Narrative Cognition and Narrative Development

Review of *Story, Listening and Experience in Early Childhood*
by Donna Schatt & Patrick Ryan
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The relationship between language and literacy is a research problem of many years of progress in cognitive science, especially in regard to school (or academic-related) literacy. This is only one of the topics covered by the authors, but the one that will be on readers' mind throughout the six chapters and three appendices. We have an example here of a study written mainly for educators and parents centered on applications for the classroom. It will also be of interest to researchers, both in the applied (to learning) fields and for scientists working in basic research. The book is centered around a strong proposal for re-orienting educational practice. At the same time, it indirectly calls attention to important theoretical questions, reason for which it has been submitted to a linguistics preprint server. Readers may wonder, given the current climate, whether or not Schatt &

Ryan's practical proposal for teaching is viable; and in fact, in this discussion we will set it aside, as a question for another occasion.

Chapter 1 presents an overview of the project, based on a series of interviews of former students and librarians at the University of Chicago Laboratory Schools (UCLS), and introduces the central proposal of the study. As mentioned above, it takes the form of a recommendation for further research: during early childhood, to include the first two or three years of primary school, narrative comprehension from listening to stories represents a key foundation for subsequent literacy learning. The authors go further, making the claim much stronger: that development of the literacy competencies of metacognition and discourse-level processing for the higher order language abilities is especially favored by the experience with storytelling. In particular, they are favored by immersion in the traditional narrative genres and by means of the traditional mode of transmission (prior to widespread literacy in society and in parallel with literacy practice today). This entails the sustained listening of stories recited by memory, without props or illustrations (as in the more common school practice of picture-book reading). Even further, the authors propose that the positive effects on literacy development should be greater for oral presentation by memory over reading from a book in hand. The UCLS early literacy program represents an actual case study of this practice and anecdotal evidence in favor of the proposal, that of enduring educational benefit and a uniquely effective path to the written word (p. 5).

While the exposition mainly relies on observational and interview evidence, we need to remember that plausible hypotheses for controlled study come to the workbench of scientific inquiry from a wide range of sources. In this case, the book suggests a number of thought experiments for the cognitive science study of language ability.

As the authors present an argument for specific methods and materials based on interview data, recognizing that it does not count as evidence for or against, they also make contact with the relevant research literature. Thus taken all together, laboratory and field investigators who work in the area of language development related to academic achievement will find that the book presents a compelling account. It presents one case study, with references to scientific studies, that now forms part of the hypothesis space for questions that have been debated for years on the relationship between language and writing. Olson (1996) is one summary of the controversy, of far-reaching implications.

This review will not only set aside, as already noted, the general pedagogical proposal, but also the proposed distinction between narration by memory and narration read from a text. How important this difference

turns out to be is an empirical claim, as it is, in principle, falsifiable. But it needs to be deferred. Instead, the broader research proposal of interest, for now, suggested by the authors is the *traditional narrative hypothesis*: that there is an important continuity between the competencies of oral tradition narrative (historical and modern) and its written counterpart. This continuity applies even to the cases where the former is largely or even exclusively transmitted by non-literate narrators. The idea that narrative cognition is a fundamental underpinning of language use beyond context-dependent, face-to-face, conversational ability can be traced to the Russian Formalist Vladimir Propp (1968[1928]). Universally accessible to developing individuals in all cultures, the psychological universal would be of the domain-general kind. The results of his analysis pointed to cross-cultural constraints in the basic motifs of narrative and how they are combined, forming a common platform that subserves story-telling and story-understanding ability. A more recent version of the continuity claim that prompted subsequent work on the oral language antecedents of literacy were the studies by Torrance and Olson (1985).

To take one example among others, the Mexican narrative project, *TV Malintzin* (https://linguistlist.org/issues/28/28-3253/), faces the same problem of empirical confirmation/disconfirmation. Observational accounts and interviews that offer testimonial affirmation generally point in the same direction: that children in sustained contact with the extensive narrative tradition of the culture, within the extended family unit during their preschool formative years, are more favorably disposed toward and more favorably situated academically in regard to the challenge of early literacy instruction. Storytellers are often not literate and listeners are pre-literate. The corpus of oral literature in fact has been transmitted from one generation to the next in this story telling-retelling context in the complete absence, until recently, of an available written version of the material. Thus, specifically in these rural community settings, the *traditional narrative hypothesis* needs to face, one day, an empirical test, more interesting given the typical cross-language circumstance, that narratives are not performed, at home, in the language of instruction of school. Importantly, in today's world, this language-contact and modality-contact situation is not exceptional or marginal, but one that characterizes communities across almost all cultures involving millions of school-age children. Again, theoretical considerations based on related research over the years suggest that it is a plausible claim. But to date it remains an hypothesis (Navarrete Gómez, 2015).

Chapter 2 begins with a recovery of the early *morphology of the folktale* concept. Stories that conform to the cross-culturally attested

“classic dramatic arc” (p. 21) provide a framework for attention and comprehension that young children have access to without any formal instruction, automatically accessible in parallel to the development of linguistic competence prior to age three. Crucially, non-linguistic domains of general cognition related to the processing of event structure interface with the language domain, again requiring no prior deliberate learning. Here, narrative ability consists of incipient knowledge of story structure plus beginner discourse-level processing skills. They emerge in receptive ability and before first grade in expressive ability, specific to the text/discourse genre of story. It would be during this stage of development where the precursors of higher-order discourse-level processing first appear, necessarily via the above mentioned interface, to then develop toward comprehension of more complex narrative followed eventually by comprehension of prosaic text of the different expository genres.

In terms of evolutionary antecedents, narrative discourse competencies are plausibly tied to the emergence of human conceptual structure and more and more complex information processing capabilities turbo-charged by the appearance in our species of full linguistic competence. They are today universally implemented in all cultures without exception, independent of literacy. How they are implemented gives rise to the variation observed from one culture to another. But the basic design features of narrative organization appear to be remarkably similar cross-culturally. This cognitive scenario accounts for the robust and completely naturalistic acquisition of “story grammar” and the spontaneous engagement with story by young children described in detail in the first chapters.

Reading, “simply,” forges a new interface with the visual system and the learned skills of decoding written language specific to a given orthography. The first approximation toward constructing this new (now not innately provided) mental architecture is known as “emergent literacy” (p. 23). In this chapter the authors discuss the importance of one of the foundational attainments of literacy in support of the learning claim of the *traditional narrative hypothesis*. This attainment consists of the sustained and focused attention on narrative type text patterns as they become more complex and challenge the processing mechanisms of listeners. In turn, this focused attention contributes to the development of decontextualized language comprehension (p. 24), central capability of advanced literacy-related language use, especially in school. Parenthetically (as it was decided to set this pedagogical proposal aside), the emphasis on this aspect of development may be part of the motivation for the authors’ distinction between picture-book reading and oral storytelling. Their

argument, it is fair to point out, has found some empirical support. Lenhart et al. (2020) are cited, who measured gains in target-word learning and comprehension in all presentations of narrative; and interestingly, unmeditated story listening (not reading from a book) showed a stronger effect than the book-sharing condition. A straightforward causal link bears mentioning regarding this report, that vocabulary knowledge has been one of the most reliable predictors of literacy learning.

Beyond vocabulary, the antecedents for successful literacy learning reside in the early development of executive functions from close listening and concentration—the fine tuning of selective attention and inhibition capabilities and metacognition. The authors present the hypothesis for future research that these cognitive advances are not favored as strongly from watching narrative-format television programs and movies, that arguably also hold viewers' attention to a comparable degree (p. 28).

Chapter 3 references additional recent research to support the narration by memory proposal. Following up on the factor of metacognition and decontextualization is their relationship to the development of Theory of Mind (ToM) evidenced right before entry to kindergarten. As the authors point out, story listening is an active engagement, where a version of the event structure is actively created, forming a coherent mental representation. The conceptualization is "distant," requiring, depending on circumstances, varying degrees of abstraction. Coherent representation depends on simulations that need to be integrated within a new context that is distant to varying degrees (p. 43). Key to the (de)context problem/opportunity is the condition that the models of new situations have to be assembled from only one kind of information: language. Comprehension tasks that become difficult to some degree require reflection on thinking. A central aspect of this reflection is the directing of awareness to character's thoughts and feelings, for entering kindergarten students a chance to apply their newly acquired ToM capabilities.

Related to these developments is the difficult but important research question of how narrative and other prosaic discourse ability is different from face-to-face interactive communicative ability (Pickering & Garrod, 2021). But then might there be a relationship, possibly in antecedents or in co-developing competencies related to ToM and metalinguistic awareness that are shared? In developing conversational ability, children begin to reflect upon conversational alignment and misalignment with their interlocutor. They similarly construct mental representations of the discourse, and soon are able to detect and repair misunderstanding. On this point, in a study of elementary school children,

Tarchi et al. (2019) found that higher levels of narrative structure were associated with higher frequencies of the use of “mental state talk.”

Chapter 4 delves further into the dimension of metacognition and ToM making contact with a representative sample of the scientific literature; this thread of the book serves as a good introduction on the topic for students entering the field. Poetic discourse ability, also of early emergence, is mentioned in passing, for good reason as it would take us far afield. The observation, nevertheless, is well taken regarding the special qualities of narrative (in performance, especially) when it crosses over by exploiting the resources of repetition and rhythmic pattern. Poetry plausibly involves other cognitive domains not implemented necessarily by the network of competencies that conform prose-narrative ability (Lerdahl, 2003).

Chapters 5 and 6 conclude by looking back on the broader landscape with a reflection on alignment and interactivity; the more distant the context of the story is from one’s own, the greater the opportunity is to align and interact with ideas different from one’s own (p. 86). The construction of coherence is anything but passive, even though outwardly it might appear to be. This idea helps us understand how truly productive critical thinking (pp. 92, 100, 103) develops autonomously in children. This underlying theme of the book also suggests follow-up investigation and discussion.

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