IMPROVISATION AND NARRATIVE

R. Keith Sawyer
Washington University in St. Louis

I explore how children’s narratives emerge from improvisational play. I begin by defining improvisation and narrative, and I analyze several episodes of children’s play to explore how narratives emerge from collaborative improvisation. The transcript examples suggest two elements that increase the likelihood that a well-formed narrative will emerge from improvisational play: the use of meta-play and dialogic discourse strategies, and the presence of a shared script. I then present a theory of collaborative emergence to conceptualize how narratives emerge from improvisational play. I conclude by drawing parallels with recent research on computer-supported collaborative storymaking environments. (Improvisation, Collaboration, Sociodramatic play, Discourse, Emergence)

In recent years, several narrative researchers have questioned the notion of narrative in its traditional connotation of a solitary, individual performer telling a story. In contrast, these researchers have observed that in many verbal contexts, narratives are co-constructed by multiple speakers (Coates, 1997; Falk, 1980; Tannen, 1989; Watson, 1975) and that in some social groups and settings, these jointly constructed narratives may be more prevalent than solo narratives (Eder, 1998; Tannock, 1998). Even in situations where there is one primary speaker, in many genres of oral narrative the audience is expected to contribute through various forms of verbal and nonverbal backchannel talk (Duranti & Brenneis, 1986; Goodwin, 1981).

At the same time, a growing body of research has explored how collaboration with peers may contribute to development. For certain skills and knowledge, collaboration seems to provide uniquely effective benefits, and these benefits derive from the interaction among participants (Johnson &
Conversational collaboration with peers is thought to be one of the most developmentally valuable characteristics of sociodramatic play (Sawyer, 1997). The contribution of social pretend play to narrative skill has been widely studied both by narrative researchers (Fein, Ardila-Rey, & Groth, 2000; Galda, 1984; Pellegrini, 1985; Pellegrini & Galda, 1982, 1993; Sachs, Goldman, & Chaille, 1984) and by researchers whose primary interest is emergent literacy (Christie, 1991; Roskos & Christie, 2000, 2001; Yaden, Rowe, & MacGillivray, 2000). These studies are motivated by the obvious similarities between play and narrative: both have fictional characters who operate in a temporarily created reality, both involve the production and comprehension of decontextualized language, and both have plot elements such as motivating events, tensions, and release.

Yet several important questions remain unanswered. Exactly how does the collaboration of sociodramatic play contribute to narrative literacy? What are its strengths and weaknesses relative to traditional classroom practices such as reading a text and being explicitly taught its narrative components? Such questions are of critical practical importance to educators; teachers are interested in how collaboration and play can be used in the classroom, and how they can be best integrated with other classroom narrative practices. Educational technologists, who are developing computer tools to support children’s collaborative narrative practice, also need to understand how playful collaborations contribute to narrative literacy.

I explore these questions starting with the observation that both peer play and situated narrative practices are improvisational: they are unscripted, not planned in advance, and the outcome is unpredictable. Because they are collaborative, the outcome cannot be controlled by any single participant; rather, it emerges from the collective actions and contributions of each participant (Sawyer, 2001). In collaborative improvisation, each child’s contribution has to be evaluated before it is accepted by the others, and each child’s turns in interaction successively build on the prior turns of the other children, resulting in the step-by-step emergence of a narrative (Sawyer, 1997). Because both social play and co-constructed narratives are group improvisations, and the outcome emerges from the discourse of the group, I argue that the developmental benefits of these forms of peer narrative practice can only be fully understood by closely focusing on the group’s conversation. A few researchers have studied the conversational dynamics of children’s narrative practice (e.g., Daiute, 1989; Dyson, 1991), and this paper continues in this tradition.

I begin by first defining improvisation, using an example of an adult improvised theater performance; I then define narrative. Following these definitions, I analyze a range of play episodes to reveal the many ways that narratives emerge from children’s improvisational play. These examples show that certain conversational techniques result in more elaborate plot structures, and that scripts can act as scaffolds that guide the process of collaborative emergence without removing its improvisationality altogether. I then present a theory of collaborative emergence to conceptualize the processes whereby narrative structure emerges from improvisation. I conclude by drawing parallels with recent research on computer supported collaborative storymaking environments.

**IMPROVISATION**

The key characteristics of improvisation are

- Unpredictable outcome, rather than a scripted, known endpoint;
- Moment-to-moment contingency: the next dialogue turn depends on the one just before;
- Open to collaboration;
- An oral performance, not a written product;
- Embedded in the social context of the performance (Sawyer, 1995a).

To demonstrate some important characteristics of improvisation, I begin with an example of dialogue taken from a 1993 performance by Off-Off-Campus, a Chicago theater group (Example 1). This is the first few seconds of dialogue from a scene that the actors knew would last about five minutes. The audience was asked to suggest a proverb, and the suggestion given was “Don’t look a gift horse in the mouth.”
Example 1. Lights up. Dave is at stage right, Ellen at stage left. Dave begins gesturing to his right, talking to himself (from Sawyer, 2002b)

1 Dave All the little glass figurines in my menagerie, The store of my dreams. Hundreds of thousands everywhere!
2 Ellen
3 Dave Yes, can I help you?
4 Ellen Um, I’m looking for uh, uh, a present?
5 Dave A gift?
6 Ellen Yeah.
7 Dave I have a little donkey?
8 Ellen Ah, that’s=
   I was looking for something a little bit bigger
9 Dave Oh.
10 Ellen It’s for my Dad.

By turn 10, elements of the narrative are starting to emerge. We know that Dave is a storekeeper, and Ellen is a young girl. We know that Ellen is buying a present for her Dad, and because she is so young, probably needs help from the storekeeper. These narrative elements have emerged from the creative contributions of both actors. Although each turn’s incremental contributions to the narrative can be identified, none of these turns fully determines the subsequent dialogue, and the emergent narrative is not chosen, intended, or imposed by either of the actors.

The emergence of the narrative cannot be reduced to actor’s intentions in individual turns, because in many cases an actor cannot know the meaning of her own turn until the other actors have responded. In turn 2, when Ellen walks toward Dave, her action has many potential meanings; for example, she could be a coworker, arriving late to work. Her action does not carry the meaning “A customer entering the store” until after Dave’s query in turn 3. In improvisation, many actions do not receive their full meaning until after the act has occurred; the complete meaning of a turn is dependent on the flow of the subsequent dialogue. In Section 3, I show that this sort of retrospective interpretation is also common in children’s play.

This example demonstrates the moment to moment contingency of improvisation. Anything could have happened at any turn of this dialogue; the actors don’t know what is going to follow an action, and they don’t know how their actions will be interpreted and elaborated. Improvisation must be analyzed as a discursive process to capture the moment-by-moment moves of each speaker, and the interactional techniques used by participants to create the narrative.

**NARRATIVE**

How do improvisations like Example 1 result in the emergence of narratives? First, I explore what researchers generally mean by “narrative.” Following accepted usage, I define narrative as:

- A genre of text, which can be written or oral, but is canonically written, and is defined by certain structural properties.
- It does not have to be performed, and it can be separated from its context of origin, or decontextualized (Michaels, 1981; Pellegrini, 1985).

This list corresponds to a somewhat traditional conception of narrative; it emphasizes narrative structure rather than narrative practice. Nonetheless, this conception influences most empirical work on children’s narrative practice. I give two examples of how researchers have operationally defined narrative that both share the above characteristics. Research in children’s narrative typically focuses on identifying the structural elements of narrative form, often with the goal of understanding children’s mental representations of narrative structure.

**Tom Trabasso’s coding scheme**

Trabasso proposed the goal-action-outcome (GAO) narrative coding scheme as a way of analyzing children’s developing ability to understand narrative structures (Trabasso, Stein, Rodkin, Munger, & Baughn, 1992). The GAO scheme allows an operational definition of two forms of coherence. **Local narrative coherence** refers to a narrative connection between an action and its immediate causing goal or its subsequent outcome. **Global narrative coherence** refers to a linking of such local coherent structures into hierarchies of goals, actions, and outcomes.
Once there was a girl named Betty.
E11: One day, Betty found that her mother's birthday was coming soon.
G11: Betty really wanted to give her mother a present.
A11: Betty went to the department store.
O11: Betty found that everything was too expensive.
O12: Betty could not buy anything.
R11: Betty felt sorry.
E21: Several days later, Betty saw her friend knitting.
S21: Betty was good at knitting.
A21: Betty selected a pattern from a magazine.
A22: Betty followed the instructions in the article.
O21: Finally, Betty finished a beautiful sweater.
A31: Betty pressed the sweater.
A32: Betty folded the sweater carefully.
O31: Betty gave the sweater to her mother.
R31: Her mother was excited when she saw the present.

S = Setting; E = Event; G = Goal; A = Attempt; O = Outcome, R = Reaction. The first number after the letter indicates the episode; the second number indicates the cumulative number of times the code has occurred in this episode.

Figure

A hierarchical narrative with global coherence (Suh & Trabasso, 1993)

Trabasso found several developmental transitions in a child’s ability to understand these narratives. For example, 3- and 4-year-olds mainly describe isolated events or external actions, and do not refer to goals or other internal states (see Figures 1 and 2). 5-year-olds begin to comprehend local coherence, associating actions with their motivating goals and with their resulting outcomes; however, they are not yet capable of comprehending the global coherence of hierarchically structured goals and subgoals. By age 9, children develop the ability to comprehend hierarchically structured narratives, and their performance on these tasks is indistinguishable from that of adults.

This coding scheme has several benefits. It allows for an operational definition of various conceptions of narrative, and it provides a quantitative measure of narrative competence. However, the scheme also has several weaknesses. It emphasizes plot structures and seems to neglect other potential forms of coherence, such as themes, morals, or trajectories associated with character development. Many classic children’s stories, for example, are not driven by internal goals of characters, but by external forces that act on characters, and how the character develops in response.
Colette Daiute’s coding scheme

A second example of a narrative coding scheme is one used by Colette Daiute (1999) to analyze friendship narratives (see Figure 3). The scheme includes plot elements (items 2.3, 2.4, 3, and 4); however, plot elements are subordinated to character development and relationships. “Complicating actions” and “conflict” are defined in terms of characters, not strictly in terms of the plot’s sequence of events.

Although Daiute’s coding scheme allows the identification of character-based forms of coherence that are missing from Trabasso’s scheme, Daiute’s scheme is weak in the area where Trabasso’s is strong: this scheme does not represent event sequences nor their hierarchical structuring into a globally coherent plot.

Although the two narrative coding schemes emphasize different types of coherence and trajectory in narrative, both schemes are designed to be applied to entire narratives as completed fixed texts, and they are both structural conceptions: they focus on the formal elements of narrative and they conceive of a narrative as a decontextualizable product. Both researchers use a methodology in which the narratives are elicited, transcribed, and then analyzed and coded. As such, the complete narrative is the unit of analysis (although Trabasso codes goals, actions, and outcomes separately, he then aggregates these component entities to derive an overall rating of the narrative). Wolf and Hicks (1989) also noted that such theories of narrative focus on underlying schemas — or how the textual elements are bound together in a complex structure — and they neglect the ways that speakers combine voices to “convey the texture of information and the author’s fluctuating stance towards the information being shared” (p. 333). I follow Wolf and Hicks in arguing that in studying improvisational dialogues such as Example 1, the unit of analysis cannot be the complete text; it must be the discursive event, a single turn or a sequence of turns. A discourse focus allows one to study the contingent, processual nature of improvised dialogue.

CHILDREN’S IMPROVISATIONAL PLAY

Children’s sociodramatic play is improvisational, in the sense of Example 1 above, because it shares the key defining characteristics of improvisation. The outcome is unpredictable; there is moment-to-moment contingency from
turn to turn; and the play is collaborative, with all children participating in the creation of the emergent narrative (Sawyer, 1997). How does the improvisationality of children’s collaborative play contribute to narrative development?

To address these questions, I analyze how narratives emerge in several different social pretend play episodes between 5-year-olds. Five is the peak age for social pretend play (Pellegrini, 1985) and is also the age at which children begin to frame their play narrative as distinct from everyday reality (Sachs, Goldman, & Chaille, 1984; Scarlett & Wolf, 1979). Example 2 is a transcript of a collaboratively improvised play narrative created among 5-year-olds during naturally-occurring play in a preschool classroom.

Example 2. Muhammed, Corinna, and Artie are playing with jungle animals in the block area (replica play). They switch between speaking as their plastic figurines and speaking out of character, as a narrator/director.1

(1) Corinna       Guess what?
(2) Muhammed     At the museum, someone is uh robbing us.
(3) Artie         And they wanna take us to jail!
(4) Muhammed     That very bad.
(5) Corinna       How do you know a hippo, is robbing you?
(6) Artie         Uh, you saw them?
(7) Corinna       Yes, I saw him last night, he was robbing my owner.
(8) Corinna       And I can’t get him [drip of] my favorite food, mashed, mashed bugs.
(9) Artie         [] to get out of here.
(10) Artie       [] took it out
(11) Corinna      The [] took it out
(12) Artie         And I can get out, BOOM.
(13) Corinna      I blasted open the door.
(14) Artie         Artie, you killed, you, uh
(15) Corinna      got killed, alright?
(16) Artie         And, we found him, OK?
(17) Corinna      He wasn’t dead, he just in [jail]
(18) Corinna      OK.
(19) Artie         [] where were you? Now they’re voicing what

All play data are from Sawyer’s dataset, gathered using methods described in (Sawyer

The replica play in Example 2 is improvisational because the children are not followed a predetermined, shared script or routine, and it is collaborative because the flow of the play drama is collectively negotiated by all children; they negotiate in a give-and-take to create the resulting performance.

The dialogue of Example 2 does not result in the emergence of a coherent global narrative structure, in Trabasso’s sense. Yet even though global coherence is not present, one can identify component elements of narratives that connect across multiple turns, forming pockets of local coherence (cf. Sachs, Goldman, & Chaille, 1984). At line (2), Corinna introduces the threat of jail: “Someone is robbing us, and they wanna take us to jail.” The “jail” theme stays active through (20), and after that, Artie introduces his “bad guy attack/flight” theme, which Corinna readily accepts.

At (5), in response to Corinna’s proposal, “Someone is robbing us,” Muhammed indirectly introduces an elaboration, that it is the hippo who is robbing: “How do you know a hippo, is robbing you?” This is a retrospective interpretation (cf. Example 1), because although Corinna did not say it was a hippo, Muhammed’s utterance assumes that that was what she meant. Artie extends this question at (6), “You saw them?” Like the talented adult improvisers in Example 1, Corinna accepts these retrospective interpretations at (7). She answers, voicing as an animal, referencing her owner, and her favorite food, mashed bugs. At (10), Artie jumps ahead with the jail theme, enacting as if Corinna is already in jail; yet Corinna had only proposed “they wanna take us to jail.” Artie proposes that he rescues Corinna by exploding the door to the jail. Again, Corinna accepts the modification of her proposal and extends it, suggesting that Artie was killed in the explosion (14). Artie doesn’t like the idea of his character being killed, so he responds with a modification (16-17): We found him, but he wasn’t dead, he was in jail. Corinna
agrees, and after these 17 lines of negotiation, the two begin enacting the scene they have just constructed.

At (19), Artie speaks in character to Corinna’s play character, “Where were you?” She answers as they have planned, “I’m in jail.” Artie enacts the explosion that will free Corinna’s character. But then, Artie introduces a new variant, the bad guys are coming in, not the good guys that would presumably rescue Corinna’s character. At (24), Corinna hasn’t picked up on this shift. She responds as if Artie’s character is rescuing her, saying “I wanna thank you.” Artie realizes that Corinna has not understood his modification of the narrative, so he repeats his new idea more explicitly, saying “Let’s pretend” (25).

These children used a range of interactional strategies to negotiate this group improvisation. At times they shift to explicit, out of character talk to propose new ideas or to modify their playmates’ suggestions (e.g., lines 23 and 25); this has been called metaplay. Several researchers have shown that children’s metaplay is related to measures of emergent literacy (Sachs, Goldman, & Chaille, 1984; Trawick-Smith, 1998, 2001; Williamson & Silvern, 1991). Just as commonly, children propose or elaborate play ideas by speaking in character—an implicit metacommunication (Sawyer, 1997). In lines (1) through (22), Artie and Corinna do not use the explicit metaplay that we find described in most of the research on play, yet they are negotiating nonetheless. In this negotiation the children combine a narrator’s voice with their play character’s voice using a dialogic strategy (Bakhtin, 1981; Wolf & Hicks, 1989). Lines (12) through (17) are dialogic: the children speak within the play frame and use pronouns which resolve to play frame characters (“you got killed”), and they combine this voice with a narratological voice. These children often “recast” information across voices: they propose a new development in the narrator voice, and then enact it with the replica character (Wolf & Hicks, 1989, p. 342). Wolf and Hicks documented recasting in a single child’s narrative; in Example 2, we see recasting across speakers—Artie in line (17), Corinna in line (20)—an important difference because it requires social negotiation and collaboration.

Bakhtin developed the concept of dialogism to analyze how authors report dialogue in novels; of course, reported speech is a significant feature of oral storytelling as well (Lucy, 1993). Bakhtin (1981) used the term “dialogism” to refer to the two-leveled nature of improvised dialogue:

Behind the narrator’s story we read a second story, the author’s story. . . . We acutely sense two levels at each moment in the story; one, the level of the narrator...and the other, the level of the author. (p. 314)

Bakhtin’s theory suggests how play dialogism might contribute to narrative ability. Yet because the narration is jointly negotiated, these dialogic processes are distributed across speakers (Sawyer, 1995b).

In the following, I present additional examples of narratives emerging from the dialogic and metaplay strategies of 5-year-old children’s improvisational play discourse. The examples suggest that two features of improvised play are related to the emergence of well-formed narratives: the use of both metaplay and dialogic strategies, and the presence of scaffolding scripts.

Metaplay and narrative

What happens when children use neither metaplay nor dialogism? In Example 3, we see a play episode with very little explicit metaplay and very little dialogism.

Example 3. Kathy, Jennifer, and Rachel are playing in the doll corner, engaging in domestic and family themed play with a set of baby dolls.

(1) Kathy Ring ring!
(2) Jennifer It’s time for my babies to go sleepy-bye!
(3) Kathy Hello?
(4) Rachel Who are you?
(5) Rachel Time for dinner, everyone!
(6) Kathy You guys! In an exasperated tone.
(7) Kathy I’m on the=*
(8) Rachel =Hang up that dumb phone.
(9) Kathy Somebody’s here.

Unlike Example 2, in Example 3 there is no explicit metaplay and no dialogic negotiation; the girls are completely in-character and the narrator’s voice is absent. Compared to Example 2, it is even more difficult to identify a coherent narrative theme. The three girls are each engaged in competing proposals for the narrative direction of the play, with Kathy on the phone, Jennifer putting babies to sleep, and Rachel initiating a dinner theme, and then a “guest” theme (“Somebody’s here”). The lack of metaplay,
combined with the lack of even local narrative coherence, is parallel to the findings of prior researchers of a link between metaplay and narrative.

A few minutes later, the same girls return to the dinnertime theme, but this time, their characters’ voices begin to blend with a narrator’s voice—a dialogic strategy (Example 4). The introduction of the narrator’s voice allows the girls to begin to negotiate, although they do not come to an agreement on a shared play narrative.

Example 4. Kathy, Rachel, and Jennifer are playing in the doll corner. The following episode begins about nine minutes after Example 3.

(1) Kathy I think dinner’s almost ready!
(2) Rachel Dinner’s ready!
(3) Kathy I cooked the dinner.
(4) Rachel Dinner’s ready.
(5) Kathy No it’s not. Not yet!
(6) I have to put a bit of eggs
(7) It’s ready!

This is a dialogic negotiation concerning who will occupy the role of “mother,” a desired role in doll-corner play. Unlike Example 3, which was almost a Piagetian collective monologue, in Example 4 the girls negotiate a single shared issue. In (3) Kathy announces “I cooked the dinner.” Although in-character, this is a claim to be the mother and a rejection of Rachel’s competing claim to be the mother in Example 3. Rachel’s shout “Dinner’s ready!” in (2) is perceived by Kathy to be a competing dialogic proposal that Rachel is the mother. Up to this point, the role assignment of mother has not been explicitly discussed and the role remains ambiguous (perhaps intentionally, since girls typically argue about who gets to be the mother and no one wants to enact the lower-status “child” role). In (5-6), Kathy voices another dialogic strategy in her bid to retain control of the mother role; using a within-frame justification, she says that dinner is not ready yet because the dish needs “a bit of eggs” (cf. Sheldon, 1990). The dialogic strategies of Example 4 are in contrast to the completely in-character voicings of Example 3, and this shift to dialogic strategy has allowed the girls to begin to negotiate a shared play narrative.

A few seconds after Example 4, Kathy attempts to gain Jennifer’s support in her negotiation with Rachel. Her dialogism becomes less in-character and more narratological (Example 5).

Example 5. A few lines after Example 4.

(1) Kathy Jennifer, come on
(2) Jennifer
(3) (3) I’ll save you some tea
(4) Jennifer OK
(5) But what about dinner for my baby?
(6) Kathy I got dinner!
(7) Jennifer Two babies!
(8) Kathy All right.
(9) Sit down.

Although both Examples 4 and 5 are dialogic, the dialogism of Example 5 contains a stronger narrator voice. Kathy’s tone of voice in (1-3) makes it clear that she is not speaking as her play character; she is asking the “real” Jennifer to join her proposed narrative theme. Yet she combines in-frame material with this out-of-character request. Although she addresses Jennifer by name, her request is dialogic because in (3) she refers to play frame activities and objects. The ensuing negotiation continues in this dialogic fashion, with Jennifer extracting a price for her cooperation: her own “baby” theme must be incorporated into Kathy’s dinner theme. Jennifer’s counter-proposal in (5) is dialogic because although it is negotiation about who will be participating in the play and what the play theme will be, Jennifer speaks as her play character in referring to “my baby.”

At this point, Rachel gives in and accepts Kathy as the mother, and the three girls sit down. They enact a dinner narrative for the next 160 lines of dialogue, with Kathy bringing plates and utensils, and serving tea, stew, and a baby bottle for Jennifer’s babies. After eating dinner, they clean up the plates and utensils and then Kathy serves ice cream. Throughout this enactment, Kathy acts as a narrative director, determining the timing of the narrative transitions without any input from Jennifer or Rachel; this enactment is thus not collaborative.

We see a progression from Example 3 through Example 5 from relatively in-character voice to an increasing integration of a narratological voice in di-
alogic strategies. In Example 3, the three girls enact competing play frames and engage in almost no negotiation focused on a common theme. In Example 4, with the shift to dialogic strategies, the girls begin negotiating with the intention of settling into a narrative enactment of a dinner theme, but they have not yet resolved the debate about who gets to be the mother. In Example 5, their dialogic talk takes on a stronger narratological voice, as Kathy addresses Jennifer by her real name.

In both the replica play of Example 2, and the doll-corner play of Examples 3 through 5, the improvisational, collaborative negotiation of the play results in a shared frame that has many narrative elements. However, in neither play group are the children explicitly attempting to create a story or to write a narrative, as defined in a coding scheme like Trabasso’s or Daiute’s; rather, they are simply engaging in the common negotiations of social pretend play. The narrative elements emerge from the group’s improvisation, just as in the adult improvised dialogue of Example 1.

Scripts and improvisation in narrative

In the above examples, children’s improvisational play rarely results in complex narrative structures with global coherence. When do children’s play dialogues result in narratives with global coherence? Several researchers and educators have experimented with different scaffolds in an attempt to enhance the developmental benefits of improvisational group play for narrative development. In thematic fantasy play (Saltz, Dixon, & Johnson, 1977), children hear a story read to them, select or are assigned roles from the story, and enact the story with teachers prompting, narrating, and at times taking roles and joining in the enactment. Vivian Paley encouraged her preschool students to share their stories with the class, and enact them with other children in a play-like fashion (1988; cf. Fein, Ardila-Rey, & Groth, 2000). Travick-Smith (2001) recommended that teachers spontaneously scaffold children’s play by interjecting appropriate leading questions related to character and plot development, although this must be done carefully; Pellegrini and Gakda (1993) found that adult intervention may inhibit the sophistication of children’s play language. Daiute (1989) studied 3rd through 5th graders’ collaboratively generated stories, and concluded that children are only able to generate effective collaboration and effective narratives because they had been provided with a “general narrative structure” (p. 20), instructions from the teacher such as “Tell a story about a child who gets lost in Boston.”

An informal form of scaffolding is sometimes found in children’s sociodramatic play, when children spontaneously enact scenes from popular children’s books or movies. Such play is loosely scripted; each of the children in the group have seen the movie, but they sometimes collectively decide to modify the events of the movie and improvise an alternative plot line. These improvisations are loosely guided by the children’s shared internalization of the movie’s plot. In the following examples, I show how these shared scripts act as scaffolds, and I show that play remains improvisational even in the presence of a shared script.

Example 6. Improvisational embellishment of thematic elements from the movie The Land Before Time. Jennifer and Kathy are playing at the sand table. Jennifer has a plastic brontosaurus and tyrannosaurus, and Kathy also has a tyrannosaurus (replica play).

(12) Kathy And Cera’s not mean in this one
(13) Jennifer OK.

(18) Kathy And know what?
(19) It it do it has a earthquake in it but
(20) this earthquake is
(21) the earthquake will be right here, alright?
(22) Jennifer OK, but pretend no one got hurt in this one, OK?

(42) Jennifer pretend they had to hunt to the Great Valley

(74) Jennifer And then the Sharptooth saw them fighting
(75) and he came over to meet them, right?
(76) OK I’ll get the Sharptooth!
(77) And pretend as the Sharptooth came
(78) Littlefoot hided under them
(79) and the mother, um
(80) the mother ran away
(81) so did the Littlefoot
(82) And pretend the poppa’s stood up stronger
(83) I’ll get the Sharptooth.

From extended narrative sequences such as Jennifer’s in (74) through (83), one can surmise that Jennifer has internalized many narrative elements from the movie; for example, Sharptooth and Littlefoot are characters from the movie. However, even though the two girls are enacting a movie that both of them have seen, they do not always follow the narrative of the movie; they often embellish or modify the narrative to fit the ephemeral demands of the emerging play frame. In (12), Kathy proposes that “Cera’s not mean in this one” (Cera is snobby and bossy in the movie); in (22) Jennifer proposes that “no one got hurt in this one” (many of the dinosaurs die in the movie); and in (79–80) Jennifer proposes that “the mother ran away” (the mother was killed by Sharptooth in the movie).

One might hypothesize that these differences result because the children don’t accurately remember what happened in the movie. If so, one could attribute these modifications to failed memory rather than to improvisational creativity. However, at several points the children demonstrate that they are aware that these embellishments are not faithful to the movie. About 10 minutes into this play episode, Corinna joins the two girls and they summarize their play up to this point. When their reported narrative diverges from the movie, Corinna notices and asks the girls to explain their embellishments (Example 7).

Example 7. Kathy and Jennifer summarize their play for Corinna.

(296) Kathy Pretend a long time ago, all the animals []
(297) Kathy all of the guys were []
(298) Corinna I don’t believe you, that things there is Littlefoot?
(299) Jennifer and Kathy Well, we’re playing Littlefoot
Kathy
(300) Corinna Alright
(301) Kathy Yeah, that’s how big the longnecks are
(302) Kathy You know the longnecks lived here?
(303) Kathy A longlonglong long long time ago
(304) Kathy Before anyone was born.
(305) Corinna Yes I know.
(306) Kathy But then the dinosaurs=

(307) Kathy =All died
(308) They all died
(309) Corinna I know.
(310) Kathy But we’re just pretending that they they
(311) Kathy they came to life
(312) Kathy And they were statues

At (298), Corinna objects that Jennifer’s brontosaurus figurine could be used for the character of Littlefoot, because it does not look like the one in the movie. Littlefoot is a baby brontosaurus — a “longneck” — and Jennifer’s toy is obviously a full-grown adult. Kathy and Jennifer realize this, as evidenced by their unison shout “Well, we’re playing Littlefoot.” Again, at (306), Corinna is about to object that the dinosaurs all died in the movie; Kathy anticipates her objection, even to the point of completing her utterance, and then says “we’re just pretending” that they came to life.

The embellishments on the movie script that are collaboratively made in Examples 6 and 7 are evidence that these children have internalized the plot of the movie, are capable of creative modifications of the movie plot, and are aware they are doing so. These embellishments show that even when enacting familiar shared narratives, children cannot assume that the story will continue in the usual manner; one of the children may propose a modification to the narrative, and after appropriate negotiation, the modification may be incorporated into the shared play frame. These collaborative embellishments show that there is always improvisation, even in these apparently more scripted play episodes (also see Branscombe & Taylor, 2000).

When Kathy and Jennifer anticipate Corinna’s objections, and explain them by saying “we’re just pretending,” it is evidence that the girls are aware that they have modified the usual narrative, and they know that their jointly constructed narrative diverges from the canonical version of the movie. After Kathy’s explanation in (312), Corinna readily accepts the play modifications, and joins in the enactment. In fact, rather than dinosaurs, Corinna has brought a duck and a hippopotamus, even though all three girls realize that such animals do not appear in the movie (animals only evolve after the dinosaurs are extinct). Jennifer and Kathy agree to accept that animals and dinosaurs can co-exist in their narrative, despite its inaccuracy:
Example 8. An earlier negotiation of what play figurines Corinna will be allowed to use.

(273) Jennifer Corinna don't wanna get dinosaurs she wants to get
(274) animals is that OK?
(275) Kathy Well, we don't have animals in our game.
(276) The animals come when they die
(277) Jennifer No, she wants to have animals

Although the girls embellish the scripted narrative of the movie, the movie's script nonetheless functions as a scaffold for the play improvisation. Because all three girls have seen the movie, they have many narrative elements already provided for them. Thus, they can focus their improvisational negotiation on embellishments to this basic narrative, rather than having to create everything from scratch.

Several scholars have noted that children's play is often an embellishment on a routine in a theme-and-variation pattern (Corsaro, 1985; Fein, 1987; Sawyer, 1997; Sutton-Smith, 1981). Children repeat and embellish routines; the routine provides a narrative structure, but children at play do not simply reproduce it but rather embellish and modify it through improvisational collaboration. Such play may be more effective at encouraging narrative development than the completely improvisational play of Examples 2 through 5. Not only might it result in more complex collaboratively constructed narratives; it also gives the children an opportunity to think explicitly about these embellishments, and how they are different from the original narrative.

THE COLLABORATIVE EMERGENCE OF NARRATIVE FROM IMPROVISATION

How does play collaboration result in the emergence of a shared narrative? Examples 2 through 5 do not contain well-formed, elaborated narratives, measured on either Trabasso’s or Daiute’s narrative coding scheme. They are highly embedded in the social context and thus not decontextualizable; and they rely on shared background knowledge among the participants. Examples 6 through 8 contain narratives with a higher degree of global coherence, as a result of the presence of a shared script that acts as a scaffold.

A critical methodological question is how to determine whether an improvised dialogue has resulted in a narrative. A common approach is to transcribe the dialogue and then to analyze the transcript as a static structure, applying the tools of structural analysis to it. For example, the narrative coding schemes of Trabasso or Daiute could be applied to transcribed improvisational encounters such as Example 2, just as they are to composed stories. The problem with such a methodology was noted long ago by conversation analysts: it transforms an improvisation into a fixed text, thereby removing what is most essential to improvisation – its processual contingency and its social and collaborative nature (Sawyer, 2001; Wolf & Hicks, 1989). The difficulty in connecting collaborative improvisation and narrative is that while collaborative improvisation is a social practice, a processual notion, narrative is a structural notion, a property of stories and texts. These concepts refer to different orders of social reality (see Figure 4).

Sociocultural perspectives have the potential to provide a theoretical framework to connect improvisation and narrative, because they situate emergent literacy within social and cultural practices (cf. Yaden, Rowe, &
MacGillivray, 2000, p. 444). Researchers in sociocultural psychology and situated cognition argue that knowledge and intelligence reside not only in people’s heads, but are distributed across situated social practices that involve multiple participants in complex social systems. “Knowing” is reconceived as the ability to participate appropriately in these shared cultural practices. In the sociocultural perspective, mind is considered to be “social, cultural, and embedded in the world” (Gee, 2000, p. 195).

Similarly, I argue that the narratives that emerge from collaborative improvisation are collective social products. To understand the connections between narrative and improvisation, one must use methods that acknowledge the moment-to-moment, processual, contingent nature of improvisation, and its social and interactional nature. Structural methods of narrative analysis cannot easily do either, because they do not theorize the process whereby the narrative emerges from the dialogue—the key question from a sociocultural perspective. To theorize this process, I use Sawyer’s concept of *collaborative emergence* (1999, 2002b).

Improvized narratives are created by the collaborative efforts of the entire group. No single speaker creates the narrative; it emerges from the give and take of conversation. The narrative is constructed turn by turn; one child proposes a new development for the play, and other children respond by modifying or embellishing that proposal. Each new proposal for a development in the narrative is the creative inspiration of one child, but that proposal does not become a part of the play until it is evaluated by the other children. In the subsequent flow of dialogue, the group collaborates to determine whether to accept the proposal, how to weave that proposal into the drama that has already been established, and then how to further elaborate on it.

Narratives are “collaboratively emergent” from improvised dialogue for several reasons. First, they are unpredictable and contingent; their structures cannot be predicted in advance of the interaction. Second, the narrative emerges from the successive actions of all participants; it is not the conscious creation of any one person. For this reason, the social-interactional-discursive elements of dialogue are essential and defining features of the narratives that are generated. Third, because the narrative emerges out of an interactional, discursive process, no single child can drive its creation, and because it is a collective social product, it cannot be equated with any child’s mental schema. Fourth, because improvisational discourse allows for retrospective interpretation, the emergent narrative cannot be analyzed solely in terms of a child’s goal in an individual turn, because in many cases a child does not know the meaning of her own turn until the other children have responded. In improvisational play, narrative elements emerge that cannot be understood by focusing on individual children’s mental representations and goals.

The emergent narrative is a collective social phenomenon. Drawing on theories of sociological emergentism (Sawyer, 2001b), I argue that the emergent narrative is analytically irreducible to the actions, intentions, or mental states of participating children. Although the narrative is created by children through their collective action, it is analytically independent of their internal mental models and goals. This position is a version of what sociological theorists refer to as *methodological collectivism*: the position that although only individuals exist, there may be analytically irreducible phenomena that emerge from collective action. Arguments for analytic irreducibility have been accepted in a broad range of scientific fields, because irreducibility is a common feature of emergent phenomena (Sawyer, 2002a). This approach is opposed to methodologically individualist approaches to the study of play narratives. Methodological individualism is the stance that all properties of group behavior can be reduced to, and ultimately derived from, properties of individuals. In the study of group narrative practice, methodological individualism corresponds to the view that the group’s emergent narrative can be analyzed by analyzing the internal cognitive representations of it within a participating child’s mind.

The reductionist thrust of methodological individualism remains implicit in many disciplines that study conversational interaction. For example, many cognitive psychologists assume that the emergent narrative is reducible to participant’s internal representations of it, as in Schank and Abelson’s (1977) *script* model and in *event schemata* theories more generally (see Mandler, 1984; Tannen, 1979). The theory of collaborative emergence associates the narrative with the emergent and negotiated social process, rather than with any mental representation of it. Emergent narratives cannot be fully explained by analyzing the actions or mental states of the participant individuals, and then by working “upwards” to an explanation of the emergent narrative. This sort of analysis can partially explain the collaborative emergence of narratives, but cannot adequately represent the analytic independence of the narrative, nor the conversational processes that generate them.

Collaborative emergence thus describes the connection between unstructured improvisation and the resulting narrative structure. Studying collabora-
tive emergence requires a focus on the turn-by-turn symbolic processes that participants use to cocreate their interactional frame. Conversation analysis can offer theory and methodology to study the emergence of narrative from improvisation; it is a commonplace among scholars of conversation that individuals work together to co-construct their social reality through interaction. Conversation analysts have noted that speakers co-construct the interactional frame, and that the frame, in turn, constrains the future actions of individuals. Conversation analysts have argued that higher-level structures (not only emergent narratives, but also social structures and institutions) are the product of the moment-to-moment unfolding emergence of collaborative, communicative interaction. Conversational dynamics produce and reproduce these higher-level structures. In turn, these emergent higher-level structures both constrain and enable future conversational actions (Giddens, 1984; Sawyer, 2002b).

Conversation analysts have argued that talk cannot be understood as a static transcript, but must be viewed as fundamentally in play during interaction (Schegloff, 1990; Schegloff & Sacks, 1973). In children’s play dialogues, the narrative emerges from collective action. The emergent narrative is a dynamic structure; it changes with every turn. Until the play period is over or the group disbands, the analyst cannot stop the play at any one point and identify with certainty what the narrative’s structure is. It is always subject to continuing negotiation, and because of its irreducible ambiguity, intersubjectivity must be continually negotiated and reproduced.

The theory of collaborative emergence suggests that the study of sociodramatic play and narrative must foundationally incorporate conversation-analytic methods that closely analyze the processual, turn-by-turn dynamics of pretend play dialogue. For example, conversation-analytic methods could be used to study meta-play and dialogic strategies in play conversation. How are such strategies combined in sequences of conversation? How does the presence or absence of these strategies affect the nature of the narratives that emerge? Answers to these questions will require a processual focus on the collaborative emergence of play conversation, as partially demonstrated in Examples 2 through 7.

This article has explored the ways that narratives emerge from collaborative play improvisations, with the goal of better understanding how sociodramatic play might contribute developmentally to narrative literacy. I began by defining improvisation and narrative; I then analyzed several children’s play episodes, organizing them to demonstrate two factors that influence the emergence of narrative from improvisation: the use of dialogic metaplay strategies, and the presence of scaffolding scripts. I followed these examples by proposing a theoretical approach to collaborative emergence designed to help us understand how narratives emerge from improvised dialogue.

As with any other socially emergent phenomenon, in improvisational play we find that the emergent narratives cannot be reduced to the internal representations of any participant. As a result, analysis requires an empirical focus on the moment-to-moment interactional process of the group, and how the process leads to the emergence of the narrative. In conclusion I identify several implications for educators, drawing on the above examples and the theoretical approach.

First, I found that improvisational play rarely generates narratives with coherent global plot structures, but that the narratives that emerge are likely to be more well-formed if the children use metaplay and dialogic strategies. In fact, there is evidence from studies of adult improvisational theater that professional acting ensembles create more complex plot structures if they are allowed to use out-of-character techniques. Sawyer (2002b) compared two theater groups that perform long-form improvisations — 30- to 60-minute plays that are fully improvised. One of the two groups, The Family, allowed their actors to step out-of-character and use a narrator’s voice, whereas the other group, Jazz Freddy, required their actors to remain in-character for the entire 60 minutes. Sawyer found that the narratives that emerged from The Family’s performances had much greater plot complexity — they had twice as many distinct plot lines, and the plot lines were integrated more fully by the end of the performance.

Second, I found that the skillful introduction of scaffolds — loose outlines of plots, or a shared memory of a fairy tale or movie — can help to guide children’s natural collaborative improvisations into a narrative structure with global coherence. Again, there is evidence from Sawyer’s (2002b) studies of long-form improvisational theater groups for the importance of scaffolds.
Many of the groups that perform long-form improvisation have found it necessary to introduce some form of global outline or plot structure, because without it the performance wanders through pockets of local coherence but without generating a globally coherent narrative. For example, a group in Chicago used a format they called *structured improvisation* to help them generate a 30-minute performance in the style of a television sitcom. The actors prepared a scenario in advance, complete with breaks for advertisements; the scenario specified how many distinct scenes would occur and what types of characters and relationships were appropriate to the genre. The scenario also specified a global structure to be followed: an initiating event, a conflict or misunderstanding, and a resolution. Such examples demonstrate that professional adult theater groups find it difficult to generate globally coherent narratives from group improvisation unless there is a scaffold; surely preschool children will find it even more difficult.

Educators could experiment with similar scaffolds. For example, children could collectively be given a general plot scenario, the scenario could be separated into three acts, and the children directed to accomplish a certain subset of the narrative within each of the three acts. Or teachers could scaffold children’s narrative practice with well-timed prompts or queries about the unfolding story (cf. Saltz, Dixon, & Johnson, 1977; Smilansky, 1968). Baker-Sennett, Matusov, and Rogoff (1992) found that children’s improvisational collaboration resulted in the generation of a globally coherent puppet play when the children were told to recreate a familiar fairy tale like Snow White.

Educational technologists have begun to experiment with using computer technology to provide scaffolds that help the improvisations of play result in the emergence of narrative; two recent projects are of interest to narrative researchers, The MIT Media Lab’s KidsRoom, and the European Union’s KidStory project.

The KidsRoom project at the MIT Media Lab (Bobick et al., 1998) is an *immersive environment*, a “smart room” that creates a live fantasy environment for three or four children. The KidsRoom is equipped with several digital cameras with vision technology, and these cameras are programmed with the ability to detect the location and movement of the children in the room. Two walls of the KidsRoom are large screens with computer-generated images projected from outside the room, and these images are directed by the messages coming from the digital cameras, so that the children have the impression that the images on the walls are changing in response to their actions.

Because of the limitations of the technology, the KidsRoom designers decided to carefully limit the range of potential creative actions on the part of the children. The story line that children experience is largely scripted in advance, so that the number of wall images is manageable, and also so that the digital cameras know generally where to expect the children to be located. Within the script, there are places where the children can collaboratively improvise to move the story forward, but the story has the same structure and the same conclusion every time. In this way, at one point in the narrative, large monster figures are projected on the wall of the room, and the speakers play a loud roaring sound. The narrator’s voice tells the children that if the kids yell, the monsters will quite down. If the children shout loudly enough (as detected by microphones), the monsters stop roaring and the storyline progresses; if the children’s shout is weak, the voice tells the children to shout louder. If the second shout is still weak, the KidsRoom is programmed to proceed with the narrative anyway, and the monsters become quiet after all.

In an attempt to encourage children’s improvisational collaboration, the KidStory project (Simsarian, 1999, 2000) started with the guiding assumption that the scaffolds should be less constraining than in the KidsRoom project. They focused on developing intelligent toys that can enhance children’s naturally occurring play activities by facilitating what they called *storymaking*. For example, one toy developed by the KidStory team is the *Story Dice*, a set of three large dice representing the Who, the What, and the Where of a story. The children first choose six characters, actions, and locations, and label the sides of the dice themselves. The dice are equipped with internal radio electronics so that a remote computer can detect which face of each die lands up after a roll. The children then use authoring software to improvise a story that incorporates the Who, the What, and the Where that are rolled. The Story Dice thus provide a scaffold to guide children’s improvisational play, but the scaffold is more open to improvisation and collaboration than the scripted narrative of the KidsRoom.

A third implication of this article is that emergent narratives may need new coding schemes, particularly if the researcher is interested in evaluating the developmental level of the participants. Trabasso’s coding scheme uses plot structure to measure global coherence, whereas Daute’s coding scheme emphasizes characters and relationships. The play episodes in Examples 2
through 5 gain coherence from character enactments perhaps even more than from plot, but they don’t score highly on either coding scheme. Eder suggested that collaborative narrations “are more loosely structured than solo stories and tend to progress from one climax to another rather than build to a single high point” (1998, p. 84). Children’s collaborative narrative practices may result in a different type of global coherence — one based more on processual organization — and thus might warrant a more processual conception of narrative.

In sum, I have explored the relationship between collaboratively improvised dialogues and narrative structure. Narratives emerge from improvisational play through a process of collaborative emergence, and I provided several examples of this process. These examples show that the use of meta-play and dialogic strategies can improve the coherence of the emergent narratives, and that scaffolds can guide the process of collaborative emergence without removing its improvisationality altogether. An awareness of these connections is important both to classroom teachers and to developers of software to support collaborative storymaking. Future research on this topic should be interdisciplinary, combining method and theory from the empirical study of conversation with developmental theory on narrative structure and competence.

ACKNOWLEDGEMENTS

This article originated in an invited paper presented to the KidStory research team (a collaborative effort between the Swedish Institute of Computer Science, the University of Maryland, and the University of Nottingham) presented on June 28, 2000 at the Swedish Institute for Computer Science in Stockholm, Sweden, and benefited greatly from dialogue with the members of the team, particularly project leader Kristian Simsarian.

REFERENCES


