

Current Issues in Education

Mary Lou Fulton Teachers College • Arizona State University PO Box 37100, Phoenix, AZ 85069, USA

Volume 15, Number 2

August 15, 2012

ISSN 1099-839X

Negotiating First Graders' Reading Stance: The Relationship Between Their Efferent and Aesthetic Connections and Their Reading Comprehension

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Due to changing demographics, our students are coming into schools with diverse life experiences, which do not always reflect the cultural reality of their schools. Given the research on the importance of using literature that is relevant to the students' background, this study sought to explore how first grade urban students connect to literature that mirrored their personal experiences, but is not always considered appropriate material for classroom read-alouds. It was also of interest to determine how their reading stance, as measured by the type of connections students made, affected their comprehension of the story read. Results indicated that students who assumed an aesthetic stance while listening to the story, and made connections based on direct or vicarious personal experiences, scored higher on the comprehension measures.

Keywords: literacy; primary grades; transactional reading theory; reader stance; comprehension; culturally relevant teaching; multicultural literature

Each fall, teachers begin the new school year by learning about their students: their backgrounds, likes, dislikes and interests. Familiarizing oneself with student interests is important in establishing a classroom community and in helping teachers plan lessons and activities that are relevant for their students. It is especially vital to understand students' backgrounds when one considers that the face of American schools is changing and becoming more diverse. In fact Gay and Howard (2000) referred to the increasing diversity in schools as "the demographic divide" (p. 1) as they highlight the contrast between the largely homogeneous teaching force and the large African-American and Hispanic population in public schools. According to the 2010 census 29% of the U.S. population is African-American or Hispanic (U.S Census Bureau, 2011). However, the changes occurring in our schools' populations go beyond race and ethnicity, and into areas many of us are not always comfortable discussing. For example, twenty-seven percent of children live in a single parent home and 4% of children live with neither parent (ChildStats.Gov, 2011). Approximately 21%, or 15.45 million children, live in poverty – the majority of whom are African-American or Hispanic (National Poverty Center, 2011). Additionally, 1.5 million children (Now on PBS, 2009), or one in 50 are homeless (CNN, 2009) while more than 1.7 million children have a parent who is incarcerated (FCN, 2009).

Due to these changing demographics, our students are coming into schools with diverse life experiences, which do not always reflect the cultural reality of school norms. As a result, it is critical that teachers learn about their students in an effort to create lessons based on the knowledge their students bring to school. Gay (2000) argues that creating lessons that are relevant to students' lives enhances their learning. The notion that students use their existing knowledge to support the learning of new information is also based on the research on schema theory (Anderson & Pearson, 1984), in which "comprehension [acts as] the bridge between the known and the new"(Duke & Pearson, 2002). Making connections is a comprehension strategy that

capitalizes on schema theory. While making connections, students use their personal experiences and background knowledge to link it to the text they are reading, thereby facilitating and deepening comprehension (Harvey & Goudvis, 2007). The purpose of this study is to answer the following questions: 1) In what ways do first grade urban students connect to literature that is relevant to their lives, and 2) What is the relationship between the types of connections first grade urban students make and their comprehension of literature that is relevant to their lives?

Review of the Literature

Making connections is a comprehension strategy that stems from the extant research on schema theory (Duke & Pearson, 2002). When readers activate their schema (what they know) on a topic, it helps them comprehend the text more successfully (Keene & Zimmermann, 1997). Personal experiences and prior knowledge become the source of potential connections. By making connections between the text and the reader's background knowledge and personal experiences, comprehension is facilitated. Harvey and Goudvis (2007) explain that "the background knowledge we bring to our reading colors every aspect of our learning and understanding. If readers have nothing to hook new information to, it's pretty hard to construct meaning" (p. 92).

Efferent and Aesthetic Reading Stances

Students' written and oral responses to literature, along with the connections they make while reading, can serve as a window into the stance students adopt while reading a story (Martinez-Roldán & López-Robertson, 1999/2000; 2000). Rosenblatt's Sipe, Transactional Reading Theory posits that readers can assume an efferent or an aesthetic stance while reading. In an efferent stance the reader's main interest is in acquiring and retaining information after it is read, while the reader's purpose in an aesthetic stance is to experience the feelings and thoughts evoked by the text (Rosenblatt, 2005a). Although a text may be written primarily for a particular stance, the reader's stance is not predetermined by the type of text being read, but by the reader's "selective attention" (Rosenblatt, 2005c, p.56). For instance, while reading a poem the reader's attention may not necessarily be on the aesthetic properties of the text, but on acquiring facts about the setting being described. Furthermore, Rosenblatt (2005a) notes that reading stance occurs on a continuum. All reading events have aspects of the efferent and the aesthetic. The place where the reading event falls on the continuum determines the proportion of each stance. In the primarily aesthetic half of the continuum, the reader's attention will be predominantly on the personal and experiential aspects of the text. As you travel more towards the middle of the continuum, the reader's attention will shift to the more efferent, or cognitive aspects of the text. Rosenblatt (2005a) adds that

"because all readings tend to have such a 'mix,' it becomes important for readers (and writers) to keep their main purposes clear" (p. 37).

Rosenblatt's (1978) Transactional Reading Theory has been used to explore how children respond to literature. Though few studies have focused on primary grade students (Sipe, 2000), Martinez-Roldán and López-Robertson (2000) did conduct one focusing on first graders. They analyzed the discussions bilingual first graders engaged in during literature circles. They found that students made aesthetic connections while exploring social issues relevant to their community.

A few other studies have been conducted with intermediate and middle school students. These studies analyzed the effects on students' writing after having a discussion that focused on aesthetic or efferent components of reading. Many and Wiseman (1992) explored three instructional approaches with third graders. In the first approach students' discussion after reading focused on the efferent stance, in the second approach third graders focused on the aesthetic stance during their post reading discussion; the third approach did not include a discussion after reading. Not surprisingly, when asked to write about the story, the first group's writing focused on literary elements (efferent characteristics), the second group's writing focused on personal responses (aesthetic aspects), and the third group wrote a retelling of the story's events. Similarly, Wiseman, Many, and Altieri (1992) conducted a study with third graders in which the teachers guided three different types of discussions after reading: 1) free discussion, 2) teacher-guided aesthetic discussion focusing on students' personal reactions to the story, and 3) teacher-guided aesthetic discussion along with an efferent components (focusing on literary analysis elements). Dispelling Rosenblatt's (2005b) concern that "explicit teaching of skills destroys the aesthetic stance" (p. 44), Wiseman, Many, and Altieri (1992) concluded that there were no statistically significant differences between the responses of the aesthetics only group and the aesthetics plus efferent discussion group. In essence, discussions that include efferent components do not thwart aesthetic responses. When examining the stance and its effect on understanding, Many (1991) found that fourth, sixth, and eighth graders who assumed an aesthetic stance while reading had higher levels of understanding. Sipe (2000) concurs that including both personal and analytic aspects to reading discussions yields richer understanding of texts.

Selection of Reading Materials

The selection of the book being read during the reading experience is also an important consideration. "Stories close to our own lives and experiences are helpful for introducing new ways of thinking about reading," (Harvey & Goudvis, 2007, p. 92). Temple, Martinez, Yokota, and Naylor (2002) add that when

Table 1
Books Read and Topics Addressed

ords Doreen Rappaport	Racism
Jacqueline Woodson	Parental Incarceration
me Even Bunting	Homelessness
Peter Golenbock	Racism
ome Karin Littlewood	Immigration
ay oı	ay Jacqueline Woodson ome Even Bunting Peter Golenbock

students see themselves represented in literature they feel more welcomed into the classroom setting and take more interest in the book and in the discussion that follows. Keene and Zimmerman (1997) state that when deciding whether or not a book is appropriate for a child, the child's schema for the text content is a key consideration. Thus, selecting books that represent the life experiences of the students should facilitate comprehension.

Given the research on the importance of using literature that is relevant to the students' backgrounds, this study sought to explore how first grade urban students connect to literature that mirrored some of their personal experiences, but is not always considered appropriate material for classroom read-alouds. It was also of interest to determine how their reading stance, as measured by the types of connections students made, affected their comprehension of the story read.

Methods

Setting of the Study

Four first grade teachers at an urban elementary school and their students participated in this study. Three of the teachers were White females and one was an African-American male. The student population (N = 68) was predominantly African-American with 5% Hispanic, 3% Asian and 1% Multi-racial.

Procedure

Each teacher received five books focusing on nontraditional or sensitive social issues. All of the books were new to the children. The teachers read each book one time, during the course of five weeks. The books were chosen to represent social issues that had relevance to the students in the study: discrimination, homelessness, parental incarceration and immigration. These sensitive social issues were identified by the school principal and teachers as pertinent to the student population. Prior to the study, both teachers and the principal were informally

asked about the nature of the home environment, cultural reality, and social issues of the participants. Informal questioning was employed to garner the perspective of the teachers and principal as it related to sensitive social issues in children's books, as well as to inform book selection. Informal questioning enabled the gathering of anecdotal information without breaching FERPA. Table 1 shows the books that were read and the social issue each book addressed.

The read-aloud routines did not include any mention or reference to aesthetic or efferent stances of reading. After each read-aloud, the students completed a brief assessment, which included three comprehension questions and two making connection prompts.. This resulted in a total of 155 responses for the study. All four classes were video-taped during the read-aloud of the fourth book. The video-tape was examined to gain insight on the connections students made during the read-aloud.

Data Analysis

Mixed methods were used to analyze the data in order to fully capture the effects of the study. A qualitative approach was used to code and analyze students' responses to the comprehension assessment and connection to prompts as well as the stance they took while reading, whereas a quantitative approach was necessary to examine the correlation between the stance taken and the students' comprehension score. As a qualitative method, grounded theory (Charmaz, 2000) was used to assist the researchers in coding and analyzing the comprehension assessment and making connection prompts. Rigorous thematic analysis was conducted by the investigators to analyze student responses. Further analysis through constant comparison allowed for the data to merge, alter, and self-correct the themes (Charmaz, 2000). As a quantitative method, student written responses were quantified by assigning a maximum of 2

points for each comprehension question. Scores were then tabulated for each students' three-question comprehension assessment.

The making connection prompts were coded for the type of connections made by the students. The connections were coded as: (a) no data (when the student did not make a connection); (b) uncodable (when the writing was illegible or the drawing uninterpretable); (c) off topic (when the connection did not relate to the text); (d) topic based (when the student retold an aspect or fact from the text); (e) vicarious connection (when the student made a connection with the text and an event that did not happen to him or her) or; (f) direct connection (when the student made a connection with the text and an event that he or she personally experienced).

Each investigator independently scored the comprehension assessments and making connection prompts. When coding disagreements arose, the researchers discussed each issue to reach a common consensus. Thus, a 100% interrater reliability was established. The use of multiple data collection methods and sources allowed for triangulation that further strengthened the validity of the data.

Results were established through a systematic approach to categorizing student responses based on connections. Comprehension assessment data was then coded and categorized into three levels of comprehension: High, Average and Low. Frequency counts for each category were conducted. A regression analysis was also conducted to further examine the relationship between the types of connections made by the students and their comprehension score.

Results

For the first research question, in what ways do first grade urban students connect to literature that is

relevant to their lives, the students responses to the making connection prompts were coded into: off topic, topic based, vicarious connection, or direct connection. These codes were then systematically classified into new categories that indicated the reader stance reflected by the connections the students made. These new categories were efferent stance (for topic based connections), aesthetic stance (for vicarious and aesthetic connections), and a blended stance (for combinations of efferent and aesthetic connections). Figure 1 shows an efferent connection relating the text to their topic of study. After reading about Martin being shot in Martin's Big Words, the child explains that it reminded him of Martin Luther King Jr. The class read and discussed this book, along with other books on the topic, around Martin Luther King Jr. Day. Figure 2 and 3 show aesthetic connections where children are able to use their personal experiences to make deeper connections to the text. In Figure 2, the child makes a personal connection to the book. After reading about the boy's father trying to find a job (they are currently homeless) the child is reminded of when they had to live with their grandmother. Figure 3 also shows the child personally relating to the text when, after seeing Jackie Robinson being ostracized by his teammates, he relates to not having any friends and remembers an experience in the playground. A blended stance was possible because students were asked to make two connections for each book; thus, one connection could have been efferent while the other connection was aesthetic. Results indicate that urban first grade students, who were not being directed to make efferent or aesthetic connections to the text, naturally assumed an efferent, aesthetic, or blended stance when they were read storybooks about topics that were relevant to their lives the lives and of their peers.

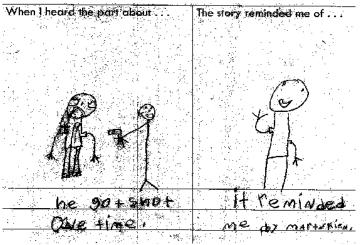


Figure 1. Example of an efferent connection made after reading Martin's Big Words.

when theard	when me and my mom
the DUT + U bout	and my brothos were
thedad hada Job	liveing with my Grandman
I has worry dashout	7
my dad.	

Figure 2. Example of an aesthetic connection made after reading Fly Away Home.

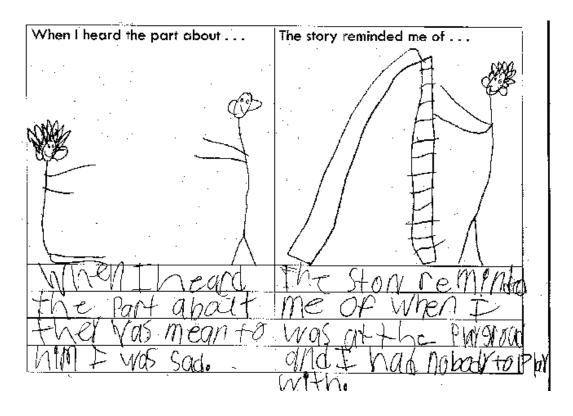


Figure 3. Example of an aesthetic connection made after reading Teammates.

Table 2
Results of Regression Analysis

Variable	M	SD	Range	Aesthetic	Blended	Efferent
Comprehension	1.92	1.21	1-5	.46*	.19	.20

^{*.} *p* < .01

In order to answer the second research question, what is the relationship between the types of connections first grade urban students make and their comprehension of literature that is relevant to their lives; data was coded and categorized into three levels of comprehension: High, Average and Low. Frequency counts for each category were conducted. A regression analysis, see Table 2, indicated that there was a significant correlation between comprehension and the aesthetic stance (r = .46, p < .01). Thus, students who assumed an aesthetic stance while listening to the story, and made connections based on direct or vicarious personal experiences, scored higher on the comprehension measures. Twenty-one percent of the variance in comprehension can be accounted for by aesthetic connections.

Discussion

This study suggests several significant findings. First, though there is a body of research that explores how students respond to literature, these studies predominantly focus on older students (Sipe, 2000), with the exception of research conducted by Martinez-Roldán and López-Robertson (1999/2000) that indicates that children as young as first grade can assume a stance while reading. Though Many's (1991) research found that an aesthetic stance can lead to higher understanding in fourth, sixth, and eighth graders, the research to date does not illustrate how the stance a reader adopts while reading affects comprehension of younger students. Additionally, the text used in the previous studies has not been an area of focus. This study adds to the research by describing how first grade urban students respond to literature that relates to their lives.

Second, Harvey and Goudvis (2007) suggest that children's schemata should be taken into consideration when selecting books for children. Therefore, it is important to know about a child's background, his or her schema, so that teachers can choose appropriate books for their students. Though many teachers may hesitate to choose books about racism, homelessness, or incarceration – even though these may be issues their students are living through – the results of this study supports the use of storybooks about sensitive social issues with children. Some teachers feel that it is their

responsibility to protect children against adult issues, as these issues may frighten or corrupt children (Wollman-Bonilla, 1998). The use of socially sensitive literature in this study shows that children were neither frightened, nor corrupted. Cai (2008) notes that using multicultural literature can result in a higher level of understanding. The results from this study indicate that using literature that reflects students' life experiences, not just cultural experiences but social ones as well, allows children to make personal connections which facilitate and enhance comprehension.

Finally, this study begins to integrate the research on schema theory and making connections with that of transactional reading theory. Though the efferent reading stance is often described as the cognitive or academic stance to reading, this study indicates that making personal connections while listening to a story, and therefore assuming an aesthetic stance can contribute gains in comprehension for young students. These findings support Rosenblatt's position for a place for the aesthetic stance in the educational curriculum (Rosenblatt, 2005).

Limitations

This study has a few limitations. The study should be replicated with a larger sample, and with a broader selection of books that represent different social topics. It would also be interesting to see if the comprehension of young children would benefit as well when children assume the aesthetic stance while reading independently.

In terms of generalization, many teachers work in schools where the curriculum must be strictly adhered to and are therefore limited in the choice of books they can use for reading instruction or read-alouds. These teachers must find other ways to bridge the content for their students.

Conclusion

Enisco (2003) concluded that culturally relevant literature can enhance reader engagement and connections for minority students, especially African-Americans. Since socially sensitive literature is often synonymous with culturally relevant literature, it should be used to support connections and comprehension development for

minority students. Literature that is closely related to real life events supports a cultural connection to text. Research has posited that readers rely on culture to make connections as they engage with literature (Lee, 2001).

In this study, we introduced first grade students to five socially sensitive children's books, Martin's Big Words (Rappaport, 2001), Visiting Day (Woodson, 2002), Fly Away Home (Bunting, 1991), Teammates (Golenbock, 1990), and The Color of Home (Hoffman, 2002) that neither frightened them nor corrupted their innocence. In fact, much like Keene and Zimmerman (1997) suggested, because the children had schemata for these topics via their personal experience, these texts were appropriate for them. While the topics centered on racism, parental incarceration, homelessness, and immigration, the results showed that because the young readers possessed cultural schemata to support connections to the literature they were able to take an aesthetic stance that contributed to gains in comprehending elements of these stories. Indeed, we report that similarly to Many's (1991) study of fourth, sixth, and eighth grade students, primary grade students who assumed an aesthetic stance also scored higher on the comprehension measures.

Children enter classrooms with rich sociocultural knowledge and schemata that are rarely engaged in the curricular and instructional methods. The rich sociocultural knowledge that students bring to school colors their perspective on learning and more specifically on literature (Harvey & Goudvis, 2007). Although there is a belief among some teachers that young children should not be exposed to sensitive topics, our study found that young children were not only able to take an aesthetic stance, they were also able to comprehend story plot and character development.

References

- Anderson, R. C., & Pearson, P. D. (1984). A Schema-Theoretic View of Basic Processes in Reading Comprehension. In P. D. Pearson, R. Barr, M. L. Kamil, & P. Mosenthal (Eds.), *Handbook of Reading Research* (pp. 255-291). New York: Longman.
- Cai, M. (2008). Transactional theory and the study of multicultural literature. *Language Arts*, 85 (3), 212-220.
- Charmaz, K. (2000). Grounded theory: Objectivist and constructivist methods. In N. K. Denzin, & Y. S. Lincoln, *Handbook of Qualitative Research* (2nd ed., pp. 509-535). Thousand Oaks, CA: Sage.
- ChildStats.Gov: Forum on Child and Family Statistics (2011). Family structure and children's living arrangements. *America's Children: Key National Indicators of Well-Being, 2011*. Retrieved from http://www.childstats.gov/americaschildren/fams oc1.asp
- CNN (2009, March). Report: 1 in 50 U.S. children face

- homelessness. *CNN*. Retrieved from http://articles.cnn.com/2009-03-10/us/homeless.children_1_homeless-children-family-homelessness-child-homelessness? s=PM:US
- Duke, N. K., & Pearson, P. D. (2002). Effective practices for developing reading comprehension. In A. E. Farstrup, & S. J. Samuels (Eds.), *What Research Has to Say About Reading Instruction* (pp. 205-242). Neward, DE: International Reading Association.
- Encisco, P. (2003). Reading discrimination. In S. Greene & D. Abt-Perkins (Eds.), *Making race visible: Literacy research for cultural understanding* (pp. 149-177). New York: Teachers College Press.
- FCN (The National Resource Center on Children and Families of the Incarcerated at Family & Corrections Network) (2009). Children and families of the incarcerated fact sheet. FCN. Retrieved from http://fcnetwork.org/wp/wp-content/uploads/fact-sheet.pdf
- Gay, G. (2000). Culturally responsive teaching: Theory, research, & practice. New York: Teachers College Press.
- Gay, G., & Howard, T. (2000). Multicultural teacher education for the 21st century. *Teacher Educator*, *36*(1), 1-16.
- Harvey, S., & Goudvis, A. (2007). Strategies That Work: Teaching Comprehension for Understanding and Engagement (2nd ed.). Portland, ME: Stenhouse Publishers.
- Keene, E. O., & Zimmermann, S. (1997). *Mosaic of Thought: Teaching Comprehension in a Reader's Workshop*. Portsmouth, NH: Heinemann.
- Lee, C (2001). Comment: Unpacking culture, teaching, and learning: A response to "the power of pedagogy." In W. Watkins, J. Lewis, & V. Chou (Eds.), Race education: The roles of history and society in educating African American students (pp. 89-97). Boston: Allyn & Bacon.
- Many, J., & Wiseman, D. L. (1992). The effect of teaching approach on third-grade students' response to literature. *Journal of Reading Behavior*, 24, 265-287.
- Many, J., & Wiseman, D. L. (1992). The effect of teaching approach on third-grade students' response to literature. *Journal of Reading Behavior*, 24, 265-287.
- Martinez-Roldan, C. M., & Lopez-Robertson, J. M. (1999/2000). Initiating literature circles in a first-grade bilingual classroom. *The Reading Teacher*, 53(4), 270-281.
- National Poverty Center (2011). Poverty in the United States: Frequently asked questions. *National Poverty Center*. Retrieved from

- http://npc.umich.edu/poverty/
- Now on PBS (2009, June). Facts and figures: The homeless. *Now on PBS*. Retrieved from http://www.pbs.org/now/shows/526/homeless-facts.html
- Rosenblatt, L. M. (2005c). From "Viewpoints: Transaction versus interaction". *Voices from the Middle*, *12*(3), 56-58.
- Rosenblatt, L. M. (2005). From "What facts does this poem teach you?". *Voices from the Middle,* 12(3), 43-46.
- Rosenblatt, L. M. (2005a). Literature S.O.S.! *Voices* from the Middle, 12(3), 34-38.
- Rosenblatt, L. M. (1978). *The reader, the text, the poem:*The transactional theory of the literary work.

 Carbondale, IL: Southern Illinois University

 Press.
- Sipe, L. R. (2000). The construction of literary understanding by first and second graders in oral response to picture storybook read-alouds. *Reading Research Quarterly, 35*(2), 252-275.
- Temple, C., Martinez, M., Yakota, J., & Naylor, A. (2002). *Children's books in children's hands: An introduction to their literature* (2nd ed.). Boston, MA: Allyn & Bacon.
- U.S. Census Bureau (2011, March). Overview of race and Hispanic origin: 2010. 2010 Census Briefs.

- Retrieved from http://www.census.gov/prod/cen2010/briefs/c201 0br-02.pdf
- Wiseman, D. L., Many, J. E., & Altieri, J. (1992). Enabling complex aesthetics responses: An examination of three literary discussion approaches. *Yearbook of the National Reading Conference*, 41, 283-289.
- Wollman-Bonilla, J. (1998). Outrageous viewpoints: Teachers' criteria for rejecting works of children's literature. *Language Arts*, 75, 287-295. Children's Literature References
- Bunting, E. (1991). Fly away home. New York: Clarion Books.
- Golenbock, P. (1990). *Teammates*. New York: Voyager Books.
- Hoffman, M. (2002). *The color of home*. New York: Penguin Putnam Books.
- Rappaport, D. (2001). Martin's big words: The life of Dr.

 Martin Luther King, Jr. New York: Hyperion
 Book
- Woodson, J. (2002). *Visiting Day*. New York: Scholastic Press.

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Article Citation

Pilonieata, P., & Hancock, S. D. (2012). Negotiating first graders' reading stance: The relationship between their efferent and aesthetic connections and their reading comprehension. *Current Issues in Education*, 15(2). Retrieved from: http://cie.asu.edu/ojs/index.php/cieatasu/article/view/947

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Current Issues in Education

Mary Lou Fulton Teachers College • Arizona State University PO Box 37100, Phoenix, AZ 85069, USA

Manuscript received: 02/27/2012 Revisions received: 04/30/2012

Accepted: 5/25/2012



Current Issues in Education

Mary Lou Fulton Teachers College • Arizona State University PO Box 37100, Phoenix, AZ 85069, USA

Volume 15, Number 2

August 15, 2012

ISSN 1099-839X

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