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Narrative Competence and Storytelling Performance: How Children Tell Stories in Different Contexts

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This study addresses some of the multiple factors that play a role in children's developing narrative abilities. It starts by reviewing approaches to narrative analysis that have had an impact on the study of children's narratives since the 1970s. Such analyses are reevaluated from a developmental perspective, based on crosslinguistic findings from picturebook narratives. The generality of these results is then examined by comparing narratives produced by children in different elicitation settings, based on findings from a large-scale Hebrew-language sample. Finally, an attempt is made to integrate these findings along different dimensions involved in developing narrative knowledge, as manifested by children at different phases of development: in recruiting linguistic forms for narrative functions, in combining foreground plotline events with affective evaluation and background circumstances, and in perceiving what it means to tell a story in task-appropriate ways. The development of narrative abilities is shown to yield a complex web of interrelations between abstract narrative competence and how this is realized in storytelling performance. *(Linguistics)*

This study concerns the complex of different factors—linguistic, cognitive, and communicative—that are involved in children's developing abilities to tell a story. Motivating this article is the claim that these factors need to be considered in a framework that combines a general theory of narrative structure with an overall developmental conception of how children extend and reorganize their knowledge of linguistic form and structure in the context of language use—in this case, in constructing narrative discourse. This claim is examined by comparing findings from research on children's ability to understand and

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construct narrative texts with a database of several hundred narrative texts produced in a range of settings by Hebrew-speaking 3- to 12-year-olds and adults.

To establish a common frame of reference, we start by outlining some major approaches to narrative analysis that have had an impact on research into children's developing narrative abilities.

APPROACHES TO NARRATIVE ANALYSIS

Different types of narrative analysis have influenced the study of children's narratives since the 1970s—with the emergence of cognitively motivated orientations in this domain. One point of departure for reviewing these approaches is suggested by the distinction drawn in two recent dissertations in the field (Bamberg, 1985; Wigglesworth, 1992). They compared studies that relate mainly to story content with those concerned primarily with story structure. The focus of their two studies, like that of this author (Berman, 1988a; Berman & Slobin, 1994), represents a third, rather different, orientation that focuses on form/function relations. The three approaches reviewed in this section are listed and referenced in Table 1.[1]

Content-based orientations to narrative reflect two complementary points of departure.[2] One focuses on children's emergent notion of *scripts* as generic, prototypical sequences of events anchored in mental schemata. These take the form of event-representations relating to situations like going to the beach, attending a birthday party, making cookies, or having a fight. Scripts have

[1]The breakdown of approaches set out in Table 1 should be qualified in several ways. First, the first two approaches are referenced by only one general and one developmental study, although each is in fact represented by numerous studies of both adult and child narratives. Second, the division into "structure" and "content" as presented here is not unequivocal. For instance, the high-point analysis undertaken in Peterson and McCabe's (1983) large-scale study is in some ways both far more structural than the Stein and Glenn (1979) approach and could be perceived as linguistic, rather than cognitive, in orientation. Third, current research on narrative development includes other classifications for types of narrative analysis. For example, Reilly (1992) distinguished between studies that "primarily focused on the structural aspects of narratives, that is, on story construction or the event structure of narratives" as compared with those that "focus on the linguistic means by which children structure their stories" (pp. 356–357). Nicolopolou (1995) provided a valuable review of what she termed "formalist approaches to narrative analysis"; for her, these include "research on children and narratives carried out by psycholinguists who take their lead from 'functional' linguistics," and, as such, they contrast with the "sociocultural approach" that she espouses, as detailed in Nicolopolou (in press).

[2]These three categories refer to approaches grounded in cognitive psychology since the 1970s (e.g., Kintsch, 1977; Rumelhart, 1975; Schank & Abelson, 1977; Thorndyke, 1977—going back to Bartlett, 1932) on the one hand, and linguistic analyses of extended discourse (e.g., Hopper, 1982; Polyani, 1985; Tomlin, 1987), on the other. That is, the term *content* here does not refer to the psychoanalytic or projective approaches to analyzing the content of stories told to and by children that formerly dominated the field (e.g., Bettelheim, 1970; Pitcher & Prelinger, 1963).

TABLE 1
Three Approaches to Narrative Analysis

Content-focus:
Event representations, scripts (Schank & Abelson, 1977; Nelson, 1986)
High point analysis, referential/evaluative (Labov, 1972; Peterson & McCabe, 1983)
Structure-focus:
Causal networks (Trabasso, Secco, & van den Broek, 1984; Trabasso & Nickels, 1992)
Story grammars (Mandler, 1982; Stein & Glenn, 1979)
Form/function relations:
Cohesion, connectivity, perspective, reference, tense/aspect (Bamberg, 1987; Bazzanella & Calleri, 1991; Berman, 1988a, 1994; Berman & Slobin, 1994; Hickmann, 1991; Hickmann & Liang, 1990; Jisa, 1987; Kail & Hickmann, 1992; Karmiloff-Smith, 1979, 1981; Slobin, 1994a, 1994b, 1995; Wigglesworth, 1990, in press)

their antecedents in familiar routines and social activities of 1- and 2-year olds—having dinner, playing with blocks, taking a bath, and so on (Tomasello, 1992, p. 43). On this view, the narrative abilities of young children are anchored in knowledge that is derived from their mental representations of events and the verbalization of such scripts (Nelson, 1986).

A second important thrust in content-based analyses is associated with the work of Labov (1972). Labov and Waletzky (1967) elicited over 600 narratives from adolescents asked to tell about a life-threatening experience. They define narratives as "one method of recapitulating past experience by matching a verbal sequence of clauses to the sequence of events which actually occurred" (p. 20).[3] The focus is thus on the temporal sequencing of linguistic strings as critical to narrative accounts of events. Another important feature of Labov's analyses is the distinction he makes between two types of components required for a successful narrative: *referential,* or *narrative,* elements and *affective,* or *evaluative,* elements. The former convey information about the characters and events in the story; they serve to move the plotline forward as it proceeds from background orientation, via a complicating action that leads up to a high point, reached just before the resolution, which completes the narrative. Evaluative elements, in contrast, convey narrators' attitudes to events and their interpretations of the protagonists' motives and reactions to events.[4]

In content-based narrative analyses, then, investigators take account of such factors as the event representation underlying the prototypical situation

[3]The original motivation for collecting this database was sociolinguistic rather than narrative. Labov was interested in obtaining naturalistic stretches of extended discourse as a context for his analysis of differences in the linguistic usages of speakers from different social and regional backgrounds. To do so meant "relying upon the basic techniques of linguistic analysis, isolating the invariant structural units which are represented by a variety of superficial forms" (Labov & Waltezky, 1967, p. 12).

[4]In recent work (Berman & Reilly, 1995b), I suggested a tripartite analysis of narratives into three classes of elements: referential, or narrative; evaluative, or attitudinal; and informative, or descriptive.

or script in which a narrative is anchored, the narrative as a text leading up to a high point, and embedding the sequential chain of events in a network of evaluative comments and background circumstances. Such analyses yield several predictions for the development of narrative abilities. First, for children to succeed in interpreting or producing a narrative text, they need to recognize a familiar script (Nelson, 1986). Second, young children may not recognize, let alone be able to verbalize, any highpoint at all; to do so requires them to have command of the structure of a canonic narrative, with a complicating action that leads up to a highpoint and culminates in a final outcome or resolution (Peterson & McCabe, 1983). And third, even older children may not fully conceptualize or give adequate verbal expression to the distinctions between referential narrative information, or plotline events, and the evaluative interpretation necessary for successful storytelling. As a result, young children will tend to focus on events and activities and will give little or no explicit linguistic expression to motivational, evaluative, and other backgrounded elements (Berman & Reilly, 1995a).

Structure-based analyses reflect the concern for mental representations central to cognitive and developmental psychology since the 1970s. They derive from the general notion of a story schema as a shared mental representation that underlies our construal of how narratives are organized, what kind of story is at issue (e.g., a fairy tale or adventure story), whether the story is a good one, and so on.[5] The concept of a *story grammar* evolved analogously to a generative grammar for syntax in the 1960s and aimed at providing a structural description of what constitutes a *possible* story or a *well-formed* story. A story grammar thus takes the form of a rule-system (corresponding to a phrase-structure grammar at the sentence level), which is intended to capture the structural regularities of narrative texts.[6] These grammars typically define the units or constituents that compose the narrative—elements such as setting, episodes, and outcome, in which each episode consists of a subset of elements (e.g., initiating event, goal, plot, and resolution) and the relations between these units (e.g., spatial, temporal, or causal).[7] A critical contribution of these

[5]Thus, both the event-representation orientation to narrative analysis in Nelson (1986), identified here with a content-focus, as well as different versions of story grammar, defined here as structure-oriented, make reference to *schemata*—in the sense of general mental representations. As such, both reflect the essentially cognitivist orientation of the bulk of the research considered in this study.

[6]The story-grammar idea was formalized in a way that made it possible to extend the model to incorporate an analogue to syntactic X-bar theory (Shen 1988, 1989).

[7]Labov (1972), as noted, treats *temporal* sequencing as critical in defining relations between the story constituents. Trabasso and his associates suggested a different emphasis, in terms of causal networks. They follow Schank (1975) in "focusing on causal inferences that link the states and actions of a story" (Trabasso & Rodkin, 1994, p. 87) and construe the narrative as essentially causal in structure.

analyses is their focus on narrative structure as *hierarchical,* since lower level elements and episodes are embedded within higher level constituents, and *recursive,* since the same elements recur from one episode to the next (e.g., internal response to a problem, attempt to solve the problem, and outcome of this attempt leading to another cycle of internal response, attempt, plus outcome, etc.).

Form/function approaches to narrative structure and narrative development consider how linguistic forms of expression are deployed to meet narrative functions such as making reference, encoding temporal or causal relations between events, and creating textual cohesiveness.[8] In developmental terms, these studies provide a powerful means for investigating Slobin's (1973) insight that, across time, known linguistic forms are used to serve new functions, and new forms are developed to meet old functions.[9]

DEVELOPMENTAL PERSPECTIVES

This section reviews some key findings that emerged from our large-scale crosslinguistic study of the so-called frog story (Berman & Slobin, 1994). Children ranging in age from 3 to 10 years and adults from different language backgrounds were asked to relate the contents of a picturebook depicting the adventures of a boy and his dog in search of their pet frog, which has disappeared (Mayer, 1969). This database was used to examine narrative structure and narrative development across different age ranges and in different languages, with the content kept constant through reliance on the same storybook.

Development of Form/Function Relations

From a form/function perspective, the frog story sample enabled us to examine both how different linguistic forms may serve the same narrative functions and how the same linguistic forms may be deployed for different narrative functions, across language backgrounds, developmental phases or both. Findings from this corpus demonstrate how, with age, children recruit more appro-

[8]Under this view, *linguistic forms* include morphemes (bound and free), words, and phrases; grammatical constructions such as relative clauses or passive voice; and syntactic operations such as word order changes or nominalizations.

[9]This idea is central to my work on children's Hebrew-language narratives, touching on such areas as null subjects as a device for topic maintenance and narrative cohesion (Berman, 1990), passive and middle voice for perspective marking (Berman, 1993a), tense marking and tense shifting for temporal anchoring of narratives and distinguishing background from foreground elements (Berman, 1988a; Berman & Neeman, 1994), and the conjunction meaning *and* used for different functions at different phases of development (Berman, in press).

priate and more varied means for expressing narrative functions such as temporality and cohesivity. Moreover, as they mature, children learn to use devices such as tense/aspect marking or subject elision for an extended range of functions.

In the domain of temporal relations, for example, we found that children are able to express quite complex, abstract conceptual notions from an early age. But it takes them a long time to deploy a full range of appropriate forms for expressing a particular function. Thus, to express *simultaneity,* children start with a marker of "recurrence," like German *auch* or Hebrew *gam* (Aksu-Koc & von Stutterheim, 1994). For instance, to describe the concurrent plunging of both the boy and his dog from a cliff into a pool of water down below, 3-year-olds might say "The boy fell into the water. The dog *also* fell." Slightly more advanced children might package the protagonists, as in "The boy and the dog fell into the water *together.*" Combining clauses by predicate gapping occurs only among older school-age children, as in "The boy fell into the water and *so did the dog,*" or with an explicit temporal conjunction, as in "The dog fell into the water *when the boy did.*" The most mature expression of this notion might combine a semantically specific conjunction with durative backgrounding in a nonfinite clause, as in "The boy (and his dog) fell into the water *while searching for the frog.*"

A similar picture emerges for the expression of the temporal discourse function of *retrospection.* Even young children show that they have recourse to this concept, for example, when they describe what happened to the dog when looking for the frog in the empty jar in which it had been kept, and from which it escaped. But they express this in a form that is not explicitly temporal, by possessive case: "The dog stuck his head in *the frog's jar.*" Older children use relative clauses to express a retrospective harking back to an earlier event: "The dog stuck his head in the jar *which was the frog's.*" Mature speakers, depending on their language, may recruit a grammaticized pluperfect form to express relative tense: ". . . *where the frog had been.*"

In the opposite direction, linguistic devices also come to be recruited for new and different functions. Table 2 sums up three sets of forms that illustrate this point in the frog story corpus. (The developmental phases in Table 2 are explained and motivated later in the Dimensions of Narrative Development section; see also Table 5.)

In the first example in Table 2, the task at hand, describing the contents of a pictured storybook, allows either present or past tense as a temporal anchor. Initially, children typically veer back and forth unsystematically between the two, focusing on local cues; for example, if the verb form could be either past or present, as in *put* or *hit,* or if the verb is semantically punctual rather than durative, as in *fell* compared with *running.* By age 5, children establish a single tense as a temporal anchor for their narrative, and they shift between past and present for grammatical purposes of marking sequence of tense or local relative-tense encodings. Eventually, these alternations are discourse-motivated by functions such as backgrounding and retrospection over longer stretches of the text.

The second example in Table 2, use of sequentiality markers like those meaning *and then* and *after that,* demonstrates a different developmental pattern. Before narrative temporality is established, either there is little or no use of such forms, or else they are used unconventionally. Subsequently, once the idea of sequentiality can be encoded, there is a tendency to overmark it mechanically, so that in some texts, nearly every pair of adjacent clauses is marked by these forms. Mature narrators largely dispense with these markers; they recognize that temporal sequentiality is the default for narrative, and so they use terms like *at first* and *later on* sparingly and more selectively, with the discourse-motivated function of initiating new episodes in the unfolding plot.

A third example of developing form/function relations is provided by null subjects. Even the youngest children in our sample (3-year-olds) already know that isolated simple-sentence clauses require an overt subject in a language like English; they may, however, occasionally omit this element, under pressure of ongoing text production. Older children (5- to 9-year-olds), use subject elision in coordination—occasionally also in subordination—at a local level of adjacent clauses; and they do so in accordance with the grammar of their native language—for example, in Spanish, elision is obligatory in same-subject coordinate and subordinate clauses; in English, it is optional in coordinate clauses and disallowed in subordinates; and in Hebrew, it is optional in both cases. Mature narrators, in contrast, exploit subject ellipsis across larger stretches of

TABLE 2
Narrative Functions of Three Linguistic Categories by Developmental Phase

	Developmental Phase		
Linguistic Category	*Prenarrative*	*Structural*	*Rhetorical*
Tense-shifting	Mixed present and past tense; erratic shifting, local-cue triggering	One dominant anchor tense; grammatical shifting, sequence-of-tense constraints	Past or present narrative mode; discourse-motivated shifting and backgrounding
Sequentiality markers	Occasional, utterance-initial	Overused, scattered across texts	Occasional, selective, to mark episodes
Null subjects	Occasionally ungrammatical in lone clauses	Grammatical, in adjacent clauses for local connectivity	Stretches of text for topic maintenance

text as a means of topic maintenance, in which it serves the purposes of discourse coherence and narrative connectivity.

The patterns summarized in Table 2 reflect a general finding for development of form/function relations in narrative. Grammatical command at the level of the simple clause is established early on, by age 3. Complex syntax is largely mastered by age 5. It takes a long time, however, until speakers are able to recruit these forms for discourse purposes, to organize and control the flow of information in constructing hierarchically organized narrative texts. That is, linguistic forms quite generally have an early emergence, but a long developmental history.

Levels of Narrative Organization

Consider the developmental implications of the two other approaches to narrative analysis set out in Table 1. Both content-based and structure-based orientations define narrative in terms of different levels and principles of organization. These start from individual events and build up to an overall plotline, or what has been termed *action-structure* (Giora & Shen, 1994; Shen, 1990, 1992; Shen & Berman, in press). Under the influence of story grammars, Shen and his associates defined a canonic story as consisting of an initiating or enabling event, attempt(s) to solve the problem, and a final resolution or outcome. They further noted that narratives are also organized on lower, less global levels of organization. These start with the most local level of two clauses linearly connected by a temporal relation of sequentiality. They proceed to causal linkages, and then build up to the global hierarchical level of action-structure. From a developmental perspective, a psycholinguistic implication of both content-based and structure-based narrative analysis is, therefore, that children's developing narrative abilities should reflect a general, independently motivated hierarchy in levels and principles of discourse organization.

Interestingly enough, analysis of the texts produced by children in response to the frog story picturebook revealed a strikingly parallel development in levels and principles of narrative organization from our youngest subjects, 3- to 4-year-olds, on through to 9-year-old schoolchildren and adults. This is shown in Table 3, to which is added an initial level of the isolated event, as the precursor to a dynamic linking between events—or relating between constituents in story-grammar terms.

Table 3 shows, first, that 3-year-olds can translate static visual pictures into dynamic verbal expression, but they have a hard time interpreting spatial arrays as temporally related sequences of events. At the next phase, connecting events locally, children give expression to temporal sequentiality, the default case for narrative. As noted in Table 2, they may overmark this explicitly to chain clauses with sequential expressions like *and then*, and *after that*. The

TABLE 3
Levels of Narrative Organization in the Crosslinguistic Frog Story Sample

	Level of Organization			
	Local			
		Linearly Connected Events		
Age (Years)	*Isolated Events*	*Temporal*	*Causal*	*Global: Hierarchically Organized Action-Structure*
3–4	+	− / +	−	−
5–6	+	+	− / +	−
9–10	+	+	+	− / +
Adults	+	+	+	+

Note. $N = 58$ per age group; − / + means that only a few children in the group reached this level, it was realized only sporadically in their texts, or both.

third level reveals a causal relating of events; this is increasingly motivated by the overall action-structure, but it is still largely local; for example, "they went into the forest *to look for the frog,*" "the boy climbed the tree *because the frog might be up there.*" Finally, some 9-year-olds, and all the adults, express a hierarchical organization at the level of action-structure; for example, "the boy had lots of adventures in his search for the frog," "in the end, he found the frog that had run away." That is, basic plot structure is established by age 5 to 9 years. However, children's texts are still typically organized online by local chaining. They rely very little on retrospective looking back or prospective looking forward to earlier or later points in the unfolding narrative. The development of narrative abilities can thus be seen to reflect a more general hierarchy of *principles of discourse organization.*

These findings might, however, be a function of the frog story task. As in any picture-based elicitation, children were required to translate static, visual, spatial input into dynamic, verbal, temporal output. We found that even 3-year-olds related to dynamic events, although they generally failed to encode temporal relations between events. But the structure of the frog story is quite complex. True, it reflects a canonic action-structure: there is a background setting (a boy has a pet frog, which he keeps in a jar); an initiating event (the frog escapes), which instigates attempts to solve this problem (the boy goes in search of his missing frog); and an eventual outcome (he finds his frog or a substitute). But the story has a long and complicated chain of episodes in which the boy looks in different locations, encounters different creatures, and experiences various mishaps—unified only by the shared goal, the search for his missing frog. This complexity, as well as other facets of the task, might account for the fact that fully developed, causally motivated, globally organized texts were produced somewhat later than might have been expected.

ROLE OF CONTEXT

The question that arises is: How generalizable is the progression set out in Table 3 to different storytelling contexts? Do children manifest this same developmental path, at the same ages, and in the same way, in other elicitation settings and in performing different narrative tasks? The following assumptions underlie the view that is taken here of the role of context in developing narrative abilities. First, there will be a single cognitively determined developmental sequence here as in other domains of language knowledge and language use. Second, this shared pattern will be affected by the particular narrative abilities and the kind of communicative demands that are evoked in different settings. That is, young children will reveal more knowledge of narrative structure and will perform better on some types of storytelling tasks than on others. Third, in learning how to tell a story, as in other areas of linguistic and cognitive development, acquisition is not an all-or-nothing leap from no knowledge to full knowledge; rather, it involves partial knowledge and reorganization and integration of prior knowledge across different domains. Further, more advanced developmental phases will be manifested earlier under some circumstances and in some areas than in others.[10]

Developmentally, then, children's abilities are considered to be *task sensitive*. This has been shown in relation to different cognitive domains (e.g., Donaldson, 1978; Fischer, 1980; Gelman, 1978; Rose & Blank, 1974; Wellman & Somerville, 1980) as well as for various aspects of language acquisition (e.g., Farrar, Friend, & Forbes, 1993; Hecht, 1985; Karmiloff-Smith, 1979; Levy, 1987). Task-sensitivity has also been demonstrated in several studies of narrative abilities (e.g., Allen, Kentoy, Sherblum, & Petit, 1994; French & Nelson, 1982; Hudson & Shapiro, 1991; Peled & Blum-Kulka, 1992; Seidman, Nelson, & Gruendel, 1986; Shatz, 1985; Wellhousen, 1993; Wolf, Moreton, & Camp, 1994).[11] As in development generally, when knowledge is not fully consolidated and integrated with other domains, so in storytelling, children will cope better with tasks that impose less of a *cognitive load* (Shatz, 1983). And indeed, the Hebrew database detailed in the next section revealed that 3-year-olds were well able to tell some kinds of stories, whereas 5-year-olds had difficulty with others, and even 8-year-olds found it hard to construct coherent narrative texts when asked to recount the contents of a film they saw just once.

[10] I use the term *phases* in preference to the Piagetian notion of age-bound, cross-domain *stages* for similar reasons to Karmiloff-Smith (1986, 1992). Developmental phases are recurrent: They may be attained at different times in different cognitive domains and in different subsystems of language knowledge (Berman, 1986)—in this case, depending on the specific narrative task or setting.

[11] For example, Hudson (1986) suggested that preschool-age children "are able to produce organized narratives about past events (either spontaneously . . . or in response to experimenters' queries) [whereas] other narrative genres, such as story production, are not mastered till late" (p. 103). Similar conclusions were reached by Seidman, Nelson, and Gruendel (1986) in comparing scripts, episodic recountings, and story production—in which a "story" is a make-believe account of a scriptlike event, such as making a campfire.

Intertask Differences in Children's Narratives

To demonstrate the impact of elicitation setting and the role of context on children's narrative productions, findings were compared from different samples of Hebrew-language narrative texts, as outlined in Table 4.

The studies are listed in Table 4 in relative chronological order of emergence of the levels of narrative organization set out in Table 3. First, in the Scripts

TABLE 4
Narrative Elicitation Studies With Hebrew-Speaking Subjects

Type of Story	*Elicitation, Materials, Instructions*	*Task, Type of Knowledge*
Scripts	"Do you know what it's like to go to a doctor/have a fight?	Verbal reconstruction of familiar sequences
doctor	What happens at a doctor,	
fight	when people go to a doctor?/ when people quarrel, what happens in a quarrel?"	Generic formulation Temporal sequencing
Personal Experience	Picture—children quarreling: "Have you ever quarreled with someone, have you been in a	Verbal reconstruction of personal experience Fight/quarrel script
fight story	fight, had a quarrel? Tell me about it."	Single-episode structure
Picture Series shopping fishing, fruitpicking	Three sets of four pictures "Arrange the pictures so they tell a story, and then tell me the story."	Visual, static, spatial > Verbal, dynamic, temporal Relation between pictures Reference, action-structure
Picture book	15-page wordless picturebook "The book tells a story about a boy, his dog, and his frog.	Visual, static, spatial > verbal, dynamic, temporal
frog story	Look through all the pictures and then you'll tell the story."	Adventure story: search theme Complex episode structure
Film	7-min film without words: "Look at this film try to	Recall and verbalization of visual scenes
pear story	remember what it is about, and afterwards tell the story."	Several unrelated episodes No clear resolution

Note. The texts in this database were elicited from different groups of subjects in each of these studies. However, it seems legitimate to compare results across the studies because the subjects all shared the following background: They were children of educated, middle-class speakers of Hebrew as a first language (as were the adult subjects who served as controls in each study); the preschoolers attended Hebrew nursery school or day care from the age of 2 and entered kindergarten at age 5 to 6; and the schoolchildren were in grade school from 6 to 11 or 12 years of age.

heading, even some of the youngest children, aged 3;0 to 3;6 months, were able to produce temporally sequenced descriptions of a familiar script. For example, when asked to tell about what happens when people go to the doctor, Ori, aged 3;1, said (as translated from the Hebrew), *"A boy goes to the doctor and the doctor checks him out and when the doctor finishes, then the boy goes home"*; Asaf, aged 3;3, told his mother, *"er . . . examines my tummy and my ears and he looks if my tongue is okay, and he tells me to stick out my tongue and he puts some medicine there."* These Hebrew data confirm the findings from the studies of Nelson and her associates; for example, Nelson and Gruendel (1986) had 3- to 8-year-old children describe common situations like eating lunch at day care, having dinner at home, and going to McDonald's. A general conclusion from the American studies was that "three-year-olds can . . . narrate central or core actions for familiar events in their correct temporal ordering using the general pronoun *you* and the timeless present tense" (Hudson & Shapiro, 1991, p. 94).

On the other hand, also in the first study listed in Table 4, the same Israeli 3-year-olds had a harder time when asked to tell what happens when you have a fight with someone. They were able to describe single events like *"you yell,"* and *"they hit you,"* but failed to order a series of events sequentially in any way. In terms of the developmental levels delineated for the frog story in Table 3, these 3-year-olds could be placed at Level 2, of relating events in sequence, in the doctor script, but at Level 1, of isolated events, in the fight script.

In contrast, the second study in Table 4, showed that a comparable group of 3-year-olds were quite good at recounting a fight or quarrel as a specific, personal experience. For example, Adi, aged 3;5, reported:

> *I fought with El'ad and I cried, and he pushed me down, and he hit me in the head and pulled my hair, and he broke my head also. And it was bleeding and they put iodine on my eye, and then my Daddy came, his name is Ellie, and then they took me to the doctor, and I cried. And then they took me to the hospital also.*

However, and this is critical, the 3-year-olds nearly all needed heavy scaffolding, in the form of guiding questions and suggestive comments from the adult interlocutor. In this, they differed markedly from children aged 5;0 to 5;6 who all produced fight stories that were well-structured monologic texts, with a beginning, middle, and end. For example, Orit, aged 5;2, informed the investigator:

> *Once, at the birthday party of one of the kids from school, I quarreled with my girlfriend because she didn't want to let me play hopscotch with them, so I was mad, and I told her I wasn't friends. And afterwards she asked me to make up, and she agreed I could also play.*

Another, rather different finding emerged from the third picture-series study listed in Table 4. This was based on three four-picture series: a woman buying a hat from another woman, two children out fishing, and two children picking fruit (Katzenberger, 1994). Preschoolers aged 4, 5, and 6 years compared with 10-year-olds and adults were asked to tell the story shown by each set of four pictures. Most of the 4-year-olds and several of the 5-year-olds treated each of the pictures in isolation.[12] This was true mainly of younger children (i.e., 3- to 4-year-olds) in the Hebrew frog story sample listed as the fourth study in Table 4, as well as for preschoolers telling the frog story in other languages (as indicated by Level 1 in Table 3). Other 4-year-olds and some 5-year-olds in the picture-series study focused on the concrete, physical similarities or differences between the people and objects in each of the four pictures in a series; for example, *"here she has a hat, and here she doesn't have a hat," "this boy is at the beach, and this boy is also at the beach."* Again, such static descriptions of the physical attributes of people and objects were rare among even the youngest of the children in the frog story task. Moreover, in the frog story, they were typically confined to the first one or two pictures in the book, for example, *"here is a boy, this is a frog, he has a dog."* Yet, as noted, stative descriptions and labelings were common among the 4-year-olds across the picture-series task, suggesting that they had not even reached Level 1, isolated-event description.

Analysis of overall narrative structure yields a rather different picture, however. On the frog story task, as shown in Table 3, few preschoolers achieved a global level of hierarchical action-structure. However, around 40% of the preschool children, and as many as 60% of the 6-year-olds, in Katzenberger's picture-series study expressed a well-organized plot structure for at least one of the three picture series she used. Both these studies used static pictorial material for eliciting narratives, and in both cases subjects had the pictures before their eyes as they recounted the stories they depicted. Nonetheless, the picture-series task yielded more advanced narrative results than did the picturebook story in some respects, and less advanced results in others.

In the last type of procedure used for eliciting Hebrew narratives listed in Table 4, subjects recounted the contents of a short film, which they had just viewed for the first time. The film was originally used by Chafe (1977, 1980) for studying how adult subjects in different cultures recapitulate experience

[12] A relevant finding from this picture-series study was that none of the 4-year-olds recognized that the same characters were depicted across the four pictures in any given series (see Bornens, 1990).

verbally. In the Hebrew study, even 5-year-olds were unable to produce a minimal, temporally well-sequenced chain of events to describe the contents of the film, and only a few 8-year-olds were able to meet this challenge. This finding contrasts markedly with the more advanced levels of narrative ability demonstrated by preschoolers as well as school-age children in the other settings listed in Table 4—generic scripts, personal experience accounts, picture-series event sequences, and picturebook story.

In sum, narrative abilities evidently do not develop along a uniformly linear curve. That is, it is not the case that one story genre develops straightforwardly before another, for example, that generic scripts are always easier than accounts of personal experiences, and that make-believe stories are harder than either of these. Nor does one elicitation setting always take developmental precedence, for example, picture series may not always be easier than picturebook stories, or film recountings hardest of all.

Factors Accounting for Developmental Diversity

The question is: Why do such divergent results emerge in different settings and across different tasks?[13] A multiplicity of factors appear to operate in concert to determine the cognitive load that the task of storytelling imposes on children at different points in their development. In this context, four out of the many such factors are noted as playing a part in raising or reducing the cognitive load: scaffolding, familiarity, episodic complexity, and plot structure.[14]

Consider, first, the role of *scaffolding*. It has been shown that when storytelling is clearly interactive and conversation embedded, with rich supportive input from familiar adults (McCabe & Peterson, 1991a, 1991b; Todd & Perlmutter, 1980), or from peers and siblings (Blum-Kulka & Snow, 1992; Nicolopolou, in press), children are more likely to produce well-constructed strings of narrative discourse.[15] This relates to how children construe the very nature of narration. Initially, they treat the task of storytelling as essentially interactive—as shown even in nonconversational settings for 3-year-olds in the studies by Berman and Slobin (1994, pp. 60–61) and for 4-year-olds in Katzenberger's (1994) picture-series research. Consequently, young children are particularly responsive to scaffolding input, to constructing a story as part of a dialogic interchange. Another reason, which has been afforded less attention in the literature, is that interactive scaffolding also serves to lighten the cognitive load. Young preschoolers are unable to sustain a lengthy stretch of text, which requires them to keep on adding new comments to a single topic, or to switch to a different discourse topic without interlocutor assistance. In other words, at these young ages, narration is far from constituting an *autonomous* activity, in the sense of self-sustained, monologic text construction.[16]

Nonverbal cues can also provide scaffolding props to the task of storytelling. One such device is the picture series, as used by Hickmann and her associates (e.g., Hickmann, 1991; Hickmann & Liang, 1990), by Karmiloff-Smith (1979, 1981) for her research on discourse-embedded use of pronouns and determiners, and by Katzenberger (1994) in the Hebrew sample. Researchers have suggested that conceptualizing a series of six or even four pictures at a time as a single, integrated unit constitutes a difficult cognitive task, beyond the capacities of young preschoolers (e.g., Bornens, 1990; Karmiloff-Smith, 1992; Shatz, 1983), and this is borne out by the results of Fivush and Slackman's (1986) use of pictures to elicit narratives at different age groups. This could explain why Israeli 4-year-olds were unable to treat four pictures as a unified series of events relating to the same protagonists, and why even 5- to 6-year-olds in Katzenberger's study generally failed to organize these events within a single, overarching temporal or locative frame.

[13]Strong supporting evidence for the facilitating effect of context is provided by Nicolopolou's (in press) study of spontaneous narratives produced by 28 Californian 4-year-olds interacting with their peers in a preschool setting. She found that at least some of the stories told by *all* of the 4- to 5-year-olds in this relatively unstructured setting demonstrated a full range of characteristics that other researchers (e.g. Hudson & Shapiro, 1991, pp. 100–101) proposed children should not be able to integrate until around 8 years of age.

[14]Other factors include (a) the medium—for example, spoken versus written (Peled & Blum-Kulka, 1992; Scott, 1988); (b) burden on memory—for example, the distance in time between encountering the situation to be narrated (e.g., having the experience, looking at the pictures, hearing a story, seeing a film) and telling about it; (c) perceptual clarity and inferential difficulty entailed by visually presented materials; (d) motivational factors such as affective salience and narrator involvement in the task; and (e) nature of the material to be narrated, whether experienced or make-believe, fact versus fantasy (e.g., difficulty in reconstructing real-life events may lead children to resort to fantasy, whereas having to make up an original story from scratch may cause them to retreat to familiar nursery stories or fairy tales).

[15]This is not a claim for any simple, one-to-one correlation between amount of caretaker or investigator scaffolding and quality of children's narrative productions. For example, mothers who tend to heavy scaffolding of their children's output may not necessarily elicit the best or longest narratives (Hudson, 1993; Minami, in press). Rather different views of this relationship are proposed by Peterson and McCabe's (1992, 1994) longitudinal studies of mother–child interactions, as well as by the detailed cross-cultural comparison of Minami and McCabe (1995).

[16]The term *autonomous* is used here in a rather different sense to that suggested by Wolf and Pusch (1985), who point out that children need to learn to dissociate between "text" and "context." For them, an autonomous text is one that reveals the child's understanding "that a text can and often should stand apart from contextual events" (p. 75).

In fact, from the point of view of online scaffolding, the frog story booklet presents an *easier* task than does a series of four or six separate pictures because in it children were able to relate to the two pictures presented to them on a single page each time. This might explain why even the 3-year-olds' frog stories related to dynamic events, not merely to concrete objects or the physical attributes of the characters depicted in the booklet. On the other hand, once children have developed beyond the interactive phase of storytelling, a set of pictures can serve as a useful prop—as shown for 5- and 6-year-old preschoolers by Shapiro and Hudson (1991). Pictures guide children on content, suggesting what they should talk about; they help them organize a plot, and free them for the task of expressing their as-yet-incipient knowledge of narrative action-structure.

In sum, different kinds and degrees of scaffolding are helpful, or necessary, for children to reach the full potential of their storytelling abilities at one or another phase in development.

Familiarity is another factor that affects how well children do on storytelling. Children as young as 2 to 3 years are able to recount well-rehearsed stories they have been told time and again. Familiarity has a nonverbal, experiential basis, too. The more prototypically scriptlike the story represented by the input materials, the higher the child's chance of success (Fivush & Slackman, 1986).[17] Besides, middle-class children like those in the Hebrew sample are used to treating a book as the basis for storytelling. Picture series tend to be used widely in pedagogical and clinical settings, as well as by researchers, but much less so in naturalistic family interactions. Thus, familiarity with the particular setting in which storytelling takes place may have a facilitating effect on how children construe the task, just as familiarity with the content of a particular script or sequence of events may ease the cognitive burden on how they perform the task.[18]

[17]This partly accounts for results obtained from another picture-series narrative sample produced by Hebrew-speaking 5- to 10-year-olds. This study replicated the elicitation task used by Hickmann (1991) in a series of crosslinguistic studies. Hickmann and her colleagues described the first of the two picture series they used—labeled the HORSE and CAT stories, respectively—as *simplifying* the task of reference to the different characters in each series: "In particular, the HORSE story involves a main protagonist (horse) and two secondary protagonists (cow, bird), whereas this distinction is not as clear in the CAT story. In addition, in the CAT story, one of the referents appears late (dog), another one reappears after a temporary exit (parent bird), and the plot involves more complex role relations (cat acting on birds, dog acting on cat)" (Hickmann & Liang, 1990, p. 1177). However, a study using Hickmann's pictures and procedures with Hebrew-speaking subjects revealed the CAT pictures to be "easier," or structurally more accessible, than the HORSE series. Zaltsman (1994) found that most 5-year-olds were able to produce a clear action-structure for the CAT series because this reflected the stereotypic situations of a mother bird flying off to get food for her goslings, a cat trying to catch the birds, and a dog chasing the cat away. In contrast, even 7-year-olds had a hard time constructing a plotline action-structure from the HORSE picture series because it starts with a prototypical, hence familiar, scriptlike sequence of events—a horse gallops in a field, jumps over a fence, and breaks a leg—but it ends with a nonstereotypic resolution in which the horse is helped by a cow and a bird, two thematically unrelated creatures. It is a nonstereotypic solution of the horse being helped by a cow and a bird.

A third factor is *episodic complexity*. Preschool-age children did well on telling about a fight or quarrel because they could treat the story as consisting of one single episode. This is what the 3- and 5-year-olds in the Hebrew sample on this task (N = 32) typically chose to do, and so did most of the 7- and 9-year-old schoolchildren (N = 37). In this they differed markedly from mature storytellers. When asked to tell about a fight or a quarrel, the adults (N = 18) nearly always constructed elaborate episodic structures; they compared several incidents between the same antagonists or contrasted similar encounters with different protagonists or on different occasions. Moreover, the single-episode narrative structure favored by children in their fight story, personal experience accounts was *not* available on the frog story task. As noted, the frog story booklet depicts a long and complicated chain of events in which the outcome of each episode leads the protagonist into a new episode, one that occurs not only at a different time (this is obligatory in narrative) but also in a different place, with different secondary characters each time. Verbal encoding of this chain of interwoven events as a unified whole proved largely beyond the capacities of preschool-age children.

A fourth factor affecting the cognitive load of storytelling (the last considered here, but see those mentioned in Footnotes 14 and 18) concerns structural properties of the story to be told. The more *canonic* a story's structure, the easier it is for children to narrate. For example, not all stories revolve around a problem that has an unequivocal, satisfactory resolution. Shapiro and Hudson (1991) found this to have an effect on the quality of narratives produced by children in response to four pictures representing a problem structure (a child and mother baking cookies, the cookies burn, they go to a bakery and buy some) compared with a non-problem-based event structure (packing up the car, going to the beach, playing in the sand, and going home). Similarly, in our Hebrew sample, young children were able to describe a visit to the doctor as a straightforward chain of events (even if they did not fully conceptualize the causal relationships involved): patient has tummyache or wound, doctor examines patient and provides a remedy, patient goes home. The same children had a harder time with a fight script in which the antagonist could be

[18]An important, related factor not elaborated here is that of *cultural* familiarity. Children in middle-class western societies all recognize the theme of a child going out to look for a lost pet, even when the pet is a frog; but Sesotho children cannot conceive of a frog as a pet because it is something for eating (K. Demuth, personal communication, January 1994). From a script-based perspective, for Israeli preschoolers, birthday parties are highly structured and routinized; North American birthday celebrations, in contrast, show much individual variation, and so are less prototypically standardized: They contain fewer "invariant sequences" (Slackman, Hudson, & Fivush, 1986) and provide more "optional pathways" (French, 1986) than other more routinely structured event types.

another child, a sibling, a parent, or a stranger, and the fight could take place anywhere. The frog story, although complicated, in fact represents a canonic goal-oriented story structure: an initial problem of the frog escaping, an attempt to solve the problem by going out to look, and a final solution. This explains why even 5-year-olds were generally able to relate to several narrative elements, although the overall complexity of the chain of events occurring in the story meant they could not sustain this through to a suitable resolution. On the pear story, film-retelling task, even 8-year-olds were generally not able to assign a global level of narrative organization to the contents of the film. One reason is that it lacks a unified plot structure. It starts with a man picking pears and then shows a boy stealing a basket of pears, but there is no clearly related resolution, for example, that the boy is discovered and punished, or manages to escape. In response, adults tended to impose their own plot structure and often devised a resolution, supplemented by evaluative commentary as to how the fruit picker reacted, although the film does not present these elements explicitly. This type of closure proved beyond the capacities of even the 8-year-old schoolchildren in recounting the contents of the film.

In sum, the ability to tell a story depends on the interaction of a cluster of factors that serve to lighten or to strain the cognitive burden faced by children in telling a story. In any context, children need to recruit their knowledge of narrative structure to perform the task of storytelling, to produce a narrative text that is both structurally well formed and appropriate to the particular elicitation setting in which it is performed.

AN ATTEMPT AT INTEGRATION: DIMENSIONS OF NARRATIVE DEVELOPMENT

From a research perspective, the manifold factors involved in developing narrative abilities need to be integrated within a unified, developmentally motivated framework. To do so means, first of all, recognizing that, in general, acquisition and development of knowledge in any cognitive domain are governed by multiple mechanisms that impinge on the path from initial entry into a domain via partial knowledge and reorganizations thereof to mature command of that domain. In the past, I have argued for this developmental orientation to acquisition of language in different subdomains of linguistic structure and language use: inflectional morphology (Berman, 1986), word formation (Berman, 1988b, 1993b), and syntax (Berman, 1987, 1990), as well as certain facets of narrative construction (Berman, 1988a, 1993a). In this model, initial, *pregrammatical* knowledge provides the basis for subsequent *structure-dependent*, rule-bound learning, which then becomes reintegrated with the consolidation of endstate *discourse-motivated* proficiency. This developmental framework allows one to analyze different types of knowledge involved in narrative construction and different facets of the ability to tell a story across these same three phases of development.[19]

In the development of narrative abilities, the first phase can be defined as pregrammatical because children do not yet have knowledge of a narrative schema or action structure—in terms of the levels of narrative organization set out in Table 3. The next phase is one of grammaticization, in which children already have command of a narrative schema and adhere strictly to the rules for producing well-formed texts. The final, integrative phase combines mature knowledge of narrative structure with the ability to cope with a heavy cognitive load, and a full repertoire of linguistic devices. In this phase, individual rhetorical aptitudes and expressive skills are integrated with well-constructed narrative production.

Three key dimensions in the evolution of narrative abilities are considered here for each such phase, as set out in Table 5: (a) how linguistic forms are related to narrative functions and these functions to linguistic forms; (b) how foreground, plot-advancing narrative events are embedded in background circumstances and affective evaluations; and (c) how the task is treated and the act of storytelling performed. The following assumptions underlie this analysis. First, in the interrelation between linguistic structure and language use, the development of narrative abilities reflects the deployment of new forms for old functions and of old forms for new functions (Slobin, 1973). Second, in terms of how events are conceptualized, narrative relies on a discourse-motivated distinction between figure and ground (Reinhart, 1984), and the development of narrative abilities depends on the emergence of foreground–background distinctions. Third, narrative competence interacts with how the task of storytelling is performed.

The first dimension listed in Table 5, *linguistic form/narrative function* relations are the focus of the third orientation to narrative analysis noted in the first part of this article. Recall that the frog story sample (Berman & Slobin, 1994) showed 3-year-olds to have good command of sentence-level morphosyntax—including word order, tense/aspect marking, and verb-argument relations. But these, as noted in Table 5, perform restricted or unconventional discourse functions. At the middle phase, children use a wider range of linguis-

[19]Note further that in terms of research *methodology*, some narrative contexts are better suited to examining particular kinds of knowledge than are others. Accounts of personal experiences like having an argument, witnessing an accident, or going to a party are good ways of revealing knowledge of scripts; of the ability to relate to a high point; and of giving expression to background, setting elements. Picture-based materials are excellent for testing the ability to maintain and shift reference, and for expressing temporal relations between events. Other fictional contexts, like recounting the contents of a familiar fairy tale, or of a novel, film, or cartoon, are good ways to check the relative importance attributed to events; the interplay of foreground and background; and the distribution of referential, or narrative, compared with affective and other evaluative elements.

TABLE 5
Three Phases In Developing Narrative Abilities Along the Dimensions of Form/Function Relations, Evaluation and Backgrounding, Task Construal, and Story Performance

	Developmental Phases		
Dimension	*Pregrammatical, Context Bound*	*Grammaticized, Structure Dependent*	*Rhetorical Discourse Motivated*
Form/function relations	Partial repertoire of linguistic forms, for restricted or nonconventional narrative functions	Range of grammatical forms, complex syntax, overt (over)marking of functions	Flexible use of full range of rhetorical options to serve advanced functions
Evaluation and grounding	Personal digression, deixis plus gestures, prosodic and other paralinguistic means for affective stance	Some inner states, (theory of mind), informative setting, little motivational evaluation or background elaboration	Explicit narrative stance, meta-cognitive comments on task, events plus associated circumstances
Task construal and storytelling performance	Interactive, communication, talking to someone, holding attention; need scaffolding; idiosyncratic and variegated	Conveying information, displaying knowledge; well-established narrative schema, powerful script; conventionalized, prosaic, stereotypic	Impressing, confiding, or entertaining; concern for genre and social setting; individual style (e.g., elaborative, literary, terse)

tic forms in extended syntactic contexts, with broader semantic reference, mainly for marking local-level relations between successive clauses. They tend to mark these relations explicitly, often to excess. Eventually, linguistic forms acquire rhetorically integrated functions, recruited by the mature speaker/narrator for more sophisticated narrative functions of coherent, unambiguous reference; grounding; and retrospection. Linguistic forms thus come to serve discourse-motivated purposes in a globally organized narrative frame.

The second dimension in Table 5 concerns Labov's (1972) distinction between the referential and evaluative components of narrative texts. Cognitively, this relates to how events are conceptualized in terms of the Gestalt distinction between figure and ground, or of foreground events compared with background circumstances. At the first phase, children tend to focus on events (Labov's narrative elements), on what happened, or on components that constitute the foreground of the plot; they pay little attention to background

elements, to explaining why and under what circumstances events took place. As a result, immature narratives lack initial background settings to provide a temporal, locative, and motivational frame for the events that ensue, and they also lack final resolutions with explanations of the consequences of these events for the protagonists (Berman, 1994; Peterson, 1990; Peterson & McCabe 1992, 1994). For example, in the Hebrew fight story accounts of personal experiences (listed in Table 4), the texts of 3- to 5-year-old preschoolers, used an average of only 10% of all clauses to provide scene-setting background (what Labov calls *orientation*) compared with 20% among schoolchildren aged 7 and 9 years, and as high as one third of the adults' texts (Berman, 1994). Relatedly, analysis of evaluative elements adapted from the criteria proposed by Bamberg and Damrad-Frye (1991) reveal that in these same Hebrew fight story texts, around one fourth to one third of the clauses constituting the children's texts (from 28% among 3-year-olds to 38% among 9-year-olds) include evaluative elements, as compared with nearly two thirds (61%) of the adults' clauses; and a parallel analysis for the film-based, pear story Hebrew texts revealed only around 8% of such evaluative elements out of the total text clauses produced by both 5-year-olds and 8-year-olds, compared with 20% in the adults' texts (Rabinowitch, 1994). Finally, the short texts produced in Katzenberger's (1994) picture-series study included almost no evaluative elements from 4- to 6-year-old preschoolers, nor from 10-year-old schoolchildren (who in all other ways constituted a control group), whereas evaluation occurred across the adult texts in this sample, too. Mature storytellers clearly differ from young children in viewing evaluative, background material as an integral part of narrative performance, even though individual storytellers may differ in how much weight they assign to this element in the narratives they produce on different occasions.

The third dimension in Table 5 concerns how speakers interpret and deal with the act of storytelling. In fact, as Reilly (1992) noted, "in contrast to these detailed analyses of children's construction of narratives, little work has been done on how children actually perform the activity of telling the story" (p. 357). Yet it is clear from Reilly's work with preschoolers, as well as from the Berman and Slobin (1994) study with 3-year-olds and Katzenberger's (1994) experience with 4-year-olds, that young children view the task as typically interactive (see Peterson & McCabe, 1994 in this connection). As a result, young children rely strongly on interlocutor prompts and scaffolding, and these constitute an important factor in lightening the cognitive load of producing a narrative account. Not being bound by the constraints of normative story structure, young preschoolers tend to produce highly individual texts that vary widely from one child to the next. Older, generally school-age children instead often provide rather prosaic, stereotypic texts; these are well structured and conform to narrative convention, but they often lack individual expressiveness

or variation from one story setting to another.[20] Mature storytellers not only have full command of story structure, they are sensitive to story setting and personal motivations. Consequently, their narratives, like those of the youngest children, display considerable individual variation in terms of the expressive options they favor, the linguistic devices and rhetorical style they select, and the evaluative framework and narrative stance they adopt. But unlike those of young children, mature narratives also adhere to the normative narrative schema manifested by children in the middle phase, and the variation across storytellers has quite different affective motivations and cognitive underpinnings.

Development of narrative abilities was earlier described as *nonlinear*, in the sense of not proceeding in a single line from one elicitation setting to another, or from one narrative genre to another. Here, narrative development is shown to be nonlinear in another sense, too. With age, various pieces of knowledge and different skills must be concurrently coordinated—for example, that a story must have a beginning, middle, and end; that to make a story comprehensible, narrators must take into account the needs and background of their audience; or that to make a story interesting, the storyteller should provide motivations and interpretations for the deeds of the protagonists. That is why narrative development proceeds from immature, idiosyncratic text construction to conventionalized knowledge of narrative structure, until this is eventually reintegrated into mature, situationally appropriate text construction, combined with individualized treatments of the act of storytelling (i.e., knowledge and skill combined).

CONCLUSION: NARRATIVE COMPETENCE/STORYTELLING PERFORMANCE

The development of narrative abilities as delineated here and summed up in Table 5 involves different types of knowledge that are manifested concurrently along three (possibly more) interrelated dimensions: (a) *linguistically*, in putting to use linguistic forms and structures in order to meet the functions of narrative discourse; (b) *conceptually*, in assigning due weight to evaluative elements that lie outside the narrative backbone, so as to go

[20]It could be argued that this stereotype of school-age elicited narratives is due to social rather than strictly cognitive factors. That is, they may view these elicitations as school-type tasks, whereas in spontaneous narrations to their peers, schoolchildren can tell highly entertaining and dramatic stories. However, there is good reason to believe that the "flat" or prosaic quality of middle-phase children has strong cognitive underpinnings, as we argue in a forthcoming study (Berman & Reilly, 1995b).

beyond the mere relating of events, telling not only what happened, but why, how, and with what consequences; and (c) *communicatively*, in interpreting the narrative task and what is involved in the telling of a story, so as to meet the pragmatic conditions imposed by the listener's expectations, on the one hand, and the narrator's responsibility for communicating clearly, on the other.[21]

The question remains as to whether, and how, these dimensions are related. Is there a causal interdependence between them, or are they merely orthogonal to one another? This is a critical issue for developmental theory in general, beyond the domain of narrative. My assumption is that the convergence of different dimensions is not due to chance, but that each of these factors—knowledge of language form and language use, conceptual underpinnings, and communicative skills—feed on one another and interact critically in development. This is not a claim for total nonmodularity—that is, that all of language acquisition can be attributed to general cognitive, affective, or social factors, or a combination of these factors. Much of language structure is uniquely linguistic, with no direct analogues in social interaction or in narrative construction. However, across time, the dimensions become more intertwined and more nurturing of one another. At the early or initial phase proposed by my model, there might be a rather indiscriminate intermixing; then, with structure dependence, separation might be quite extreme. Finally, integrative reorganization of knowledge across the modules would lead, as Karmiloff-Smith (1992) put it, to "beyond modularity." In narrative development, this could explain the long developmental history of linguistic forms used for narrative purposes that was demonstrated by our crosslinguistic study (Berman & Slobin, 1994). With age, narrative functions such as expression of temporal relations between events, taking different perspectives on events, event conflation, and event packaging were met by a range of increasingly varied and appropriate linguistic forms. These forms were used initially at the most particularistic level of the single-clause/isolated event; subsequently, in relating between adjacent-clauses/sequentially ordered events as narratively motivated at a local level; and eventually, reintegrated in a hierarchically organized, overarching narrative construction.

A second issue is raised by the title of this article: the relation between narrative competence and storytelling performance. Knowledge of narrative

[21]This last requirement involves an important additional dimension that is not dealt with in this article. It concerns the fact that in producing a narrative, as in constructing any kind of text, speakers (or writers) need to attend to the requirement of *coherence*. This is definable as a combination of referential clarity, on the one hand, and thematic unity, or the principle of organizing a text around a single integrated discourse topic, on the other. As such, coherence is relevant to text construction in general, and is not confined to narrative discourse.

structure may underlie, but it does not equal, the task of storytelling—as Reilly (1992) pointed out in her analysis of prosodic and other paralinguistic means of expressing affective evaluation used by young children telling the frog story. From the perspective presented here, narrative competence derives from a cognitive schema that is shared across mature speakers (within a particular culture, possibly across cultures, but see Footnote 18). It requires knowledge of Labov's (1972) narrative or referential elements, what we termed the core plot components (Berman 1988a, Berman & Slobin, 1994), or what others analyze as action-structure (Shen 1990, 1992). This structural knowledge enables speakers to identify a well-formed story, to distinguish different types of stories, and it sets up their expectations as to what comes next. Narrative performance, in contrast, resides in the act of storytelling; it differs from one setting to the next and from one individual to another. It depends on devices for evaluation and for alternating between foreground and background in fleshing out the core plot elements; and it is reflected in our skill at making a story interesting, in our ability to embroider and elaborate or succinctly encapsulate.

Children's knowledge of narrative structure has been shown to be vulnerable. As long as this is not fully established, their storytelling skills will be unevenly affected by context, they will be influenced by the facilitating effect of factors such as scaffolding and familiarity, and they will be most susceptible to the cognitive demands of the particular storytelling task at hand.

The picture that emerges is complex, but so are the abilities I have tried to capture. What it suggests is that in developing narrative abilities, as in other spheres of language use, the line between competence and performance is not only flexible and fuzzy, it is bidirectional. Knowledge of linguistic forms and narrative structure clearly underlies the ability to tell a story, but the acts of story hearing and storytelling impinge on this knowledge and affect it across the developmental history of each individual in becoming a proficient interpreter and teller of stories.

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