What Do We Know about Pretend Play and Narrative Development?

A Response to Lillard, Lerner, Hopkins, Dore, Smith, and Palmquist on "The Impact of Pretend Play on Children's Development: A Review of the Evidence"

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An article by Angeline S. Lillard and others in the January 2013 issue of *Psychological Bulletin* comprehensively reviewed and criticized the existing body of research on pretend play and children's development. Nicolopoulou and Ilgaz respond specifically to the article's critical review of research on play and narrative development, focusing especially on its assessment of research—mostly conducted during the 1970s and 1980s—on play-based narrative interventions. The authors consider that assessment overly negative and dismissive. On the contrary, they find this research strong and valuable, offering some solid evidence of beneficial effects of pretend play for narrative development. They argue that the account of this research by Lillard and her colleagues was incomplete and misleading; that their treatment of relevant studies failed to situate them in the context of a developing research program; and that a number of their criticisms were misplaced, overstated, conceptually problematic, or all of the above. They conclude that this research—while not without flaws, gaps, limitations, unanswered questions, and room for improvement—offers more useful resources and guidance for future research than Lillard and her colleagues acknowledged. **Key words**: narrative skills; pretend play and child development; research assessments

Angeline S. Lillard and her coauthors (2013a) have produced a comprehensive critical review of research about the effects of pretend play on various dimensions of children's cognitive, linguistic, and socio-emotional development. This article has already generated some useful discussion (in the commentaries that accompanied it), and it will undoubtedly have a significant impact on a wide range of ongoing debates about the role of play in children's development

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and education. Here we will address just one portion of the article's ambitious overview, its consideration of research on the purported benefits of pretend play for promoting children's narrative abilities. One reason this subject deserves careful attention is that children's early mastery of narrative skills is increasingly recognized as helping to lay foundations for their acquisition of literacy and long-term academic success (Reese et al. 2010). This subject also has important implications for considering the proper role and potential value of spontaneous play and "playful learning" in early-childhood education and elementary school (e.g., Hirsh-Pasek et al 2009; Nicolopoulou 2010).

Following the lead of Peter K. Smith (2010), Lillard and her coauthors distinguished between three possible ways to interpret research findings that appear to show a positive relationship between pretend play and development. First, pretend play may be uniquely necessary and crucial for the development of the skills or abilities in question. Second, it may be one of several factors that can help promote such development (equifinality). Third, the relationship between pretend play and the development of the relevant abilities may be epiphenomenal, meaning that both result from another factor and pretend play makes no independent contribution to development. Lillard and her coauthors sometimes characterized the claim that pretend play is crucial to development as the "causal" position. This formulation is misleading, however, because both the first and second claims entail causal relationships between pretend play and development. Accordingly, in this article we focus on the central question of whether pretend play promotes or contributes to the development of children's narrative skills and, if it does, in what ways. Whether or not a causal relationship between pretend play and narrative development is, in addition, a crucial or essential relationship is also a significant question—but, in our view, a secondary one.

In their article, Lillard and her coauthors argued that widespread claims for the developmental benefits of pretend play are mostly overblown and unsupported. They suggested that a pervasive proplay bias, or "play ethos" (4),* has routinely led researchers, practitioners, and policy advocates to make exaggerated claims that go beyond the existing evidence. They saw the research in this area as riddled with conceptual and methodological weaknesses and declared even

*Editors' note: Because this *American Journal of Play* article presents a close reconstruction and critique of the article by Lillard and her colleagues, Nicolopoulou and Ilgaz have included page references to specific phrases, ideas, arguments, and omissions they note in that work.

the most promising studies in need of careful replication, usually with larger sample sizes and better designs.

With respect to the relationship between pretend play and narrative development, the assessment by Lillard and her colleagues was somewhat less negative than their appraisal for most other domains. They cautiously suggested that a few studies offered plausible grounds for considering the possibility that "certain types of pretend play" may promote "certain aspects of narrative development" (21). However, they characterized the existing body of research about this relationship as too sparse and methodologically problematic to allow strong conclusions one way or another. When they asked whether pretend play was merely an epiphenomenon of other factors that promote narrative development, Lillard and her colleagues found epiphenomenalism "less likely for narrative" (26; cf. 25) than for the other domains they considered, but they based this judgment on just "one small but solid" study (25, 26)—i.e., Dansky (1980). Elsewhere in the article (1, 26), they indicated that all three possible verdicts, ranging from crucial to epiphenomenal, remain consistent with the available evidence. As they summed things up in their response to the first round of commentaries (Lillard et al. 2013b), "we did not find reliable evidence that pretend play helps development (in any domain)," though "for some domains the evidence is open to that possibility, whereas in others the evidence is more aligned with its being an epiphenomenon" (50).

If one wants to view these statements in an optimistic light, they do imply that research on the relationship between pretend play and narrative development holds some promise and that this is a worthwhile subject for further investigation. To this extent, at least, we agree with Lillard and her coauthors. We also agree that some of their methodological criticisms of previous research have merit and highlight problems that future research should address. But we feel compelled to dissent from the overall impression conveyed by their assessment of previous research, which strikes us as overly negative, dismissive, and discouraging.

Lillard and her colleagues felt it necessary to counteract what they saw as an excessively "resounding" (1) and uncritical celebration of the developmental benefits of pretend play, and in certain respects such skepticism is not only warranted but salutary. However, they may have gone overboard in the other direction. In our view, the existing body of research on the relationship between pretend play and narrative development is stronger and more valuable than this article by Lillard and her colleagues suggested, and it offers more useful founda-

Study	No. of children & SES	Age	Conditions	No. of session (Group size)	Story type	Role of adult in play group	Narrative measures	Narrative ability	Results
Saltz and Johnson (1974)	75 LSES	Preschool R: 2;10 - 5;6 *Mdn*: 3;8	DAAS NP DAAS & NP Listen/NP	48 (5)	AAS - folktales	Facilitator & trainer	a. Order Pic. Seq. b. Storytelling from Pic Seq.	a. Memory & comp b. Exp. Lang & ConnDisc.	a. DAAS>other conditions b. DAAS>other conditions
Saltz et al. (1977)	146 LSES	Preschool *R*: 3;00 - 4;6	DAAS Discuss RSDP Listen/NP	84 (5)	AAS -folktales	Facilitator & trainer	a. Order Pic. Seq. b. Storytelling from Pic Seq.	a. Memory & comp b. Conn Disc.	a. No condition difference b. DAAS & RSDP (play conds) > other conds DAAS > RSDP for children with above median language/cognitive scores.
Dansky (1980)	36 LSES	Preschool-kindergarten *R*: 4;2 - 5;10	RSDP FP Listen/NP	9 (4)	Everyday themes	Facilitator & trainer	a. Order Pic. Seq. b. Retell from Pic Seq. c. Story retell and comp (no pic) d. Storytelling -single Pic	a. Memory& comp b. Memory & comp c. Memory & comp c_2Elaboration d. Exp. Lang & ConnDisc	For all narrative measures (a, b, c, c2, d): RSDP > FP, Listen/NP
Pellegrini and Galda (1982)	108 LSES	K - G2 M_K = 5;11 M_{G1} = 7;3 M_{G2} = 8;1	DAAS Discuss Listen/NP	3 (4)	AAS - folktales	Facilitator & trainer	a. Comp questions b. Retelling (No pics)	a_1. Memory & comp a_2.Inference b_1: Memory & comp b_2. recalled in seq	a_1.K & G1 DASS > Discuss > Listen/NP a_1.G2: No condition difference a_2.DAAS > Listen/NP b_1: DAAS > Listen/NP b_2:DAAS > Discuss, Listen/ NP
Pellegrini (1984)	192 LSES	K - G1 M_K =5;9 M_{G1} =7;0	DAAS-AD DAAS-CD Discuss Listen/NP	3 (4)	AAS - folktales	AD: Director CD: Minimal	a. Comp questions b. Retelling (no pics) c. Order Pic Seq	a. Memory & comp b. Memory & comp c. Memory & comp	a. K: DAAS-AD > DAAS-CD > Discuss > Listen/NP G1: DAAS-AD = DAAS-CD > Discuss > Listen/NP b. K: DAAS-AD = DAAS-CD > Discuss > Listen/NP c. K & G1:DAAS-AD = DAAS-CD > Discuss > Listen/NP
McNamee et al. (1985)	195	Preschool & Kinder-garten 3- to 5-year-olds	DAAS & DCAS vs. AAS & CAS	8 months (Whole Class)	CAS AAS	Facilitator	Spontaneous storytelling (part of CAS & DCAS)	Story structure	DAAS & DCAS> AAS & CAS (especially for older children)
Silvern et al. (1986) Study 1	505 LSES & MSES	K - G3 *R*: 5;0-9:0	DAAS Listen/NP	12 (1/2 of class)	AAS- Children's books	Facilitator	a. Story recall questions	Memory & comp	DAAS > Listen/NP (no significant differences after 6;8 years)
Silvern et al. (1986) Study 2	340 LSES & MSES	K - G3 *R*: 4;8 -13;0	DAAS-AD DAAS-CD Listen/NP (+ discussion in all conditions)	12 (1/2 of class)	AAS- a. Folktales (familiar) b. children's books (unfamiliar)	AD: Director CD: Facilitator	a. Story recall questions	Memory & comp	DAAS-AD & DAAS-CD > Listen/NP Familiar story: DAAS-CD > DAAS-AD Unfamiliar story: DAAS-AD > DAAS-CD

Study	No. of children & SES	Age	Conditions	No. of session (Group size)	Story type	Role of adult in play group	Narrative measures	Narrative ability	Results
Williamson & Silvern (1990)	75 LSES & MSES	> 80 months + low narrative skills	DAAS (AD & CD) Listen/NP	12 (1/2 of class)	AAS	Facilitator or director	a. Story recall questions	Memory & comp	DAAS > Listen/NP
Williamson & Silvern (1992)	120	K *R*: 5;7-7;3 *M* = 6;1	DAAS-CD (coded play- enact-ment vs. metaplay)	3 (4)	AAS	Facilitator (minimal)	a. Comp questions b. Retelling c. Order pic seq d. Tell story from memory	a. Memory & comp b. Memory & comp c. Memory & comp d. Language competence	Metaplay & language competence contributed to story comprehension but play-enactment did not
Nicolopoulou (2002)	17 LSES	Preschool 3-, 4-, & 5- year-olds	DCAS Control	6-7 months (Whole Class)	CAS	Facilitator	Figurine-Based Narrative Task	Narrative discourse	DCAS > Control
Baumer et al. (2005)	35 LSES & MSES	K & G1 *R*: 5;1-7;3	DAAS Listen/NP (+ discussion in both conditions)	14 (Whole Class)	AAS-chapters of book	Actor, Trainer, & Facilitator	a. Order pic seq (unfamiliar story) b. Tell a story from pic seq. (same unfamiliar story)	a. Comp b. Exp. lang & ConnDisc	a. DAAS > Listen/NP b. Length: DAAS > Listen/NP Linguistic Complexity: DAAS = Listen/NP ConnDisc: DAAS > Listen/NP

DAAS: Dramatization of adult-authored stories
DCAS: Dramatization of child-authored stories
RSDP: Realistic Sociodramatic Play
FP: Free Play
CD: Child-directed
AD: Adult-directed

NP: Nonplay activities
Listen: Listened to the stories
AAS: Adult-authored story
CAS: Child-authored story

ConnDisc: connective discourse/narrative coherence
Pic Seq: Picture sequence
Comp: (narrative) comprehension
Exp.Lang.: Expressive language

Figure 1. Overview of play-based intervention studies

tions for future research than the article implied. Of course, this research is not without weaknesses, limitations, and possibilities for improvement. So we concur that "much more and better research is essential" (1). And advancing research on this subject, in a way that builds effectively on both the contributions and shortcomings of previous work, definitely requires constructive criticism. But in this connection we would, again, take a different tack from Lillard and her coauthors. In our judgment, their assessment of previous research relied too narrowly on methodological criticisms of disconnected studies—and not all of those methodological criticisms were entirely justified or conceptually compelling.

We do not undertake a comprehensive reexamination of the research on pretend play and narrative development. Instead, we focus on one type of research that accounts for over half of the studies examined by Lillard and her coauthors in their section on narrative: studies of play-based interventions with adult involvement. This includes their entire subsection on "Training Studies" as well as two other studies included in their subsection on "Experimental Studies"—Pellegrini and Galda (1982) and Pellegrini (1984). As their overview makes clear, studies of play-based interventions constitute the most substantial body of research on the relationship between pretend play and narrative development. Thus, we review and reconsider the research in this area that Lillard and her coauthors analyzed as well as a few other relevant studies they did not discuss (see figure 1).

Pretend Play and Narrative: Some Theoretical Preliminaries

We might begin by reminding ourselves why we should expect pretend play to promote narrative development. One key reason is that pretend play itself has a narrative dimension, because much of it centers on the enactment of narrative scenarios (Galda 1984). In fact, for a number of purposes it is useful to see children's pretend play and storytelling as complementary modes of their narrative activity, on a continuum ranging from the discursive exposition of narratives in storytelling to the enactment of narratives in pretend play (Nicolopoulou 2002, 2007; Paley 1990). Thus, it seems plausible that these two types of activity would draw on, and promote, some of the same skills and capacities (as Lillard and her coauthors noted on p. 19). We will use the word "narrative," when unmodified, to refer specifically to the production and comprehension of stories (i.e., discur-

sive narratives). But we should not lose sight of the affinities and intersections between pretend play and narrative—not least because they have helped shape research agendas and strategies in this area.

Studying the possible effects of pretend play is also complicated by the fact that it is a complex activity that integrates several dimensions, each with potentially significant implications for development. Among other things, pretend play serves as a vehicle for symbolic imagination and "as-if" thinking; it involves the physical enactment of symbolic scenarios; and, in its nonsolitary forms, it is a cooperative activity involving intersubjective understanding, negotiation, and coordination of action by participants. Furthermore, children's pretend play can occur in a variety of settings and manifestations. These range from "pure" spontaneous play by individual children or peers through more mixed activities with a strong play element—which may include activities with various degrees of participation, structuring, and guidance by adults. As it happens, a substantial portion of the research that has systematically examined the impact of pretend play on narrative development has focused on studying pretend-play-based interventions involving adults. To avoid cumbersome formulations, we will generally describe these simply as play-based interventions, with the understanding that the play element here refers to pretend play.

Revisiting the Play-Based Intervention Studies: Putting Play to Work

Much of the research on play-based interventions occurred in the 1970s and 1980s, and it took its initial impetus from the play training program designed and studied by Smilansky (1968). Smilansky sought to devise techniques by which teachers could help increase the quantity and quality of sociodramatic pretend play by Israeli preschoolers, especially children from low-income and otherwise disadvantaged backgrounds. Smilansky hypothesized that engaging in and sustaining sociodramatic play is not simply a natural activity but involves skills children need to learn and master, and that particular forms of adult-child interaction can assist and encourage them in this process. The training guided children in make-believe dramatizations of ordinary activities such as going to the store or to the doctor or playing house. Depending on circumstances, the adult trainers (usually teachers) engaged in "inside" interventions (in which the adult participated in the play enactment and modeled certain roles); in interven-

tions from "outside" the play scenario (in which the adult offered suggestions and asked questions); or in some combination of the two. When the children's play episode had developed its own momentum, the adult pulled back and let it proceed. To some extent, one might say, as Dansky (1980) later put it, that the adult's role was to act as a "catalyst" more than as a "trainer" (56). It should be noted that children's participation in these play episodes was always voluntary, that adults took their cues from the children rather than imposing standardized play scenarios, and that children could and did improvise spontaneously in the course of their play. Evaluations of this play training (Smilansky 1968; see also Smilansky and Shefatya 1990) suggested that it does increase both the quantity and quality of sociodramatic pretend play by children from lower socioeconomic backgrounds.

Smilansky expected that fostering and improving children's sociodramatic play should, in turn, help promote the development of skills relevant to their academic success. She observed some signs that it did, but she did not systematically assess the effects of pretend play on these other abilities. However, her play training work inspired "a virtual avalanche of studies" (Williamson and Silvern 1991, 70)—experimental, observational, and otherwise—examining the effects of pretend play on children's development in domains ranging from cognition and problem solving through interpersonal understanding, language, and narrative.

Establishing Positive Effects of Pretend Play on Narrative Development

The narrative stream of this research, which we review, was initiated by Saltz and Johnson (1974). They also introduced a modification of Smilansky's play training technique that was adopted by much of the subsequent research. Whereas Smilansky focused on "realistic" pretend play in which children dramatized typical activities from everyday life, Saltz and Johnson substituted what they termed "thematic-fantasy play" (TFP), which might also be called the dramatization of adult-authored fantasy stories. Preschoolers from disadvantaged backgrounds were trained to enact familiar fairy tales such as *Three Billy Goats Gruff*, *Red Riding Hood*, *The Three Little Pigs*, and *Hansel and Gretel*. Small groups of children enacted each story several times, and each child took on a different role in each of several sessions. Following Smilansky's terminology, Saltz and Johnson

distinguished "sociodramatic play" from this type of fantasy playacting, but we would describe multiactor fantasy play as simply another form of sociodramatic play. In comparison with Smilansky's technique, the TFP variant offers children more structured play scenarios (though the children still have some flexibility in how they adapt and interpret the scenarios in their enactments) and uses explicitly fictional or fantasy scenarios.

In their pilot study, Saltz and Johnson divided their subjects, preschoolers from disadvantaged backgrounds, into four groups with different experimental conditions. The first group acted out fairy tales with adult training (TFP), including postenactment discussions. The second was trained in classifying physical and social features of objects (without any dramatic enactments). The third group alternated between the two activities, doing the first in half the sessions and the second in the other half. The fourth group was read the same stories used in the dramatic playacting but did not enact them. Thus, the first experimental condition combined narrative and pretend-play elements; the fourth had (discursive) narratives with no pretend play; and the second included neither play nor narrative elements. The tests administered to the children after the intervention period of four months included two tasks measuring narrative skills: a story-recall task that involved reading stories illustrated with pictures to the child, reshuffling the pictures after each story was read, and asking the child to arrange the pictures in proper sequence while retelling the story; and a narrative-production task that involved generating coherent stories from sets of pictures. Neither of these narrative assessment tasks used stories that had been enacted during the intervention. Children who participated in the dramatic enactment of fantasy stories performed significantly better on both the story-recall and story-production tasks than children in the other three groups. Classroom observations indicated that they also engaged more frequently in spontaneous sociodramatic play with peers than other children in the sample.

The design of this pilot study had several problematic features, some mentioned in the article by Lillard and her colleagues. For example, although children in both the first and fourth groups heard the same stories, the children in the intervention (TFP) group went over the stories more frequently and thoroughly in interaction with adult trainers. Thus, it is possible that the beneficial effects of this intervention in promoting narrative skills owed more to its narrative dimension, and to the greater amount of adult pedagogy and engagement it provided, than to its play-enactment dimension. (Lillard and her coauthors described this design problem as "teaching to the test" [21], but that formulation

seems imprecise here, because the stories enacted and extensively discussed in the intervention were different from the ones used in the narrative assessment tests.) Lillard and her coauthors also raised the possibility of experimenter bias, an issue to which we return later. However, it is important to emphasize that these methodological difficulties, and others associated with this line of research, were already recognized by researchers in the 1970s and 1980s, beginning with Saltz and Johnson themselves, and those researchers made serious efforts to address them (Christie 1987).

The main study by Saltz, Dixon, and Johnson (1977) adjusted the design to equalize the amounts of adult engagement and guidance for the different conditions and to highlight other possibly relevant variables. The four conditions used in this study were the following: In the first condition (as in the first condition of the 1974 study), the children dramatically enacted fantasy stories with adult guidance and support (TFP). In the second condition, the children listened to the same fantasy stories read aloud by adults, then discussed the stories, but did not enact them. In the third condition, researchers fostered "realistic" sociodramatic play along the lines of Smilansky's play training program. The fourth was a control condition with neither narrative nor pretend play elements; instead, this set of children engaged in typical preschool activities.

With respect to narrative outcomes, the results were disappointing for narrative recall but intriguing for narrative production. All four groups of children did poorly on the narrative recall tasks, and there were no significant differences between their results. One possible reason was that the narrative recall tasks used for this study were too difficult for the preschool children involved. On the narrative production task, the overall differences between results for children in the two play groups and in the two nonplay groups were not significant.

However, more interesting and promising results emerged when one took into consideration the children's levels of language and cognitive skills, as measured in pretests. (The Peabody Picture Vocabulary Test was used for the first year of the study, and the Picture Test of Intelligence was used during the second and third years.) Among children whose linguistic and cognitive abilities at pretest were above the median, those in the two play conditions performed significantly better on the narrative production posttests than those in the two nonplay conditions; and children who participated in fantasy playacting (TFP) performed significantly better than those who participated in Smilansky-style "realistic" play. These results suggest that young children may need a minimum level of linguistic and cognitive abilities before they can effectively benefit, in terms of

narrative development, from dramatizing fantasy stories. Once children have reached these minimum threshold levels, however, these play-based interventions may yield significant benefits for promoting their narrative development.

Dansky (1980) also investigated the effects of sociodramatic pretend play on the development of cognitive and language skills, including narrative skills. Unlike Saltz and Johnson, his study did not include the dramatization of fairy tales but, instead, returned to Smilansky's focus on "realistic" sociodramatic play facilitated and encouraged by adults. The subjects were again young children from disadvantaged backgrounds, but whereas Saltz and Johnson's subjects were preschoolers aged 3 to 4.5 years, Dansky's were kindergartners of 4.2 to 5.8 years. The three conditions were: one with Smilansky-style sociodramatic play; a nonplay condition with exploration training to help children discover the properties and functions of physical objects; and a free-play condition, in which an adult was available to answer questions but did not offer guidance or suggest possible play themes. The first two conditions received equal amounts of adult engagement and discussion, and children in the two play conditions (the first and third) received identical play props and other objects. A week after the end of the three-week intervention period, testers unaware of the subjects' treatment conditions administered a set of measures that included story-comprehension, story-production, and story-recall tasks.

Results indicated that children in the Smilansky play-training condition performed significantly better on all narrative-related tasks than children in the other two. Lillard and her coauthors agreed that Dansky's study "suggests that social pretend play positively influences narrative development" (21). Dansky asserted explicitly that, in his view, the results of his study helped vindicate the core hypotheses of Saltz and his collaborators. "In fact, data from five different measures all converged to support the contention that S-D [sociodramatic play] activity significantly enhances children's comprehension, recall, and construction of sequentially organized, causally interrelated series of events [i.e., narratives]." Thus, Dansky hypothesized, the more "ambiguous" findings of the Saltz, Dixon, and Johnson study (1977) might be related to the fact that their subjects were younger. Their story-recall and production tasks might have been too difficult, or some of the children might have been too young to benefit effectively from the pretend-play intervention, or possibly both.

Like Saltz and Johnson, Dansky (1980) reported that children who participated in the play-training condition engaged in considerably more everyday sociodramatic play in the classroom than before the intervention, and that the

quality and quantity of their sociodramatic play were significantly higher than those of children in the other two conditions. He drew two implications worth noting. First, the larger amount of pretend-play activity by children in the play-training condition was not restricted to the intervention sessions, since the play training had a multiplier effect (51). Second, Dansky argued (56-57) that the absence of developmental effects for children in the free-play condition did not necessarily imply that participation in pretend play has no beneficial effects on children's development. On the contrary, the free play condition provided children with *opportunities* for pretend play; but in practice those children, like the disadvantaged children observed by Smilansky, did not spontaneously engage in much pretend play.

In the 1980s this line of research was advanced most prominently by two sets of researchers, Anthony Pellegrini and Lee Galda (Galda 1984; Pellegrini 1984; Pellegrini and Galda 1982) and Stephen Silvern and Peter Williamson and their associates (Silvern, Taylor, Williamson, Surbeck, and Kelley, 1986 [cited by Lillard et al. as "Silvern, 1986"]; Williamson and Silvern, 1991, 1992). One question that Pellegrini and Galda sought to address was whether the effects of play-based interventions could be attributed to adult engagement and tutoring in the training rather than to the children's pretend play itself. Pellegrini and Galda (1982) divided their subjects, 108 disadvantaged children aged five to seven years (in kindergarten, first grade, and second grade), into two treatment conditions with extensive adult engagement—one play and one nonplay—and a control condition. The same fairy tale was read to each group, after which the children either acted out the story with adult guidance (the first condition), discussed the story with an adult (the second condition), or drew pictures based on the story (control condition). There were three sessions, each using a different fairy tale. After the third session, the children were tested on their abilities to reconstruct and comprehend the story used in that third session. Children in the fantasy playacting condition performed better than those in the adult-led discussion condition, who in turn performed better than children in the drawing (control) condition. Intriguingly, among kindergartners in the fantasy-enactment condition, children who enacted the most prominent roles generated the highest scores on comprehension and retelling tasks.

Pellegrini (1984) differentiated the variables further by using two distinct playacting conditions, one adult-directed and one merely adult-facilitated. He divided 192 kindergartners and first-graders from disadvantaged backgrounds into four conditions: adult-guided playacting, as in the previous study; peer-

directed playacting, in which an adult assigned roles to the children and asked them to enact the story on their own; adult-led discussion of the story, including questions that asked children to compare and accommodate their recollections of the story with those of other children; and drawing (the control condition) with neither playacting nor discussion. Story-recall and story-comprehension tasks were administered on two occasions, immediately after the third session and a week later; on the second occasion, children were shown the storybook cover but the story was not reread to them. The three measurement instruments were a criterion-referenced recall and comprehension task (CRT), a retelling task, and a sequence-memory task.

In the first round of testing, children in the two playacting conditions performed significantly better on all tasks than those in the discussion-and-questioning condition, who performed significantly better than those in the control condition. These outcomes suggested that the benefits of the playacting could not be treated simply as epiphenomenal effects of adult engagement and tutoring, because the peer-directed play also enhanced participants' narrative skills. Children's participation in dramatizing fantasy stories had a distinct and irreducible impact on their narrative skills. Pellegrini interpreted this pattern of results as emerging from the additive character of the activities in the different conditions. Children in the two play conditions reconstructed and discussed the story (with the adult or among themselves) as well enacting it; children in the third condition discussed but did not enact it; and children in the control condition did neither. Further analysis suggested that the effects of different modes of play-based intervention were mediated by the age of the children. Among kindergartners, children in the adult-directed play condition scored significantly higher than those in the peer-directed play condition. Among first-graders, however, there was no significant difference between results for children in the two play conditions.

This pattern of results was modified somewhat in the outcomes of the follow-up tests a week later. For both kindergartners and first-graders, there were no significant differences between the scores of participants in the two play conditions, and participants in the control condition again had the weakest scores across the board. Among kindergartners, participants in the play conditions performed significantly better on the CRT and memory-sequence tasks than participants in the discussion-and-question condition. On the retelling task, however, participants in the three noncontrol conditions performed equally (i.e., there were no significant differences in the scores of the three groups). Among

first-graders, players performed significantly better on the memory-sequence task than participants in the discussion condition, but on the CRT and retelling tasks the participants in all three noncontrol conditions performed equally well.

These results left a number of interesting questions hanging, and some of them were pursued further by Silvern and Williamson, whose work represents the culmination of this line of research during the 1970s and 1980s. (Silvern and Williamson's research was discussed by Lillard and her coauthors [21], but their account of it was sketchy and in some ways misleading.) Like Pellegrini and Galda, Silvern and Williamson studied play-based interventions involving the enactment of fantasy stories, and they sought to establish whether the pretend play element of these interventions had significant effects on narrative development that were not simply reducible to the effects of adult engagement and pedagogy. They also sought to investigate and specify the ways in which such play-based interventions, and different specific modes of play-based intervention, might have differential effects and potential benefits for children at different ages and different levels of prior competence in narrative and other relevant skills. (They offered theoretical reasons, grounded especially in Piagetian constructivism, for expecting such differential effects.) And they tried to distinguish analytically between different elements of pretend play and to begin to assess which elements might be most responsible for any developmental effects.

Their key publication, Silvern et al. (1986), reported on two related studies. One key difference between the design of these studies and those of Pellegrini and Galda is worth noting at the outset. Whereas Pellegrini and Galda tested children on a story that had been enacted or discussed or both in one of the intervention sessions, Silvern and Williamson made a point of using stories in their evaluation tasks (both pretests and posttests) that were different from any of the stories to which children had been exposed in the intervention sessions. Children who participated in story-enactment interventions were tested on stories that they had not enacted. (This was also true for the studies by Saltz and Johnson and by Dansky discussed earlier.) Therefore, positive results on the evaluation tasks would not simply reflect children's ability to memorize or comprehend specific stories they had enacted, but would indicate the development of generalized narrative abilities (a point emphasized by Christie 1987).

The first study tested the effects of a story-dramatization intervention designed to keep adult involvement in directing and guiding the children's playacting to a minimum. The study involved 505 children, aged five to nine years, in twenty-six complete classrooms (in several schools) ranging from kin-

dergarten through third grade. They came from both low-income and middle-income families. Thirteen teachers implemented the play condition in their own classroom; and, to help equalize possible implementer effects, each one also implemented the control condition in a paired classroom in the same school. (Efforts were made to ensure that as many children as possible in the control classrooms would be familiar with the implementing teacher. This was the case for roughly two-thirds of the control subjects, and post-hoc analysis found no significant differences in results between them and control subjects unfamiliar with the teacher.)

In both the playacting and the control conditions, the same story was read to all classrooms twice each week on alternating days. Each class assigned to the playacting condition was divided into two equal groups (to keep numbers manageable for enactment purposes). After the story was read to the class, one group acted it out, having agreed on role selection and other dramatic arrangements among themselves, while the other half of the class watched. On the alternate day the other group enacted the story while the first group watched. In control classrooms, each story was read to the class on two alternating days. In line with the agenda of limiting adult involvement, there were no teacher-led discussions of the stories in either treatment or control classrooms.

The intervention was conducted for eight weeks. In weeks one and eight, the teachers administered a narrative pretest or a posttest to all subjects. An unfamiliar story was read to each class, after which a multiple-choice test—with oral questions and an answer sheet—was used to assess children's recall and comprehension of the story. These tests were scored using a standardized key. During weeks two through seven, the teachers implemented the regular treatment and control conditions. In weeks two and three, the teachers began by using familiar stories like *The Three Bears*. Then, during weeks four through seven, they used unfamiliar stories—ones which these children were unlikely to have heard before. The pretest and the posttest used unfamiliar stories different from each other and, as noted earlier, different from any of the stories used during the treatment weeks.

Overall, children in the treatment classrooms performed significantly better on the posttest than children in the control classrooms, which suggests that participation in the fantasy playacting improved their narrative recall and comprehension skills. But the intervention had differential effects depending on age. Analysis suggested that children of eighty months (6.7 years) or less at the beginning of the intervention showed significant benefits, whereas for chil-

dren over eighty months there were no significant differences in results between treatment and control groups. These findings suggest, in turn, that there may be an age range beyond which this particular play-based intervention ceases to be effective in promoting narrative development.

The second study reported in Silvern et al. (1986) distinguished more systematically between different degrees of adult involvement and direction in managing the children's story enactments, along lines reminiscent of Pellegrini (1984). Thus, there were two playacting conditions, rather than one, and a control condition: the first condition used adult-directed playacting; the second used peer-directed playacting (as in the first study), for which adult implementers were specifically trained to take a facilitative but nonintrusive role; the third (control) condition included no story enactment. Subjects and teachers were drawn from some of the same schools as those in the first study. Subjects included 340 children in twenty complete classrooms from kindergarten through third grade, and ten teachers implemented the intervention. Different teachers implemented the directive and facilitative treatments, and in each case the same teacher implemented the control condition in a paired classroom. In all three conditions, the reading of the story was followed by an adult-led discussion. Six of the teachers used stories likely to be familiar to the children, while the other four used unfamiliar stories. Otherwise, procedures were the same as in the first study.

The results essentially replicated the core findings of their first study. Overall, children in both play conditions performed significantly better on the narrative recall-and-comprehension posttest than children in the control (discussion) condition. There were no significant overall differences between the two play conditions. But the effects of the intervention were mediated by age and, in this study, also by story type. Again, younger children in the sample (kindergartners and first graders) showed significant benefits for their narrative skills from participation in story enactments, whereas children over eighty months did not. And between the two play conditions, the directive variant showed more benefits when the stories were unfamiliar, whereas the facilitative variant showed more benefits when the stories were familiar.

Williamson and Silvern (1990) followed up that pair of studies by trying to specify more precisely how some characteristics of the children participating in these pretend-play-based interventions may influence their effects. The previous findings for the sample as a whole suggested that children beyond eighty months of age no longer showed developmental benefits from story dramatization. Williamson and Silvern hypothesized that, in this context, age might be

serving as a proxy indicator for children's levels of narrative proficiency prior to the intervention. Drawing on the data for the 845 subjects in the previous two studies, they selected the 436 subjects older than eighty months and, from that pool, identified seventy-five subjects (split roughly equally between play and control conditions) who scored at least a standard deviation below the mean on the narrative pretest. Within this targeted sample of seventy-five second- and third-graders with relatively low narrative skills, children in the play conditions scored significantly higher on narrative posttests than children in control conditions. These results implied that children's level of narrative proficiency was the key factor, rather than age per se, and that these play-based interventions can continue to promote children's narrative development as long as the children have not yet achieved a certain threshold of narrative proficiency. That level of proficiency remains to be determined more precisely. Williamson and Silvern also speculated (133) that story-dramatization interventions with somewhat different features, perhaps using more challenging stories, might continue to benefit the narrative skills of children at higher levels of competence.

Williamson and Silvern (1992) attempted to specify which components of the children's pretend-play activity were most important in promoting their narrative skills. This study involved child-directed enactments of several fantasy stories by 120 lower middle-class kindergarten children. Because it was more exploratory than the studies just discussed—and, perhaps in part for this reason, was not included in the review by Lillard and her coauthors—we will just sum up the results. Children's pretend play contains at least two analytically distinct components: the enactment of pretend scenarios and the "metaplay" communication and interaction surrounding it, which includes conversation and negotiation in setting up the play, choosing roles, and resolving conflicts and disagreements within the play episode. The results of the study, as interpreted by Williamson and Silvern, suggested that the metaplay component of pretend play made the key contribution to promoting the children's narrative development, rather than the enactment itself. They emphasized, however, that "metaplay cannot take place outside the context of the overall play situation" (90).

Lillard and her coauthors appeared to dismiss the results of Silvern et al. (1986) and Williamson and Silvern (1990), but it is not clear why dismissing this research would be warranted. (Lillard and her coauthors indicated at one point that Silvern and Williamson found developmental benefits of pretend play "only for children with poor narrative skills" [21]. But this remark, which was not accurate, may have been based on conflating the results of the studies

reported in Silvern et al. [1986] with results from the follow-up study reported in Williamson and Silvern [1990].) In our judgment, this is a strong body of research that generated some solid and convincing results. The framing of the research was conceptually and methodologically sophisticated, and the studies reported in both Silvern et al. (1986) and Williamson and Silvern (1990) were well constructed. These studies included large numbers of subjects, they carefully delineated and differentiated the relevant variables, and they complemented each other in ways that helped refine and extend the analysis. They were also carefully designed to address several key conceptual and methodological questions that had been raised about previous work in this line of research, as well as anticipating some methodological strictures emphasized in the article by Lillard and her colleagues. In our view, they did so effectively. For example, they were able to distinguish the effects of pretend play from those of adult engagement and tutoring, and they successfully avoided such methodological dangers as "teaching to the test" and confounding implementer with implementation.

Silvern and Williamson went out of their way—almost to a fault—to design unimpeachably objective measures for narrative recall and comprehension, using multiple-choice tests that were scored using a standard key (as explained in Silvern, Williamson, and Waters 1983). The one criticism explicitly raised by Lillard and her coauthors nevertheless concerns the possibility of experimenter bias—or, more precisely, implementation bias. That is, using the same teacher to administer both treatment and control conditions in paired classrooms, which "on face . . . seems like a good idea," could introduce an element of bias, since each teacher had a personal stake in having her class do well and might therefore conduct the intervention accordingly. Instead, "having multiple disinterested outsiders as experimenters would be better" (Lillard et al. 2013a, 21). These concerns are not inherently unreasonable; but given the other safeguards built into the design of these studies, they do not offer convincing grounds for dismissing Silvern and Williamson's research. Furthermore, while the proposed solution of bringing in outsiders for implementation would be worth considering, this procedure could well generate its own problems and disadvantages. In the real world, no research design is perfect or foolproof. But we would reiterate our judgment that this work by Silvern and Williamson, and particularly the core findings reported in Silvern et al. (1986), deserves to be treated as solid and significant. Their findings support the conclusion that children's participation in pretend-play-based interventions can enhance the development of generalized narrative skills.

Was This Line of Research Compromised by "Teaching to the Test" or Other Forms of Epiphenomenalism?

We have brought up several criticisms directed by Lillard and her coauthors against previous research on pretend play and narrative development, including this line of research on play-based interventions that we have been reconstructing. We focus for a moment on one factor that Lillard and her coauthors suggested might produce epiphenomenal results in this research, the danger of "teaching to the test" (e.g., 21, 26). That is, elements of intervention activities may include content that would be of direct help on the outcome of the test. But in all the research from the 1970s and 1980s that we have been discussing, the only studies that might plausibly be characterized in these terms are the ones by Pellegrini and Galda. In all other cases, this problem was deliberately avoided by using a different story for posttests (and pretests, where these were administered) from the stories enacted or discussed in the treatment conditions. Thus, positive results on the evaluation tasks did not simply involve memorizing specific stories, but suggested the development of generalized narrative skills (to draw again on the formulations of Christie 1987). "Teaching to the test" is a problem only when children are trained to do better on a test without improving the substantive skills or knowledge on which they are being tested.

At one point Lillard and her coauthors appeared to suggest that even if play-based interventions enhance generalized narrative skills in the children who participate, this process might still involve teaching to the test, because if children "pretend by focusing on the narrative structures of stories, their own stories come to have better narrative structure" (26). But it is not clear why this would be a problem. A more illuminating way to frame the point might be that different forms of pretend play may have different developmental effects. If so, such an outcome would help *vindicate* the educational value of using play-based interventions to enrich the quality of children's pretend play, including its narrative richness. In effect, Lillard and her colleagues conceded this point themselves in their next sentence when they state that children "are naturally motivated to play, so if we can embed learning in play materials such that we positively influence development, that would be good" (26). Precisely. So, again, what is the problem? As noted earlier, pretend play has an inherent narrative dimension, so narrative is not an extraneous

element artificially imported into it. If the evidence shows that narratively richer play has more developmental benefits for children's (discursive) narrative abilities, this would not at all imply that the causal relationship was merely epiphenomenal.

This point raises more general conceptual issues regarding the approach of Lillard and her colleagues to evaluating research on the developmental benefits of pretend play. If the effects of pretend play are influenced by "features of adults with whom children interact, features of the children themselves, and the content with which children pretend" (26), that does not necessarily imply that the relationship between pretend play and narrative development is epiphenomenal. Instead, these may well be factors that mediate, specify, or enable the positive effects of pretend play or do all three. In fact, as we have seen, these mediating, specifying, and contextual factors were explicitly addressed by the research program under discussion. As it was developed and refined over time, finding differential effects of play-based interventions for children at different ages and different developmental levels, and for different modes and degrees of adult involvement, became a deliberate feature of this research program, not a bug. This important aspect of the research was not clearly brought out or systematically considered by Lillard and her colleagues in their discussion, resulting in an incomplete and somewhat misleading picture of both the orienting concerns and the contributions of this line of research.

A Provisional Summary

In our judgment, the accumulated findings from this body of research provide "reliable evidence" that children's participation in these play-based interventions helps promote the development of their narrative skills, and that the pretend-play element in these interventions generates developmental benefits that cannot be explained away as epiphenomenal effects of adult engagement and tutoring. This basic conclusion leaves open a wide range of specific questions on which "much more and better research is essential." But it can serve as a solid foundation and starting point for further investigations.

This research also produced a number of more suggestive findings about the ways in which the effects of play-based interventions are influenced by various mediating and specifying factors—including "features of the children themselves," the types and degrees of adult involvement, "and the content with

which children pretend"—as well as interactions between these factors. While many of these findings still have to be regarded as tentative and exploratory, the overall picture that emerges from them looks, provisionally, both plausible and promising. Here are some of the main outlines of that provisional picture: It seems clear that there is a finite period of opportunity in children's development during which interventions that incorporate sociodramatic pretend play (involving enactment of "realistic" or fantasy scenarios) can be most effective in helping promote their narrative skills. Most researchers appear to agree that, for most children, this period falls somewhere between the ages of three to seven years; but the precise boundaries remain uncertain and are potentially flexible, depending on modes of intervention, the characteristics of the children involved, and other factors. (Pellegrini [1984] and some others have suggested that kindergarten is the optimal age. But this was only one assessment, and a tentative one.) At the lower end of this age range, it seems plausible that children may require some minimum threshold level of cognitive and language skills, and perhaps also of proficiency in sociodramatic play and in specifically narrative skills, before they can benefit effectively from participation in these pretend-play interventions. At the upper end of the age range, it may be that these play-based interventions work until children have mastered a certain level of narrative skills. After that, these particular play-based activities, such as dramatizing fantasy stories, may no longer be helpful in promoting narrative development—though this leaves open the possibility that appropriately modified play-based interventions might still be developmentally beneficial.

Within the age range, several factors in combination help influence, and mediate, the developmental effects of these and other pretend-play activities. Those factors include the characteristics of the children involved and the role of adults, which can range from more directive to more facilitative. Provisionally, the findings so far suggest that, everything else being equal, children's narrative skills are most likely to benefit from modes of intervention with greater amounts of adult direction, guidance, and scaffolding when the children are younger; have weaker cognitive, linguistic, or narrative skills, or a combination of them prior to the intervention; or are confronted with unfamiliar and otherwise difficult material. In situations where the reverse is true, more facilitative modes of adult involvement can be more developmentally beneficial.

Such questions still need to be pursued more fully and systematically, and the body of research under review offers some useful guidance for further research in this area.

More Recent Play-Based Intervention Research: Some Promising Tendencies

To return to a point of partial agreement with Lillard and her coauthors, one of the strongest criticisms one can make about research on the relationship between pretend play and narrative development is that there is not enough of it. It is unfortunate, for example, that this research program on play-based interventions conducted during the 1970s and 1980s was not followed up and developed more vigorously during the decades that followed. However, there have been other recent tendencies in research on the value of play-based interventions for promoting children's narrative development, and it may be worth mentioning two promising examples. Both focus on educational practices designed to integrate elements of pretend play and narrative and to combine adult guidance and facilitation with children's active engagement.

The article (21) by Lillard and her colleagues discusses a study by Baumer, Ferholt, and Lecusay (2005) with a story-dramatization intervention based on Scandinavian "playworld" pedagogies. This study used a more complex and sophisticated narrative text than the research discussed earlier. The regular teachers in two kindergarten classes began reading portions of C. S. Lewis's *The Lion, the Witch, and the Wardrobe* (1950) to the class several times a week, following each reading with a class discussion and other activities normally associated with book reading. Then, during the fourteen-week intervention period, there was one session per week in which that day's portion of the text was enacted in the treatment classroom rather than being read aloud by the teacher, followed by a class discussion. At first these enactments were carried out by four outside researchers, then the teacher joined in, and during the last third of the intervention period the children also participated in the story dramatization. In the control classroom, the corresponding sessions continued to follow the preintervention procedure, though outside researchers were also present in the classroom and interacted with the children. Before and after the intervention period, several tests were administered to measure the children's narrative comprehension and production skills. The results were equivocal but suggestive. Children in the pretend-play classroom showed significantly greater improvements than children in the control classroom on the comprehension test (where the differences were significant but not substantial) and on two of the three narrative-production tasks—for story length and coherence, but not for linguistic complexity. We agree with Lillard and her coauthors that these

findings are "intriguing" though not conclusive, and research focused on story-dramatization interventions of this sort should be pursued further.

There is also an emerging line of research focused on a storytelling and story-acting practice originally developed by the teacher and researcher Vivian Paley (1990; see also Nicolopoulou 2002) that is regularly used in many preschool and kindergarten classrooms and some early-elementary classrooms in the United States and abroad. This practice includes the dramatization of fictional or fantasy stories, but the stories are composed by the children themselves. During a specified period each day, any child who wishes can dictate a story to a designated teacher, who writes it down with minimal intervention. The storytelling is voluntary, and each story dictation is typically child-initiated. At the end of the day, each of the stories composed that day is read aloud to the entire class by the teacher while the author and other children, chosen by the author, act it out. This is an apparently simple technique with complex and powerful effects. All children in the class typically participate in three interrelated roles: composing and dictating stories, taking part in acting out the stories (their own and those of other children), and listening to (and watching the performance of) the stories of the other children in the class. The story-acting component of this practice gives it a strong pretend-play element. It also helps embed the children's activity in the context of the classroom miniculture and the children's everyday peer-group life. The public enactment of the stories means that the children are, in effect, telling their stories not just to adults but to each other; thus, it offers the children an opportunity for extensive narrative sharing, experimentation, and cross-fertilization.

This storytelling and story-acting practice has attracted a good deal of attention and analysis (Cooper 2005). But so far there have been few studies that attempted to assess its effects systematically on children's narrative development, and the studies that have done so (e.g., McNamee et al. 1985; Nicolopoulou 2002) have been limited to small samples of a few preschool or kindergarten classrooms. Nevertheless, although the published findings still need to be regarded as tentative and exploratory, they have been positive and encouraging. The results suggest that participation in this activity can significantly enhance narrative production and comprehension skills for children from both middle-class and disadvantaged backgrounds. (A large-scale multiyear study with data from a preschool child-care program, directed by Nicolopoulou, is currently in preparation.) In addition to pursuing this promising line of research further, it would also be worthwhile to consider whether and how narrative-and-play-based practices using child-authored stories and adult-authored storybooks might usefully complement each other in the education of young children.

Summing Up and Looking Ahead

Lillard and her coauthors (2013a) have done us all a service with their comprehensive critical review of research about the effects of pretend play on children's development. We want to acknowledge the value of this systematic overview and to reiterate that there are a number of specific points on which we agree, or half-agree, with their arguments. In the end, however, we do not find their critique of this research entirely convincing or illuminating. This is true, in particular, for research that has investigated the effects of children's pretend play on narrative development. For reasons we have tried to make clear, we believe that their assessment of this research and its contributions is overly negative and dismissive. To flesh out and support this judgment, we focused on and reconsidered the body of research that has studied educational interventions incorporating a strong pretend-play element. This research is certainly not without flaws, limitations, and possibilities for improvement. But it would be unwarranted and unfortunate to conclude, as Lillard and her colleagues (2013b) asserted, that this research has provided no "reliable evidence" (50) that pretend play helps promote narrative development. We submit that it has done so, and that the existing body of research on this subject is stronger and more valuable than the review by Lillard and her colleagues suggested.

We have argued that the account of this research by Lillard and her colleagues is incomplete and misleading in significant respects; that their treatment of relevant studies is often too disconnected and fails to situate them in the context of a developing research program; and that a number their criticisms are misplaced, overstated, or conceptually problematic, or more than one of these. Here we would add a more general observation. Lillard and her coauthors claimed that, although they preferred laboratory-based experimental research, they were also receptive to other types of research conducted in naturalistic settings (Lillard et al. 2013a, 27; 2013b, 50). In practice, however, their entire discussion was marked by a taken-for-granted bias in favor of experimental studies and a pervasive inclination to distrust and dismiss the results of studies conducted outside the laboratory. Their methodological criticisms of those studies were sometimes plausible and appropriate, but they rarely showed real appreciation for the distinctive challenges, and distinctive value, of developmental research conducted in naturalistic social contexts. All types of research should certainly strive to be as conceptually sophisticated and methodologically rigorous as possible, and pressing for such rigor should be a high priority, but an

excessively one-sided or misplaced preoccupation with methodological purity should also be avoided, since it can encourage a readiness to throw the baby out with the bathwater.

At the same time, no survey of existing research about the impact of pretend play on narrative development should induce a feeling of complacency or triumph. There is simply not enough of such research. Given the burgeoning interest in both pretend play and narrative, and the strong affinities and interdependence between these two fields of symbolic activity, we actually find it surprising that there have not been more efforts to address them in an integrated way and to examine the relationships between them systematically. Even areas of this subject that have received significant research attention remain full of gaps, unanswered questions, and topics that call for further and deeper exploration.

We have touched on some of those already. Regarding the effects and potential benefits of play-based interventions, for example, we need careful and probing investigations of such questions as the optimal modes and degrees of adult involvement, guidance, assistance, and facilitation; the possibilities for mobilizing the developmental potential of peer cooperation and other peer-group dynamics as well as adult-child interactions; the advantages and disadvantages of different ways of integrating pretend-play and narrative elements with these activities; and the differing effects and potential benefits of different types of play-based interventions for children of different ages and skill levels and from diverse sociocultural and economic backgrounds. It is also important to sort out carefully the different dimensions of pretend play and their impact, separately or in combination, on the improvement in different dimensions of narrative development (and other domains of development). On the other hand, we also need to avoid excessively fragmenting the phenomenon of pretend play, since much of its appeal and significance comes precisely from its integration of distinct elements into a complex but unified activity. There is a persistent need to develop flexible and penetrating, but also systematic and reliable, instruments of measurement that can most effectively help us evaluate the richness and complexity of both pretend play and narrative.

Furthermore, while there are understandable reasons why a large proportion of the research systematically investigating the impact of pretend play on narrative development has focused on play-based interventions with adult involvement, there is always room for more wide-ranging research that also pays attention to more independent and spontaneous forms of peer-group play. And in the most general terms, there is an ongoing challenge to develop theoretical and empiri-

cal approaches that can do justice both to the similarities and interdependence between children's pretend play and narrative and also to the differences between them. As one of the authors of this article has argued (Nicolopoulou 2007), it seems likely that the active interplay and fruitful cross-fertilization between pretend play and narrative in children's experience and development is not a phenomenon that can be taken for granted, but itself represents a developmental achievement that serves as a basis for further development.

In pursuing these and other challenges, the existing body of research on pretend play and narrative development constitutes only a starting point. But it can offer substantial and valuable resources, encouragement, orienting questions, and guidance for further research in this area.

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