in these events.

7.    Orit, humanities graduate student [Clauses 1–22 of 22]:

*In the context of a new post at my school (as a counselor), I am obliged to meet with the senior counselor and to get her approval.* [OPENING =

Clauses 1 to 2]. *Accordingly, I arranged a meeting with the senior counselor … I waited at the time and place we had set, but she never turned up …* [EPISODE = Clauses 3 to 21] *When I called her up some time later, she asked why I hadn't called earlier, and I reminded her that she herself had a copy of my CV with my phone number included. Our conversation ended then and there* [RESOLUTION = Clause 22].

8.    Yoram, humanities graduate student [Clauses 1 to 22 of 22]:

*My place of work is made up by and large of congenial, friendly folks. Yet there are two young women there who seem not to have fully internalized proper working relations* [OPENING = Clauses 1 to 3]. *Today I had to enter tons of data on the computer, and since I kept getting phone calls while I was working, one of the women got mad, and asked me when I was going to finish with the computer …* [EPISODE = Clauses 4 to 19]. *This incident proved to me that her generally poor relations with people she works with are not without basis, and her own problematic character is what causes all kinds of unnecessary conflicts at work* [CODA = Clauses 20 to 22].

Examples 6, 7, and 8 show that there is an interaction between the two dimensions we have identified for the discourse functions of narrative openings: nature of anchoring (kind of background information) and organizing pivot (temporal reference). Here, mixing of tenses reflects a switching of perspectives—from background to foreground, from present to past—in the course of recounting a story that might be beyond the more linearly organized output to which younger children appear to be limited (Flavell, Miller, & Miller, 1993; Moshman, 1998). Interestingly, a similar interaction emerged between the two corresponding dimensions in the discourse functioning of expository text openings, as noted in the next section.

*Functioning of expository openings.*    Opening elements in expository texts were analyzed from the two perspectives of discourse framing by means of topic definition and textual organization along the axis of generality.

With respect to topic definition, we defined the notion of *text topic* as a combination of two dimensions: generalization (with or without elaboration) and anchoring (in the video or in the real world). With respect to the first dimension, generalization, for an expository opening to be considered adequate, it needed to contain both an *explicit generalization* and some *specific elaboration* of the content of the topic—here, the topic of "problems between people," presented in the instructions given to participants—such as reference to different instances or types of interpersonal problems or conflict. Where an opening included neither of these two distinct though related dimensions—explicitness and elaboration—it was defined as "vague" (e.g., "there's lots of problems everywhere"). The opening to a

piece of expository discourse also needed to provide some *anchoring* for the claims it makes. In the task at hand, this could be by reference to the video clip shown at the outset of the session, or to some external reality. When no such anchoring was provided, the opening was defined as "detached."

Thus, elaboration and anchoring both serve to clarify an initial generalization, but they do so in different ways: *elaboration* expands or extends the notion conveyed by the generalization by means of additional, ideational commentary; *anchoring*, in contrast, delimits the generalization by reference to concrete instances in the fictive or real world. In other words, generalization lies at the very core of expository discourse (like the event in narratives), but it needs to be both extended and restricted to go beyond a vague or empty generality. This, too, requires a switching of perspective between general and specific, abstract and concrete, that would seem to be beyond the abilities of young children.

Different types of openings were characterized along the two dimensions of type of generalization plus type of anchoring. These are illustrated in the excerpts translated from the original Hebrew in Examples 9 through 14, ranked on a continuum from *vague plus detached* to explicitly *generalized plus real-world anchored*. Six combinations of these two criteria were found in the sample: vague generalization detached from reality (9), vague generalization anchored in the video clip (10), vague generalization anchored in the real world (11), explicit generalization detached from reality (12), explicit generalization anchored in the video clip (13), and explicit generalization anchored in the real world (14).

9.   Vague generalization detached from reality—Shem, 7th grade [Clauses 1 of 8]:

*There are many problems between children*

10.   Vague generalization anchored in the video clip—Uri, 7th grade [Clauses 1–2 of 11]:

*In my opinion, the movie shows things that you see in everyday life at school*

11.   Vague generalization anchored in real world—Orit, adult [Clause 1 of 10]:

*Unfortunately, our society in general and Israel in particular have many problems between people and in different domains*

12.   Explicit generalization detached from reality—Nimrod, 11th grade [Clause 1 of 7]:

*In my opinion, problems between people are the basis for people's negative traits, jealousy, hatred, wickedness, etc.*

At the next level, where generalizations are anchored rather than detached, in 13(a), the seventh-grader is writing about a particular instance from the video; in contrast, the older boy in 13(b) uses instances from the video as a trigger or starting point for his exposition.

13(a)  *Explicit generalization anchored in the video clip*—Guy, 7th grade [Clauses 1–5 of 14]:

*I think that children that copy in exams do harm to themselves because if they don't know the material, so copying will not help them*

(b) Yochai, 11th grade [Clauses 1–4 of 11]:

*In my opinion the movie correctly presents problems which exist in schools and in youth groups all over the world. The movie presents problems like violence between children and little "transgressions" that start at a young age like harassments, theft, etc.*

14.  *Explicit generalization anchored in real world*—Neta, science graduate student [Clauses 1–10 of 29]:

*Conflicts between people arise in situations where each one has a different opinion and the situation engender a clash between their opinions. In a situation where there is a conflict of interests in which each side is interested in something else and is not prepared to compromise, such confrontations can be found in everyday life nearly any place where people come together: in line for the bus or the bank, in political disagreements, in altercations on the road (about how to drive or where to park, for example), arguments about how best to deal with a particular situation and so forth.*

An additional strategy for introducing an expository discussion is analogous to the "metatextual commentary" found in some of the older writers' narratives. These text-oriented comments relate to the topic as a superordinate category or provide a note of personal Involvement. The opening translated in Example 15 includes both these elements.

15   Sarit, humanities graduate student [Clauses 1–5 of 11]:

*The subject of problems between people is a loaded and complex one. It exists among children and teenagers as well as among adults. Coming myself from a background in education, I daily come into contact with problems between children in various domains, some of which were depicted in the video-cassette.*

Table 4 gives the breakdown for the seven types of expository openings illustrated in Examples 9 through 15. The figures add up to more than 100% of the total 80 participants, because four participants produced openings that included more than one type of topic definition.

Table 4 reveals two types of topic definitions as the most favored as a means of expository introduction. Vague generalizations detached from reality characterized nearly 90% (35 of 40) at the grade school and junior high levels (e.g., from the openings of the fourth grade children include, in English translation: "I think there are lots of people that don't respect one another;" "I think it's not nice to do something like that;" "In my opinion, violence is the worst thing there is"). In contrast, explicit generalizations anchored in the real world were favored by nearly two thirds (25 out of 40) of the high school students and adults. The three other types of topic definition lying between these two extremes were far less common: vague generalization anchored in the video clip, vague generalization anchored in reality, and explicit generalization anchored in the video clip. Across age groups, these ac-

TABLE 4
Distribution of Types of Topic Definition Provided in Expository Openings
in Four Age Groups

| Type of Topic Definition | Grade School: 9–10 | Junior High: 12–13 | High School: 16–17 | Adults: 25–35 | Total |
|---|---|---|---|---|---|
| Vague generalization detached from reality | 20 | 15 | 4 | — | 39 |
| Vague generalization anchored in video clip | — | 2 | 1 | — | 3 |
| Vague generalization anchored in real world | — | — | — | 1 | 1 |
| Explicit generalization detached from reality | — | 2 | 3 | 5 | 10 |
| Explicit generalization anchored in video clip | — | 1 | 1 | — | 2 |
| Explicit generalization anchored in real world | — | — | 11 | 14 | 25 |
| Text-oriented or personal comments | — | — | 2 | 2 | 4 |
| Total | 20 | 20 | 22 | 22 | 84 |

*Note.*  N = 20 per group.

counted for less than 20% of expository openings (14 of 84). The figures in Table 4 further show that the vast majority of the two younger age groups—all 20 grade school students and 17 of the junior high students—failed to define their text topic by an explicitly anchored generalization. Again, this contrasted markedly with the older participants (only 5 high school students and 1 adult). Our data indicated that explicit specification of the topic in an introductory statement is a hallmark of more mature expository prose.

This finding is consistent with results and interpretation of earlier work on expository text openings from a similar database in three other languages (Tolchinsky et al, 2002). However, given the lack of relevant developmentally oriented research on expository discussions of the type elicited in this study in general and on the opening elements of such texts in particular, our claims may be perceived as somewhat circular. This problem might be overcome by having independent judges, both expert and nonexpert, rank the opening elements of the different texts in our database as juvenile, adequate, or fully proficient. Lacking such information, we could only suggest that phenomena that appeared in our database among a few adolescents and relatively more adults, but not at all in the younger age groups, seemed to us to be diagnostic of maturely proficient text construction. This conclusion was supported by the fact that all 20 grade school students and 17 of the junior high students also failed to anchor their generalizations, although the remaining three anchored them in the video clip. In contrast, the bulk of the older participants (13 high school students and 15 adults) anchored their generalizations, typically with reference to the real world (11 of 13 at high school level and all 15 in the case of the adults), and less often to the video, which served as an anchor for two high school students and none of the adults. Finally, the last type of opening element, metatextual commentary on the nature of the text topic or their own personal involvement in the topic, was relatively rare, occurring in only 4 out of the 80 texts from two high school students and two adults.

In contrast to the lack of developmental differentiation of opening background elements in the narrative texts produced at these relatively advanced ages (see previous Functional analysis of narrative openings section), the picture that emerges for opening topic definitions in the expository texts is thus clearly age-related. At grade school and junior high school age, opening generalizations are typically vague and detached, whereas high school students and, even more so, adults mostly introduce the text topic by an explicit generalization anchored in some external real world situation. This finding, too, indicates that expository text construction constitutes a relatively late development.

An additional perspective that we adopt for analysis of expository openings, analogous to the pivot of temporality in narratives, is what we term the "organizing pivot of generality." As previously shown, expository introductions typically take the form of generalizations that form the basis for increasingly specific information as the text proceeds. The flow of information provided in an expository piece

of discourse typically proceeds from general to specific, a progression which constitutes the organizing pivot of the text as a whole. Thus, the information given immediately after the opening is more specific than the information contained in the opening. These can be characterized, in terms suggested by Britton's (1994) important psycholinguistic analysis of expository discourse, as the "move-ons" that follows the initial move-on plus appropriate expansions. This analysis yields two contrasting types of texts. In one case, both the first move-on (which constitutes the text opening) and the second move-on are on the same level of generality; in the other, information flows from general to specific both within and beyond the opening element. Britton's characterization is close to, and in fact largely inspired, our definition of adequate expository openings as requiring a generalization that is expanded by elaboration, and so supports our suggestion that this combination represents a "mature" type of text initiation. The two relevant types of opening move-on plus follow-on segments are illustrated in Examples 16 and 17, respectively.

16.    Adam, 7th grade [Clauses 1–8 of 12]:

*In my opinion we should treat everyone equally, even if we don't like him or he is not on the same level as us* [OPENING = Cl 1–3] *If you don't like someone, you shouldn't show him, you should ignore him or explain to him nicely so that he'll change his behavior*

17.    Yariv, science graduate [Clauses 1–5 of 19]:

*Problems between people often arise as a result of defective communication, intolerance, and lack of goodwill. Most problems that arise from the above-mentioned causes find even greater expression among children and young people*. [OPENING = Cl 1–3]. *At those ages, communication between youngsters is poor, based mainly on external appearance, false impressions, and social status, as in the division into popular and unpopular*

In over half the texts we examined (42 of 80; 20 in Group G, 17 in Group J, and 5 in Group H), the information failed to move in a gradated fashion from the opening to the body of the text. The combination of a vague generalization detached from reality, on the one hand, and lack of information flow from general to specific, on the other, reflected the interaction between the two components of expository openings considered here: discourse framing by topic definition and text organization in terms of generality. In developmental terms, the inability to provide both an explicit and clearly anchored generalization combined with information that proceeded from general to specific was revealed mainly by the two younger age groups considered here: 9- to 10-year-old grade school students and 12- to 13-year-old junior high school students. In other words, analogously to the interac-

tion found between the two dimensions we identified for the discourse functions of narrative openings (see previous Functional analysis of narrative openings section)—kind of background information and temporal reference—maturely proficient expository text introduction could also be characterized as combining the two dimensions we defined as relevant for this type of discourse. Various other combinations reflected transitional levels of expository text construction, en route to full proficiency.

## Linguistic Encoding of Text Openings

In analyzing the linguistic expression of text openings, we proceeded from a functional perspective, taking the genre-dependent characterizations of narrative settings compared with expository introductions as our point of departure. As an analytic strategy, we focused on the nature of the generalized background commentary expressed in the opening elements of each of these two types of discourse. To this end, we considered predicating expressions in narratives, as the locus for temporal reference to situations, and we examined nominal expressions in expository prose, as the locus for relative abstractness of reference to entities.

*Predicating expressions in narrative openings.*    Nearly three quarters (51 out of 71) of the texts we included as "narratives," as defined in the previous Demarcation and Length of Openings section, opened without any general element at all, starting directly with reference to events that initiated the episode recounted in the rest of the narrative. One example was illustrated in Example 2, from a seventh-grade girl ("Me and my girlfriend quarreled and other girls got involved. And a conflict developed among the girls in our class"). Other such examples are from a grade-school girl ("I quarreled with a girl in my class"), from a high-school boy ("Me and some friends went out to spend the evening at a discotheque"), and from a university student ("In 1993, I took a trip abroad by plane"). As such, their predicates were typically dynamic verbs expressing activities or changes of state (*quarrel, get-involved, develop*; *went out to spend*; *took a trip*). Also, they were all encoded in the only past tense form available to speaker–writers of contemporary Hebrew (Berman & Neeman, 1994; Berman & Nir, in press).

As a bridge between these fully specific past-time, event-anchored openings, on the one hand, and more generalized background settings, on the other, consider the example in 6(a), repeated here as Example 18.

18.    Smadar, 7th grade [Clauses 1–3 of 30]:

*One year (in 6th grade), there was a girl in our class (she is still in our class) that lied to us lots of times about matters of principle and other things.*

The predicates in this narrative opening were "mixed," because two of them were nondynamic copular verbs (one in the past and one in present tense) typically used for describing background states—one in past tense (there was a girl in our class) and one in present tense (she is still in our class). Although the third clause was in past tense with a dynamic action verb (lied = told lies), this is hedged by the generic temporal adverbial "lots of times," which indicated recurrence of the plot-initiating background event, and so makes reference to a generalized prior state of affairs. In contrast, the next two examples, also from seventh-graders, refer only to specific situations existing prior to the time of the events of the story.

19(a)    Shem, 7th grade [Clauses 1–4 of 10]:

*In my previous school, our class was not at all united. There were fights and violence all the time, and there were a few different camps. I wasn't part of any camp.*

(b)    Guy, 7th grade [Clauses 1–4 of 15]:

*When I was in 3rd grade, there were two kids, one of them is my best friend and the other is also my friend.*

In Example 19(a), the verbs are all past tense, but they take the form of Hebrew *haya* 'be', as copular verbs with attributive complements (not united, part of) or as existentials referring to what existed at the time prior to the onset of the events in the story. In Example 19(b), there is a shift from past to present reference, again all in copular constructions, setting the background time and circumstances of the events about to be reported. These examples from seventh-grade openings in Examples 18 and 19 give linguistic expression to the less mature type of background settings through either tense-shifting or alternation between copular tense-marking predicates and lexically more specific dynamic verbs to introduce the background to the plot line events. In contrast, consider the examples in 20 from a high school girl (a) and from two adults (b) and (c)—repeated from Example 8. These illustrate different forms of generalized commentary that constitute the background introduction to accounts of narrative events.

20(a)    Inbar, 11th grade [Clauses 1–4 of 26]:

*Personally I don't often get involved in altercations with other kids. The incident I can think of right now is one where a boy in my class offended me … .*

(b)    Yoram, humanities graduate student [Clauses 1–2 of 22]:

*My place of work is made up by and large of congenial, friendly folks. Yet there are two young women there who seem not to have fully internalized proper working relations*

(c)    Rinat, humanities graduate student [Clauses l–15 (shown in part here) of 29 clauses]:

*There are lots of cases of disappointment or satisfaction from the behavior of people around you. These instances surround us daily … Generally (people) tend to recall the most recent things that happened to you and not things that relate to the distant past unless it was by way of a trauma. What I remember of the past year is a case of a girlfriend that I thought quite different things about.*

The opening clauses in Examples 20(a) and 20(b) involve shifting of both tense-marking and verb type. The high school student's opening in 20(a) starts with a generalized remark in the timeless present about the narrator's involvement with the topic, and then proceeds to a text-oriented comment, also in storytelling time, as background to the specific incident to be reported, with the initiating event described as "a boy offended me"—both past tense and dynamic action verb, but one with an affective connotation. The generalization in 20(a) is only partial, because it refers explicitly to the narrator's own involvement "Personally, I don't …." The example in 20(b) starts out in present tense with nondynamic verbs, and then proceeds to a Hebrew past-tense verb *hifnim* literally 'internalized' in the sense of "evidently not yet internalized = have not yet internalized" to express present relevance of a situation with past time inception. The excerpt in Example 20(c), abbreviated from the original, illustrates a particularly skillful interweaving of present- and past-tense predicates, creating a sophisticated interplay of generalized expository-like comment as background to the past-tense narrative events. Another relevant example is the opening from a woman graduate student, introduced by a gerundive, nonfinite form of the verb *haya* 'be', with all the rest of the (underlined) forms in the same "simple" past tense: *Be-heyoti studentit le-toar rishon, harbe meod studentim, ben im <u>hayu</u> xaverim o lo, <u>sha'alu</u> mimeni maxbarot kdey lehashlim xomer she loh <u>hispiku</u> lesakem bizman ha-hartsa'ot* 'When-being = when I was an undergraduate student, a good many students, whether (they) <u>were</u> my friends or not <u>borrowed</u> [=would/used-to borrow] my notes in order to make up material that (they) not <u>managed</u> [= hadn't managed] to summarize in class'. Together, these examples illustrate the following features of encodings of narrative openings in Hebrew: (a) given the paucity of grammatical means for alternating reference to time and aspect in contemporary Hebrew, mature narrators use a range of other options, including shifting between present and past to distinguish background situations from foreground events; (b) the use of verb form interacts with choice of *Aktionsarten* or verb type, to express durative activities, change of state

events, and stative circumstances; and (c) maturely proficient narrators select different rhetorical devices and linguistic means for expressing the generalized state of affairs existing prior to the onset of narrative actions.

A related feature of the narrative opening of older participants is shown in the examples in 21, in the transition from background setting (the opening) to foreground events (the episode). In these examples, all from adults—with 21(c) repeated from 7 and 21(d) from 20(c)—text openings are separated from the onset of the story by a double square bracket. These openings, too, are couched in the timeless present (which in Hebrew has the same form as the deictic, immediate present and also nontensed participles) to refer to generalized states of affairs prior to the events reported in the narrative.

21(a)   Adi, sciences graduate student [Clauses 1–2 0f 10]:

*I have quite a good friend, with many common spheres of interest, and we do all kinds of things together. [[One day, talk between us <u>spilled</u> over into politics …*

(b)   Yariv, sciences graduate student [Clauses 1–2 of 52]:

*In the course of my work, I come into contact with gradeschool [sic] kids that I teach subjects in ecology and environmental studies. [[In the 6th grade of one of these schools, there <u>was</u> a kid called …*

(c)   Orit, humanities graduate student [[Clauses 1–22 of 22]:

*In the context of a new post at my school (as a counselor), I am obliged to meet with the senior counselor and to get her approval. [[Accordingly, I arranged a meeting with the senior counselor …*

(d)   Rinat, humanities graduate student [Clauses 1–15 (shown in part here) of 29 clauses]:

*There are lots of cases of disappointment or satisfaction from the behavior of people around you. These instances surround us daily … Generally (people) tend to recall the most recent things that happened to you and not things that relate to the distant past unless it was by way of a trauma. What I remember of the past year is a case of a girlfriend that I thought quite different things about. [[ When the two of us <u>started</u> studying together for our M.A. …*

The examples in 21 from adult texts reveal a discourse stance that is detached or abstracted away from the specific context of the story events, from which they are

distanced by a combined use of (a) timeless present tense, (b) typically nondynamic verbs (copular, possessive, modal), and (c) a variety of strategies for shifting from the background opening to the initiation of events—from the stereotypic temporally specific "one day" to the specific location of a particular class and a particular student in 21(b), the event that was incurred by this background situation in 21(c) "Accordingly, I did …," or the state of affairs that initiated the chain of events in 21(d) "starting to study together."

Taken together, these examples suggest that fully proficient, mature narrative openings function very much like their counterparts in expository discourse. They proceed from the general to the specific in reference to time, place, and participants—at least given the particular communicative context and the nature of the instructions received by participants (to narrate a personal experience about a specific incident of interpersonal conflict). Clearly, the specific type of narrative elicited (picture-based or purely verbal, fictive or veridical, etc.) may yield different age-related results in general, and with respect to their setting elements, in particular (Berman, 2001, 2004).

*Nominal expressions in expository openings.*    We considered nominal expressions as the locus for linguistic encoding of relative abstractness and distancing of reference to entities. Unlike the case for predicates, where linguistic analysis provided us with well-established, genre-neutral categories of temporality through tense–aspect markings and of predicate semantics in terms of activities and states, categorization of nominal expressions appeared to us to be essentially topic-dependent and even, in the database we were analyzing, task-dependent. To neutralize the "task-dependency" of this analysis, we disregarded instances where the opening generalization consisted of a mere repetition or echoing of the input expression provided as the topic in the task elicitation, when participants were instructed to write a composition discussing *be'ayot beyn anashim* 'problems between people'. There were five such instances: one from a 4th grader, three from 7th graders, and one from an 11th grader. Smadar, a junior high school girl, started by writing *ani xoshevet še <u>be'ayot ben anashim</u> tamid korot ve gam xayavot likrot* 'I think that <u>problems between people</u> always happen and are bound to happen'. Nadav, a high school student, opened his essay with *<u>be'ayot ben anashim</u> nov'ot me-hayaxas shel anashim ish le-re'ehu* '<u>problems between people</u> emerge from the attitude of one person to the other'. This left us with a total of 75 expository texts, which were analyzed for nominal structure and content: 19 from 4th grade, 17 from 7th grade, 19 from high school, and all 20 adults.

We also disregard pronominal reference, which is at the core of many linguistic analyzes of reference, to focus on lexical expression of what we term *explicit* generalizations. Thus, we considered the structure and content of nominal expressions in relation to the *function* they performed in the context of the opening to an expository text. Specifically, we analyzed the lexical noun phrases occurring in four

types of initiating commentary on the topic of interpersonal conflict: suggestions for solutions (22), explanations of causes (23), illustration of instances, and subcategorizations of the phenomenon. In these examples, noun phrases are in italics, and openings are presented in order of relative maturity, with the (b) and (c) examples representing more proficient and explicit formulation of the given type of initial commentary.

22.    Proposal of solutions:
(a)    Resital, 7th grade [Clauses 1–2 of 22]:

*When (there) are <u>problems between people and kids, the best way to solve the problem</u> it [= is] to talk.*

(b)    Yoav, humanities graduate student [Clauses 1–6 of 23]:

*A: <u>Inherent problems between people</u>, B: <u>Local or temporary problems (created by circumstances of time and place) that are resolvable</u> [literally: given to resolution] <u>by negotiation and (mutual) acknowledgment.</u>*

Example 22(a) contains two relatively heavy complex noun phrases—in the first, the head noun *problems* is modified by a coordinate prepositional phrase; in the second, the head noun *way* is modified by a complex nonfinite verb phrase. However, the first largely echoes the input stimulus nominal, and so is directly task-based; the second is verbal rather than fully nominal in character. In contrast, the adult's opening combines two types of initial commentary—both subcategorization and proposed solution—and the noun phrases are so heavy that the entire excerpt of nearly twenty words (as counted by the conventional orthographic representation of words in the original Hebrew) can be analyzed into only two juxtaposed noun phrases, made up of head nouns modified by denominal adjectives (*inherent, local, temporary*), participial phrases, and relative clauses, and including abstract nominals derived from verbs and adjectives (*resolution, negotiation, acknowledgment)* and sophisticated loan words (*inherent*) and also morphologically complex native nouns and adjectives that are the hallmarks of nominal complexity in Hebrew as in other languages (Ravid & Avidor, 1998; Ravid & Cahana-Amitay, in press).

23.    Explanations for causes:
(a)    Noa, 7th grade, [Clauses 1–3 of 27]:

*I think that <u>problems between people</u> or kids develop in <u>most cases</u> because of <u>lack of understanding/listening.</u>*

(b)    Noa, 11th grade, [Clauses 1–8 of 22]:

*I think that because we live in <u>a state that is not separated from religion,</u> there exists <u>racism</u> in plenty and I would guess that precisely in <u>a state that started out from the desire of a hated people</u> (there) would be <u>more tolerance and acceptance</u> because it has experienced <u>the other side</u>.*

(c)    Vered, humanities graduate student, [Clauses 1–2 of 8]

<u>*The most serious problem between people*</u> *is <u>violence which derives of course from lack of tolerance for the other person's deeds or words</u>.*

The younger girl's explanation in (a) remains relatively vague (*in most cases*) and general (*lack of understanding/listening*)—an impression that is strengthened by the use of an indeterminate slash between the two derived nominals. Here, the complex derived morphology of these two nouns is consistent with the fact that the younger Noa's expository text was, in general, the best in both structure and content in her age group. The high school Noa's opening, in contrast, is highly specific, and includes reference to a large number of abstract "institutional" nominals (*a state, religion, a people, the other side*) along with derived nominals relating to abstract states (*racism, tolerance, acceptance, desire*) and heavy noun phrases deriving from reliance on relative clause modification, combined with a high-register passive participial adjective (*hated*). The adult's explanation of why there is interpersonal conflict is couched in almost entirely nominal terms, as we saw in 22(b) as well: Both the subject and complement of her introductory equasional proposition—linked by the copular pronominal form *hi* 'she = it'—take the form of complex noun phrases, an adjectivally modified head noun (*problem*) and an abstract head noun (*violence*) modified by a relative clause that includes nested prepositional phrases with no fewer than five different nominals (*lack of tolerance, person's deeds or words*).

24.    Illustrations:
(a)    Eilam, 7th grade, [Clauses 1 of 42]:

*Sometimes <u>problems in society</u> arise due to <u>some sort of weak side in one of the victims of problems of the type: blows, ostracism, desire for distance, violence, etc</u>.*

(b)    (=13b) Yochai, 11th grade [Clauses 1–4 of 11]:

*In my opinion <u>the movie</u> correctly presents <u>problems which exist in schools and in youth groups</u> all over <u>the world</u>. <u>The movie</u> presents <u>problems</u> like <u>vio-</u>*

*lence between children* and *little "transgressions" that start at a young age* like *harrassments, thefts, etc.*

(c)   Adi, 11th grade, [Clauses 1–3 of 9]:

*One of the problems of the human race* and actually when you come to think of it, *the biggest problem of all,* is *the problem between one man and another.* This is expressed in *several points: wars, murders, terrorist attacks, disputes between groups* or *between one man and another.*

(d)   (=17) Yariv, science graduate [Clauses 1–5 of 19]:

*Problems between people* often arise as *a result of defective communication, intolerance,* and *lack of goodwill. Most problems* that arise from *the above-mentioned causes* find *even greater expression* among *children and young people.*

These examples reinforce our earlier comments on increased noun phrase sophistication as a function of age and literacy. These nominals are characterized by abstractness of content, formal complexity of morphological derivation, and heaviness and nesting of syntactic architecture. In addition, in keeping with the nature of illustration and subcategorization in general, an effect of nominal "heaviness" is achieved by the rhetorical devices of listing and parallelism—clearly demonstrated in the examples in 24(a) through 24(d). Moreover, age-related progression is revealed by changes in the content of the types of illustrative examples that writers provide in their openings: from the local and physical school-based *blows and beatings* to a broader social context at high school age (*harassments, thefts* and even *war, murder, terrorism*). The adult introduces the examples he gives by reference to more universal, socially anchored background causes (*defective communication, intolerance, and lack of goodwill*)—again all by means of stacking of abstract, derived nominals combined with rich use of adjectival and other epithets (*the above-mentioned causes, even greater expression, children and young people*).

The fourth and last type of initiating commentary specifying the nature of the discourse topic is that of subcategorization, presenting points to be elaborated in subsequent discussion of the topic (25.1) or noting different social subgroups involved in the topic (25.2). These were ranked as most abstract and complex of all, inter alia because there were no cases of this type of topic initiation in the youngest age group in our sample.

25.   Subcategorization:

25.1    Points for further discussion:
(a)    Inbar 11th grade [Clauses 1–5 of 24]:

*When attempting to <u>examine the subject of problems between people</u> (one) needs to relate to <u>several questions</u>: Why (is it) important to communicate in general? Where do <u>such conflicts between people</u> derive from? And how (if at all) can <u>such problems</u> be avoided?*

(b)    Shamgar, humanities graduate student [Clauses 1–5 of 26]:

*In attempting to discuss <u>problems between people</u>, we need to examine <u>which problems</u> we are referring to: <u>behavioral problems between people</u> or <u>problems of communication between people</u>. Is <u>a certain kind of behavior</u> that which constitutes <u>a problem</u>?*

25.2    Classification of social groups:
(c)    Avital, 11th grade, [Clauses 1–3 of 13]:

*In my opinion, <u>the biggest problem between people</u> is that there are <u>those that consider people from a different culture—Russians, Arabs, the poor, etc.—to be inferior.</u>*

(d)    Sivan, science graduate, [Clauses 1–2 of 7]:

*<u>Interpersonal problems</u> constitute <u>a broad topic that covers problems between sexes, races, and social classes.</u>*

These excerpts all rely in different ways on the rhetorical device of parallelism (Reinhart, 1995), with individual speaker-writers selecting their own favored stylistic means. Several use rhetorical questions as the opening gambit to their text; others resort to listing different but similar groups and subgroups of people and problems. Shamgar in 25(b) for example, uses the accepted Semitic device of lexical repetition, reiterating the topical head noun *problem* several times in the course of a few clauses.

Our analysis of nominal expressions in expository openings thus highlights two quite general features of developing text production abilities that are among the key motifs of the larger project in which this study is embedded: (a) the close interconnection between discourse function, thematic content, and linguistic form, and (b) the related interdependence between syntax and lexicon. It also underscores earlier findings from narrative development to the effect that in Hebrew, as in other languages, "linguistic forms have a long developmental history" (Berman, 1988; Berman & Slobin, 1994; Hickmann, 2003). This protracted route, however, is evi-

denced mainly, perhaps exclusively, in discourse-embedded contexts—such as monologic narrative and expository text production. In such settings, it is not enough for speaker–writers to make use of their repertoire of grammatical and lexical devices to produce well-constructed simple clauses and isolated sentences. Preschool children are well able to perform such tasks. What takes a long time to acquire is the ability to concurrently recruit a wide range of combined linguistic, cognitive, and communicative resources and to deploy them appropriately in the online production of monologic text construction.

## DISCUSSION

This article has considered text openings as a window on general features of discourse structure and content, and as reflecting developments in text construction abilities across adolescence. Accordingly, we analyzed the form and content of opening elements in terms of the functions they perform in particular types of discourse: to provide background information in narrative accounts and to introduce the topic of discourse in expository discussions. An innovative feature of our analysis concerns the pivot around which information is organized in the two types of texts: a pivot of temporality shifting between storytelling and story-time in narratives, and a pivot of generality shifting between generalization and specification in expository texts. These discourse functions underlie our analysis of the linguistic forms used to encode the opening sections of the texts we examined: verb tense and verb semantics in narratives, and nominal structure and content in expository texts.

Our analysis focused on text openings as a window on developing text production abilities across school age and into adulthood. Two practical reasons motivated this decision as a research strategy. One is that it is very hard to get a handle on overall text structure in qualitative terms—for instance, to go beyond counting whether, which, and how many narrative elements are included in the global "action structure" (Shen, 1988; van Dijk, 1980). Second, prior attempts at having groups of researchers from varied backgrounds (education, developmental and cognitive psychology, speech pathology, linguistics) rate the overall quality of elicited texts reveals that—although they tend to largely agree on their ranking as poor, mediocre, or good, or as juvenile, middling, or mature—there is very little consensus on how they arrived at such decisions and what explicit criteria motivated them (Katzenberger, 1994; Ravid & Katzenberger, 1999). In view of these difficulties at operationalizing a global evaluation measure for developing text production, we decided "to start at the beginning" as a heuristic. Besides, beginnings have a privileged status in all areas of human activity, not only for heuristic purposes.

For these reasons, both methodological and principled, our study did not attempt to explicitly relate its findings for text openings to the overall quality of the

texts in which they were embedded—although we would very much like to find some way of doing this both in individual profiles and across groups. In the meanwhile, however, the results of our analysis suggest that opening elements of both types of discourse are good candidates as diagnostics of the overall organization and content of the texts that they introduce.

Our study extends findings of recent developmentally oriented studies on text openings: the role of scene-setting elements in the narratives of preschoolers (Berman, 2001), and the type of anchoring provided to the openings of narrative and expository texts by children and adults speaking and writing in different languages (Tolchinsky et al., 2002). Findings from our study are highly consistent with the results of other analyses comparing school children's narrative and expository text construction (Scott & Windsor, 2000), as well as with other research on the database examined here. Furthermore, they supplement earlier studies conducted at the global level of the texts as a whole from two main points of view: The narrative and expository genres are clearly distinguished in linguistic expression from the youngest age group (Berman & Nir, in press), and expository text construction constitutes a later development than narrative (Katzenberger, 2003).

The fact that the openings to narrative texts emerged as better and more canonically constructed at an earlier age than those of expository texts can be taken to reflect the difficulty of expository, compared with narrative, text construction in general. The reasons for this difference are complex. One is that narratives and expository texts differ in communicative purpose. Narratives aim to involve their listeners or readers in human experiences of the storyteller or of others; personal-experience narratives, particularly, are typically embedded in social interaction and conversational interchanges. Expository texts, in contrast, aim to provide information or to present ideas, and so are often confined to more distanced or academic settings (Graesser & Goodman, 1985). In experiential terms, all cultures and all people are familiar with narrative type discourse from early childhood (Karmiloff-Smith, 1986, noted that narrative is probably one of the commonest forms of extended discourse), but expository discourse has a more limited experiential basis and is often a school-based activity. In a related vein, in thematic content, stories are about people, concrete objects, and events, whereas expository texts devolve on ideas and abstract topics of discussion, so that in a sense, the topic is the protagonist (Havelock, 1986). The two types of texts also reflect distinct cognitive processes (Berman & Katzenberger, 2001), underlying what Bruner (1986) calls different "landscapes of consciousness" (pp. 20). Also, as we have tried to show here, they rely on distinct principles for framing and anchoring the information that they convey.

These factors do not include knowledge of *linguistic forms* per se because, as noted, children use genre-appropriate forms of verbal expression in both their expository and narrative texts from the youngest age group we examined. Children's deployment of appropriate means of linguistic expression interact with two major

developmental underpinnings in narrative, compared with expository, text production. General features of sociocognitive development, on the one hand, and differential exposure to and experience with the two types of texts, on the other, converge to explain why children develop command of narratives earlier, and more efficiently, than of expository type discourse. In terms of cognitive load and demands for monologic online text-production, the two genres differ markedly in principles of overall text construction. As Labov (1972) pointed out, well-structured narratives can be organized linearly along a purely temporal axis, where one event follows another in sequence, and even preschoolers have a well-developed sense of sequential ordering. Well-organized stories with a clear beginning, middle, and end may be dull or even banal, they may not make an interesting point, and they may lack the evaluative commentary and interpretive viewpoints that lie at the heart of maturely proficient storytelling. Therefore, they will fail to achieve the communicative goal of entertaining or involving their addressees. However, they will be coherently organized and canonically structured. This is not the case for expository texts which, in the absence of a recognizable equivalent to a narrative schema, lack a clear overarching principle of organization. They, too, must have a beginning, middle, and end. However, as our analyses have shown, they may start out with an illustrative example from which they proceed to generalize, or vice versa. They may start by introducing the topic in general and then go on to elaborate it. Finally, their conclusion may take the form of a summary, a restatement, or an elaboration of the ideas that preceded, or even introduce a totally novel new idea.

A major cognitive difficulty in constructing an expository text is that, rather than describing events that occurred or could have occurred, it creates its own content. As Britton (1994) pointed out, the very function of expository texts is to create a thematic structure in the reader's (or hearer's) mind. In consequence, expository texts reveal a particularly intimate interaction between discourse structure and thematic content. As noted, canonical narrative organization may be manifested even in personal-experience accounts that are not particularly interesting in content, or complicated in episodic structure. However, in expository texts, discourse organization and discourse content are intertwined, so that the structuring of a piece of expository discussion depends not only on how the flow of information is organized but also on the logical consistency and originality of the propositional content that it conveys.

In the task required in this study, participants related to the topic of interpersonal conflict along a cline of generality: from general to specific and back to general. The least informative elements of content, typical of the younger children's texts, took the form of vague or platitudinous generalities. Only older participants provided concrete illustrations or characterizations of such problems (beyond what was shown in the video) and specific proposals for solutions, and only from high school on were participants able to generalize beyond such problems to dis-

cuss underlying causes and social implications. Mature speaker–writers differ markedly from younger children in the ability to take different perspectives on issues, to develop individual attitudes to and ideas on a socially relevant topic (interpersonal conflict), and to both generalize on the topic and to relate it to personal experience. The quality of the younger children's expository texts shows that they are not as yet able to cope with the cognitively complex demands of interweaving specific incidents with general comments on a topic, nor are their discourse skills adequate to the task of embedding their generalized propositions ("move-ons" according to Britton, 1994; "nuclear" statements according to Fox, 1987; Matthiessen & Thompson, 1988) in a fabric of expansions or ancillary commentary in the form of elaborations on the theme, episodic illustrations, and concrete proposals.

The conceptual difficulties underlying expository text construction thus derive from the inherent nature of such discourse and the heavy cognitive demands that it imposes in terms of online output of the self-initiated structuring, organization, and content of the information to be conveyed. This is compounded by experiential factors. Children have far earlier and more extensive exposure to and experience with hearing and producing narratives than more abstract expository discussions. To construct clearly organized and thematically informative expository texts, sociocognitive maturity may need to be supplemented by school-based experience with literacy-related activities in reading and writing, and in listening to and producing academic type texts that expound on abstract topics and general ideas. This, in turn, highlights the potentially important role of literacy and schooling in such developments.

In spite of the apparent preciousness of narrative abilities, our study reveals that, as predicted, fully proficient openings emerge as a late development in both types of texts. Our analysis of predicates in narratives and of nominals in expository texts shows that younger school age children have difficulty in recruiting appropriately distanced, general, and abstract forms of expression so as to set the scene for the events that constitute a narrative about interpersonal conflict and to establish the basis for the factors underlying such conflicts in expository discussion of the topic. In line with earlier work on text construction abilities (Berman & Slobin, 1994), we propose that this difficulty is not due to purely linguistic factors (e.g., even preschoolers have a rich repertoire of predicate types and complex nominals), but derives from the need for speaker–writers to recruit suitable linguistic means of expression while coping with the heavy cognitive demands involved in monological discourse production: command of a hierarchical global text structure, preplanning of the discourse about to be produced, and monitoring of online text production.

A further finding was that even children in the younger age group provide clearly distinct openings to their narrative, compared with their expository, texts. In this they reveal, as predicted, a definite differentiation between the two types of

discourse. However, also as predicted, with increased age and maturity of text production abilities, the two text types become less dichotomously differentiated. Thus, the narrative openings of the older participants include features typical of expository discourse, such as reference to the timeless present and formulation of generalizations, and their expository openings often involve reference to past time anecdotes and personal experiences. Interestingly, this tendency of intermixing genre-typical features is more marked in narratives than in expository texts. This seems to us both developmentally and experientially anchored. In western cultures, at all events, once speaker–writers move into the expository mode, this takes over as a dominant mode of expression. This is particularly true in the written modality, which is what we examined here. For younger children, both the spoken modality and the narrative mode predominate. With age, and under the impact of increased literacy and greater experience with literacy-related activities and types of discourse, expository discussion tends to increasingly shape the way we think and give written expression to our thoughts.

## ACKNOWLEDGMENTS

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