

Articles

Understanding War, Visualizing Peace: Children Draw What They Know

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Abstract

The current study focuses on data collected from children in the United States shortly after the Yugoslavia-NATO conflict. Fifty-six children in two Midwestern states were asked to draw a picture of peace and a picture of war. Two major themes, peace as interpersonal interactions and peace as negative peace, emerged from the qualitative analysis of the children's peace drawings and their accompanying verbal statements. Five themes were identified in the analysis of the war drawings and descriptions: war as activity, war as group conflict, death as a consequence of war, negative emotions related to war, and war as fantasy. Calculating t-tests for paired samples revealed that children included significantly more objects and more figures in their war drawings than in their peace drawings. However, there were no significant differences between the peace and war drawings regarding the number of colors or the percentage of space used. Developmental features of children's drawings are discussed and implications for researchers are presented.

Introduction

In response to the terrorist attacks on September 11, 2001, art therapists in New York and across the country have used their skills to provide grief counseling and trauma intervention to help individuals cope with the resulting psychological trauma (American Medical Association, 2002). Unlike wars in the past, contemporary political violence is likely to directly impact noncombatant civilians, and the risks to children have increased in the last few decades (United Nations, 1996). According to Myers-

Bowman, Walker, and Myers-Walls (2000), even children not directly impacted by political violence often are aware of current violent political conflicts and report feelings of fear, worry, sadness, anger, and confusion in their reactions to such events. Although not directly in harm's way, children exposed to war through the media or other sources must try to make sense of the information they receive. Recognizing what children understand about war is a first step in helping them cope with war and the feelings associated with it. Awareness of how children conceptualize peace can assist the professionals working with them to find ways to help children identify positive, nonviolent actions they can take in response to war. Therefore, the purpose of the current study is to investigate children's understanding of peace and war by examining their drawings of these concepts.

Many researchers have focused their attention on the impact of war on children living in war zones. Only a few have investigated children's understanding of the concepts of war and peace in general. These investigations have been conducted in Australia (Hall, 1993), Canada (Covell, Rose-Krasnor, & Fletcher, 1994), Israel and Palestine (Spielmann, 1986), Northern Ireland and England (McLernon & Cairns, 2001), Sweden and the Netherlands (Hakvoort & Hagglund, 2001), and West Germany and the U.S. (Dinklage & Ziller, 1989). Similar findings across these studies suggest a common understanding of war and peace among children, despite differences in their cultures and their exposure to political violence.

Children as young as 6 years old demonstrate at least a limited understanding of war, and by the age of 8, their understanding seems fairly complete (Hakvoort & Oppenheimer, 1993; Hall, 1993; McLernon & Cairns, 2001). Children's understanding of war generally includes a concrete description of the objects and activities of war such as soldiers, weapons, fighting, killing, and dying (Covell et al., 1994; Hakvoort & Hagglund, 2001; Hakvoort & Oppenheimer, 1993; Hall, 1993; McLernon & Cairns, 2001). Older children, more than younger children, add abstract ideas to their definitions of war. Not surprisingly, these developmental differences have been linked to the cognitive

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advances in children's thinking identified by Piaget (1952). Thus, older children, in addition to their concrete descriptions of war, include the consequences of war and the reasons people participate in war. They also are more likely than younger children to associate negative emotions with war (Covell et al., 1994; Hakvoort & Hagglund, 2001; Hall, 1993).

Researchers have compared when children first understand war with when they initially understand peace. These investigators generally agree that children's understanding of war precedes their understanding of peace (e.g., Hakvoort, 1996; Hakvoort & Oppenheimer, 1993). Researchers also have identified a progression from concrete to abstract descriptions in children's understanding of peace. Hakvoort and Hagglund (2001) suggested that children's understanding of peace includes core content that presents itself at an early age and continues to be present in older children's descriptions even as they elaborate their descriptions by adding more abstract elements. For example, most children, no matter what their age, define peace as what it is not (e.g., peace is *not* fighting). According to Hakvoort and Oppenheimer (1993), children "conceive of peace primarily in terms of *negative peace*, associating peace with issues such as the absence of war, the absence of war activities, or with a state of stillness" (p. 70). Researchers also have suggested that children's perceptions of peace include interpersonal interactions such as being nice to people, sharing, and being friends (Covell et al., 1994; Hakvoort, 1996).

Because the majority of this research has been done with children outside the U.S., it is unclear whether or not the same findings will hold true for American children. According to the theory of symbolic interactionism, meanings arise from social interactions and are "modified through an interpretive process used by the person in dealing with the things he [or she] encounters" (Patton, 1990, p. 76). Thus, children's interactions within their environments will impact the meanings they give to war and peace. This is in line with a socialization approach to children's understanding of war and peace, which suggests that sociocultural factors contribute to the development of social meanings including peace and war (Oppenheimer, Bar-Tal, & Raviv, 1999). If this is the case, children in the U.S. may have a very different understanding of war and peace than children in other countries based on differences in their sociocultural environments. For example, their relative lack of direct involvement in armed conflict could impact the meanings they give to peace and war. Previous research has suggested that exposure to political violence may, in fact, be related to children's understanding of war and peace, but the results have been mixed, depending on the differences in levels and types of exposure (Dinklage & Ziller, 1989; McLernon & Cairns, 2001; Hakvoort & Hagglund, 2001; Spielmann, 1986).

Symbolic interactionism emphasizes the importance of identifying the meanings children give to peace and war and the relationship of these meanings to sociocultural factors. However, doing so is not always easy. Children's perceptions can be difficult to understand. Their authentic meanings

may not be discovered when adult researchers attempt to fit children's communication of ideas into adult understandings. Previous research on children's understanding of war and peace rarely has taken this into account. Although most researchers have used open-ended questions in their data collection methods, very few have approached analysis of the children's responses qualitatively. Fewer still have used methods other than verbal means to better understand children's perceptions of peace and war.

Although art therapists have long understood that drawings can reflect children's perceptions of their experiences, only a few social scientists have used drawings as a research tool. Some researchers have studied children's drawings in terms of their relationship to emotional and cognitive development (Gardner, 1980; Goodnow, 1977; Kellogg, 1969; Lowenfeld, 1957; Silver, 1978). More recently, some have looked at drawings to explore self-concept, gender roles, and attitudes toward work (Stiles, Gibbons, & de Silva, 1996; Stiles, Gibbons, & Peters, 1993). McLernon and Cairns (2001) are among the very few who have used children's drawings to learn more about children's understanding of war and peace. They asked children ages 6 to 7 in Northern Ireland and England to draw a picture of peace and a picture of war to learn more about the impact of political violence on children's understanding of these concepts. The researchers noted themes of nature and religion within the children's images of peace, and concrete objects and activities in their images of war. The drawings supported findings noted in studies utilizing children's verbal descriptions (e.g., Covell et al., 1994; Hakvoort & Oppenheimer, 1993; Hall, 1993).

Even when their drawings have been used to better understand the meanings children give to war and peace, rarely, if ever, have these drawings been analyzed in terms of developmental differences. According to Lowenfeld (1957), as children mature so do their drawings. "As growth progresses, the creative expression, a visible manifestation of [that] growth, changes" (p. 60). Lowenfeld suggested that children's graphic expressions begin with scribbling and evolve to include consistent use of their own personal schemas to represent the world around them. He described this change in graphic expression in terms of four stages (i.e., *scribbling*, *preschematic*, *schematic*, and *dawning realism* or *transitional*) commonly identified in the drawings of children ages 2 to 11. These developmental stages of drawing are still in use by art therapists and educators today (Anderson, 1994) and graphically reflect the changes in children's cognitive development that Piaget (1952) described. Thus, the increasingly abstract understanding of peace and war identified in children's verbal statements (e.g., Covell et al., 1994; Hakvoort & Hagglund, 2001; Hall, 1993) also should be reflected in their drawings of peace and war.

The current study is unique because it utilizes children's drawings of war and peace to better understand developmental differences in the meanings children give to these concepts and how those meanings are related to sociocultural factors. Also unique to this study was the focus on the perceptions of children in the U.S. and the inclusion of chil-

dren between the ages of 3 and 12. A special effort was made to include preschool children because previous studies often excluded children younger than 5 years. In addition, we employed both qualitative and quantitative analyses.

Method

This study is part of a larger, ongoing qualitative investigation into parent-child communication regarding peace and war and children's understanding of these concepts. The project consists of three waves of data collection. The first wave of data collection took place shortly after the Persian Gulf War in 1991 with U.S. parents and children (Wave I). A second wave of data collection included families in the U.S., Yugoslavia, and Greece and took place during the summer of 1999 through the spring of 2000 shortly after the Yugoslavia-NATO conflict ended (Wave II). The third wave of data collection began with U.S. families after the terrorist attacks in the U.S. on September 11, 2001, and is currently in progress (Wave III).

The present study focuses on the data collected from children in the U.S. during Wave II of the overall project. The interviewers in Yugoslavia did not collect drawings from the children in Belgrade and did not provide a specific reason for not doing so. The drawings by Greek children were unavailable at the time of analysis for this report. Therefore, the focal point of analysis is the U.S. children's drawings and their verbal statements about those drawings.

Participants

Children were recruited through schools, childcare centers, churches, after-school programs, and individual contacts. Fifty-six U.S. children living in the Midwest participated in the study (31 females and 25 males). All children were invited to draw both war and peace. Forty-five children completed both drawings. Six children did not complete any drawings. Two did not complete war drawings, but completed peace drawings. Four children did not complete peace drawings, but completed war drawings. Thus, 47 drawings of peace and 49 drawings of war were analyzed. The children's ages ranged from 3 to 12 years with a mean age of 7.6. The mean age of girls and boys was similar (7.8 and 7.6, respectively). We did not ask the children to provide demographic information other than their age. Gender was identified by the interviewers. Ethnicity was not reported for each child, but based on the interviewers' overall perceptions, the sample was predominantly white with a very limited representation of other ethnic groups.

Procedure

Children were interviewed individually in settings comfortable to them and suitable for interviewing (e.g., the child's after-school program, church, or home). Parents occasionally were present for interviews with very young children, but typically only the child and the trained interviewer were present. In addition to obtaining consent from parents, consent was obtained from each child using a form

designed for his or her developmental level. The face-to-face structured interviews lasted between 20 and 60 minutes. Interviewers informed the children that they were interested in knowing "what kids think about war and peace." The children were told they could stop the interview at any time, ask questions, or tell the interviewer if they did not want to answer a question. Interviewers also explained that there were no right or wrong ways to answer the questions.

At the beginning of the interview, each child was asked to draw a picture of war and a picture of peace. Children were provided with standard white 8.5" x 11" copy paper and colored felt-tip markers of varying widths and hues. A few of the children asked if they could use their own pencils when they drew, and they were allowed to do so. Interviewers were trained to record any comments made by the children while they drew. They also were trained to ask the children to describe their drawings. Unfortunately, the interviewers were not consistent in their approaches. Some drawings had incomplete accompanying verbal statements. Other drawings were not accompanied by any comments because the interviewers did not ask about the drawings or did not record the children's comments. Additionally, some children did not comment on their pictures even when asked. Therefore, approximately 10% of the drawings were analyzed without any accompanying verbal descriptions.

During the remainder of the interview, the children were asked open-ended questions about war and peace in general, enemies, refugees, real war, and related topics. The protocol for this part of the interview is described in detail elsewhere (Walker, 2002).

Analysis

The qualitative data analyses were conducted according to guidelines suggested by Patton (1990). We initially looked at the drawings and read the children's accompanying verbal statements to become familiar with their content. We followed this cursory look at the data with further analysis during which emerging patterns were identified separately for the peace and war drawings. The drawings and their descriptions were examined again with these patterns in mind. During this stage of the analysis, specific themes emerged. After developing these observations into descriptive categories, we returned to the data, seeking consistency and contradiction within the drawings and the children's verbal descriptions. Findings were supported by identifying exemplars among the drawings and accompanying verbal statements.

During this qualitative analysis, specific drawing features that could be quantified also were identified. We chose to compare the peace and war drawings in terms of their formal design elements (e.g., color and space) and recognizable content (e.g., figures and objects). Thus, only those drawings with recognizable content were included in the quantitative analysis ($n = 42$). A coding sheet was created as a guide for counting the numbers of figures and objects included and the number of colors and the percentage of space used by each child in his or her war draw-

ing and peace drawing. We generated hypotheses based on our observations during the qualitative analysis. We expected to find a greater mean number of figures in the war drawings than in the peace drawings. We also expected to find a greater mean number of objects in the war drawings than in the peace drawings. Also, it was expected that children would use a greater percentage of the paper's space when drawing war than when drawing peace and that children would use more colors to draw peace than to draw war.

Results

Two major themes, peace as interpersonal interactions and peace as negative peace (i.e., the absence of war), emerged from the qualitative analysis of the children's peace drawings and their accompanying verbal statements. Five themes were identified in the analysis of the war drawings and descriptions: war as activity, war as group conflict, death as a consequence of war, negative emotions related to war, and war as fantasy.

Peace Drawings

The most common theme identified in the children's peace drawings was peace as interpersonal interactions: being friends, shaking or holding hands, and giving to or helping another or playing together. Forty-eight percent of the peace drawings reflected this theme. An 8-year-old boy drew two people and said, "They are making peace by being friends." A 9-year-old girl described the figure in her picture of peace as "a guy just like kinda giving somebody flowers, but you can't see the other person" (Figure 1). Children also drew people playing games or getting ready to play together. For example, a 10-year-old girl, describing the figures in her drawing, said: "I drew a person asking if they could play soccer, and the boy said 'Yes.' And on the other side, I put a girl saying, 'I'm new,' and the other girl's saying 'I'm Sarah. Let's go play.'" A 12-year-old boy described his drawing of peace as two friends playing Nintendo (Figure 2). "They are playing a Tiny Toons game."

A second theme identified in the children's peace drawings was peace as negative peace (i.e., what peace is not). Forty-two percent of the children's peace drawings reflected this theme. These children described peace as inactivity, the absence of conflict, or the end of war. They often drew one or two inactive figures standing side by side. Many of them described peace as nothing going on, no fighting, or no shooting. For example, an 11-year-old girl described her drawing as a "peaceful, fun environment. Everything is, ya know, okay, no war, no fighting, no disagreements. Everybody just loves each other" (Figure 3). A 7-year-old girl, when describing her drawing, had this to say about peace: "Oh, that's when nothing's going on and you're just sitting in front of the TV and just doing nothing, and you're outside and nothing's going on. It's quiet. It's very peaceful. That's why they call it peace." They also drew people with their weapons on the ground no longer shooting each other. Often these drawings initially looked

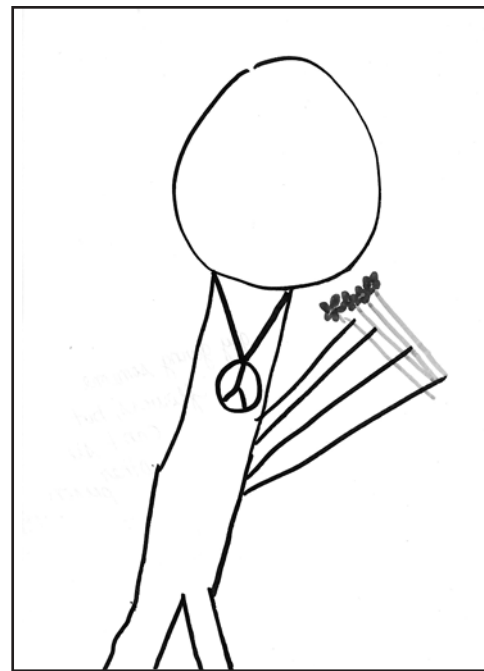


Figure 1 Peace by 9-year-old girl

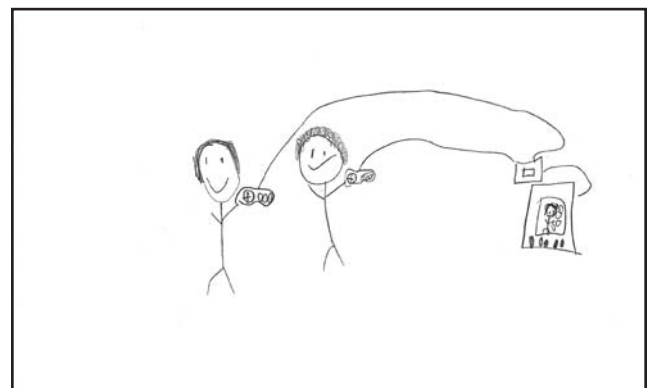


Figure 2 Peace by 12-year-old boy

like war drawings because the children included military equipment. A 7-year-old male described his drawing of peace in this way: "Uhm, they're all dropping their guns, putting their hands up, smiling because they realize peace overpowers violence" (Figure 4).

War Drawings

The most common theme identified in the children's war drawings was war as activity. Sixty-two percent of the children drew war pictures that included actions such as fighting and shooting. Action words were used in many of the children's descriptions of their war drawings. According to a 12-year-old girl, "What comes to mind is violence, shooting. All war really is, is just violence and killing people. That person's falling. A helmet, an action shot. It reminds me of war because a person is shooting another person, violence, and blood." The children's war drawings often had a lot happening in them. The people in the draw-

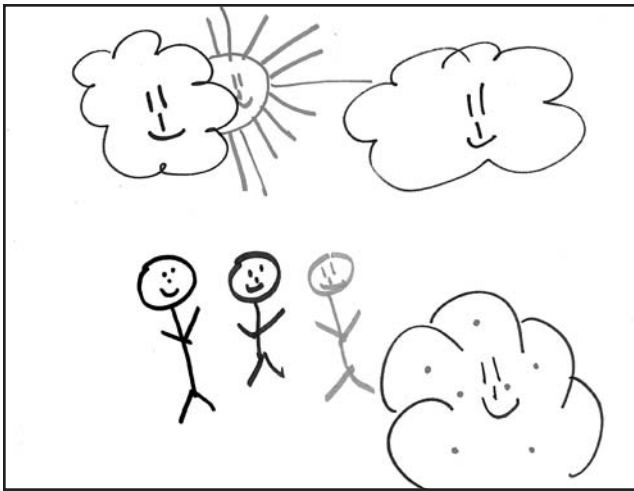


Figure 3 Peace by 11-year-old girl



Figure 5 War by 6-year-old girl



Figure 4 Peace by 7-year-old boy

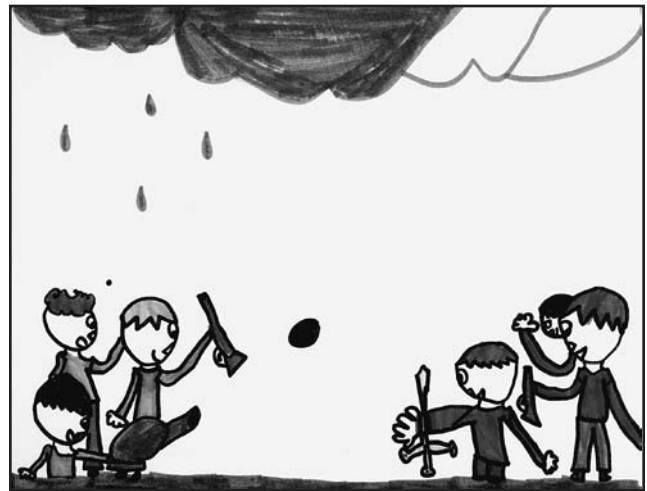


Figure 6 War by 7-year-old girl

ings seemed to be doing things or things were happening to them. This activity was reflected in the verbal descriptions of their drawings even when the figures themselves seemed stiff. The following description by a 6-year-old girl epitomizes this finding:

This is going to be a dead person. That's where a bullet went in and it's bloody. Yucky. This is the gun. Now I'm going to draw another person right side up. He's still at war. We'll make the other gun. And this guy's gonna be shooting the bullet. Another guy shooting—he's a black person. This guy has a different colored bullet—so you can tell which gun it's coming from. Those two people are flying up high. The guy just died so he hasn't hit the ground. He just shot a bullet. (Figure 5)

A second common theme in the children's war drawings was war as group conflict. Forty-four percent of the children described their pictures in terms of sides or teams fighting

each other. In their drawings, people face each other, often from opposite sides of the page. A 7-year-old girl described the teams in her drawing by what people are wearing: "Some people are blue and some people are red" (Figure 6). Other children identified good guys and bad guys, referred to armies and countries, drew flags and uniforms, or mentioned different skin colors. Some children also identified specific groups as the opponents in their drawings (e.g., Indians and settlers, Redcoats and Americans).

Twenty-eight percent of the children's drawings included the third theme: death as a consequence of war. They drew dead or dying people, and described people getting killed. Death was acknowledged even when people were not included in the drawing. An 11-year-old girl described her drawing as "a broken heart because when there's war, lots of people get killed. Everyone's sad because people they love are killed. And the actual people in the war are brokenhearted because they died."

Negative emotions (e.g., sad, brokenhearted) represent a fourth theme in the children's drawings. Twenty-four percent of the children associated war with feelings of sadness; others described war in terms of people being mad at each other. Sometimes children reported feeling sad themselves when they think about war. For example, referring to her war drawing, one 10-year-old girl said, "War is kind of hard to draw 'cause I don't really like war. It's hard to draw 'cause I don't like to think about war." An 11-year-old boy described his picture of war by saying, "Soldiers when they are fighting—it makes me sad." Other children warned the interviewers about the content of their war pictures. When asked to draw a picture of war, a 6-year-old girl said, "Okay, but it's gonna be sad," and a 7-year-old girl said, "This will be yucky." The children, especially very young children, did not always represent these sad feelings in the affect of the figures they drew. Many of them drew smiles on figures they described as sad or angry. However, some children older than 6 indicated they had made a mistake and changed their figures' facial expressions. For example, a 9-year-old boy asked, "Why did I draw smiles?" Then he changed the smiles to frowns on the two figures in his drawing of war.

Some of the children (12%) used fantasy images to describe war, the fifth theme identified in the children's war drawings. Most of these children made references to specific fictional characters (e.g., Pokemon, Darth Vader, Forrest Gump), and one 8-year-old boy drew a fantasy war picture based on his own imagined characters:

This is like a space age war. This guy is, uhm, Jacks and he is 504, that's his number, and his job is to kill anybody he sees that is on the other team and also he is the one guy that's supposed to take chances. He shot this guy and there's lots of guys through this little canyon place. And he also put this bomb sort of thing in the canyon, and it's going to explode in like two seconds...but at least he has a jet pack on the back. And this kind of gun, it's a really good shooter. And he shot him at the helmet. I'm just showing you the action part, not the blood dripping out. (Figure 7)

Developmental Differences

In addition to the themes identified specifically within the peace and war drawings, several developmental differences were suggested by the findings. For example, the youngest children, 3 to 5 years old, were more likely than older children to draw only a picture of war. When asked to draw peace, a few of these children indicated that they did not know how to draw peace or did not know what peace was.

All of the very young children (3 and 4 years old) who completed drawings were in the latter part of the scribbling stage or already in the preschematic stage of artistic development. According to Lowenfeld (1957), children in the last part of the scribbling stage have begun to think symbolically and to name their scribbles. For example, a 4-year-old boy identified one of his scribbles as peace: "The dots are kisses of loving people. They're more people kissing." He identified another scribble, similar in terms of

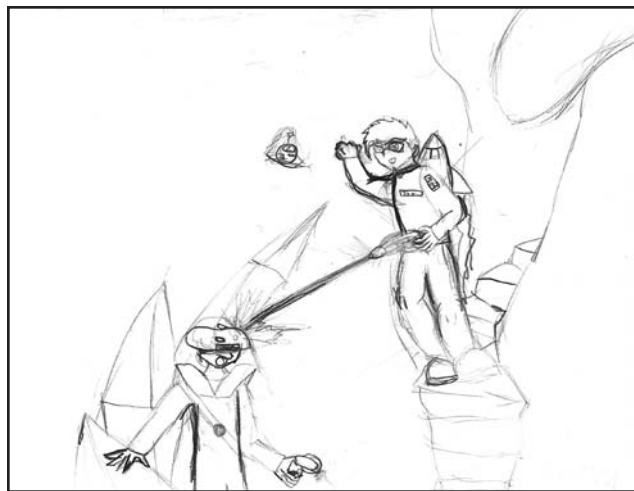


Figure 7 War by 8-year-old boy



Figure 8 War by 9-year-old boy

color and space used, as war: "These are all the wars, all the wars hurting people, the kids." Other children in this stage named their scribbles, but showed a lack of understanding of peace and war. A 5-year-old boy suggested that "war is the aliens with three eyes" and described his peace picture as "a piece of pizza."

As children move into the preschematic stage of artistic development, they begin to include graphic symbols in their drawings, but their symbols often are not consistent from one drawing to another (Lowenfeld, 1957). In the current study, most of the children in this stage were 4 to 5 years old. Some of them represented specific aspects of peace and war. For example, a 5-year-old girl described her peace drawing as "someone helping someone get up" and

her war drawing as “this is someone who’s dead and that’s blood and that’s two boys fighting.”

Most of the drawings by the children 6 to 10 years old reflected elements typical of the schematic stage of artistic development (Lowenfeld, 1957). They used graphic symbols consistently and organized their drawings along base-lines (Figures 5 and 6). These children included more details in their drawings than younger children. This was especially true in their representations of war, which included weapons and other military equipment and people fighting and dying. Verbal descriptions of the drawings also reflected more details about war and peace, and they included more abstract ideas. For example, a 9-year-old boy described the person in his war drawing as visiting her husband’s grave and imagining the way he died (see Figure 8). “That’s her husband. He’s getting shot. It’s what she thinks could have happened.” When a 10-year-old described the people in her peace picture, she emphasized the tolerance of racial differences. She stated, “This is anybody. I’m making different colored people—different races. I like people who are different races.”

The artistic development of a few of the children (6%) went beyond the schematic stage into what Lowenfeld (1957) initially identified as dawning realism and what has been described by later researchers as the transitional stage (Anderson, 1994). These drawings typically included more details, more action, and more accurate spatial and color representation. No clear content differences emerged between the verbal descriptions of children drawing in the transitional stage and those drawing in the schematic stage of artistic development. Also important to note is that children drawing in the transitional stage were not necessarily among the older children (11 to 12 years old). Seventy percent of the children in this oldest age group expressed doubt about their drawing abilities, chose to draw stick figures, and provided fewer details in their drawings than younger children (Figures 2 and 3).

Quantitative Results

Paired-sample *t*-tests were utilized to compare the number of objects, the number of figures, the number of colors, and the percentage of space used in the peace and war drawings of the children in all age groups combined. Only those drawings with recognizable content were included in the quantitative analysis ($n = 42$). An alpha

level of .05 was used. The *t*-tests revealed that children included significantly more objects ($t = -4.316, p < .05$) and more figures ($t = -1.955, p < .05$) in their war drawings than in their peace drawings. However, there were no significant differences between the peace and war drawings regarding the number of colors or the percentage of space used (Table 1).

Discussion

The content of the U.S. children’s drawings in the current study reflected several themes similar to those identified in previous studies. In their drawings of peace, they associated peace with what it is not (e.g., absence of fighting) and with interpersonal interactions (e.g., sharing, friendship). In their drawings of war, they identified concrete and negative aspects of war. They described their pictures using action words (e.g., fighting, shooting, killing), included images of war objects and people (e.g., guns, soldiers, airplanes), mentioned death as a consequence of war, and associated war with negative emotions. These findings were similar to the verbal responses of Canadian children (Covell et al., 1994), Swedish and Dutch children (Hakvoort & Hagglund, 2001), and Australian children (Hall, 1993) and to the drawings by Northern Irish and English children (McLernon & Cairns, 2001).

According to symbolic interactionism, the meanings children give to peace and war are based on the social interactions they have and the interpretive processes they use as they encounter peace and war in their environments. The similar meanings children give peace and war across these countries may be attributed to a shared Western culture in which adults are less likely to identify examples of peace for children than they are to identify examples of war. In the U.S., for example, violent conflict is often labeled war in television news coverage, films, history texts, and video games. Examples of peace, however, typically are not identified in these same sources. Thus, children view peace primarily as what it is not, or they generate their own definitions based on their immediate environments with the consequence that peace is understood as the interpersonal interactions they experience in their everyday lives.

Despite the similarities between our findings and those of other studies in Western countries, two somewhat unique themes—war as group conflict and war as fantasy—emerged in the current study. Hall (1993) indicated that the Australian children in his study associated war with intergroup conflict and team games, but other researchers did not report this finding. These differences may be due in part to methodological variations among studies. Overwhelmingly, previous studies have employed quantitative analysis in which categories were generated by the researchers and then used to analyze children’s responses. In contrast, the current study utilized qualitative as well as quantitative analysis; themes were allowed to emerge from the data thereby emphasizing the children’s own words and images. Likewise, Hall used both qualitative and quantitative procedures in his analysis. The methods used in these two studies were more similar to each other than to the other stud-

Table 1
Quantitative Peace and War Comparisons

	Peace Drawings ($n = 42$)	War Drawings ($n = 42$)	<i>t</i>
Number of colors	4.02	3.88	0.363
Number of figures	2.07	2.83	-1.955*
Number of objects	1.45	2.62	-4.316*
Percentage of space	39.60	44.55	-1.693

* $p < .05$

ies, which may explain why the theme of war as group conflict emerged in our studies but not in others.

Another methodological difference between the current study and most previous studies is the use of drawings versus the use of verbal responses to examine children's understanding of war and peace. This difference may help explain the finding unique to this study that some U.S. children describe war in terms of fantasy stories. It may be that imaginative stories about war are more likely to be generated when a child is asked to *draw* war than when a child is asked to *describe* war. The meaning children give to the act of drawing may suggest an opportunity for creativity, playfulness, or imagining. This same meaning is probably not assigned to answering an interviewer's questions.

On the other hand, the theme of war as fantasy may be related to differences between the U.S. and other Western countries. Most of the drawings in which this theme was identified relied less on imagination and more on exposure to film and video games. For example, a 3-year-old boy referred to Darth Vader from Star Wars when asked to draw war. Another boy, 5 years old, described the figure in his war picture as "Link," a character from a popular video game, and a 7-year-old boy mentioned the Pokémon movie. Popular culture in the U.S. is saturated with visual imagery related to war, which may not be as true in other Western societies. Furthermore, because many of these examples are visual in nature, it is not surprising that the fantasy theme would become apparent in the drawings of children rather than in their verbal responses. More studies are needed, however, to better understand the use of fantasy images to define war and any related cultural differences.

The developmental progression in children's understanding of war and peace identified by previous researchers (Covell et al., 1994; Hakvoort, 1996; Hall, 1993) was supported by the current study. Children's understanding of war seemed to precede their understanding of peace. Children, especially those between 3 and 5 years, were more likely than older children to say they could not draw peace or that they did not know what it was. Some of these same children, however, could and did draw war. In addition, the drawings and verbal descriptions of older children (ages 6 to 10) were more complex than the drawings of younger children (ages 3 to 5), suggesting that these older children had a better understanding of peace and war than did younger children.

These findings are not surprising and most likely reflect the changes in cognitive abilities that occur during childhood. According to Piaget (1952), as children explore their environments, they must adapt to new information by incorporating it into previous understanding or, if they cannot, by reorganizing their understanding in some way to include the new information. This process of reorganization becomes increasingly complex as children develop. "These changes in the *structure of thinking*...have profound effects on the *contents* of knowledge as individuals mature. Consequently, age-related changes in the understanding of peace, war, and conflict are expected" (Oppenheimer, Bartal, & Raviv, 1999, p. 6).

Interestingly, the drawings of 11- and 12-year-olds typically were *less* complex than the drawings of the 6- to 10-year-olds, but because their verbal descriptions were *not* less complex, it is unlikely that this was due to lower levels of understanding of peace and war. A more likely case is that the older children's doubt in their own drawing abilities influenced their decision to draw stick figures and include fewer details. According to Anderson (1994), children can be "very critically aware of the discrepancies between what they see and how they are able (or unable) to create realistic artwork" (p. 43). Concerned about their ability to draw people and things realistically, these older children chose not to try; instead they relied on stick figures and other stereotyped images.

The children's drawings seemed to reflect the progression in artistic development Lowenfeld (1957) described. That is, more children ages 3 to 5 drew scribbles or symbols characteristic of the scribbling and preschematic stages than did children 6 and older, who were more likely to include elements of the schematic stage. Children's placement in one stage or another, however, was not always related to chronological age. The drawings of some 8-year-olds demonstrated higher levels of artistic development than some 12-year-olds. This discrepancy may reflect the children's levels of comfort with talking about peace and war, their cognitive awareness of these concepts, or their levels of comfort with drawing.

Quantitative analysis of the drawings served as support for the qualitative results and provided an additional strategy for comparing and contrasting the children's meanings of peace with their meanings of war. For example, children frequently characterized peace as an interpersonal interaction and war as group conflict. These findings suggest that children viewed peace as requiring only two or three people and war as requiring greater numbers of people. The *t*-tests revealed that children included fewer people in their peace drawings than in their war drawings, and this difference was statistically significant.

The children also included a greater number of objects in their war pictures than in their peace pictures. Similar objects were depicted in many of the children's war drawings. For example, many included military equipment (e.g., guns, airplanes). In contrast, the objects included in the peace pictures varied widely (e.g., flowers, a table, a parachute). This finding seems to support the idea that U.S. children are provided with specific examples of war that help them identify what objects "belong" to war. Because children are provided with fewer examples of peace, the objects of peace are less recognizable to them. Thus, the meanings given to peace must come from their immediate environments.

Children's use of color and space did not differ significantly between their drawings of war and their drawings of peace. Therefore, in terms of formal design elements, there were more within-group similarities than between-group similarities. In general, one child's drawing of peace was more similar to his or her own drawing of war than to his or her peers' drawings of peace. This will not surprise art therapists who typically see the child's drawing style, including his or her use of color and space, as uniquely his or her own.

In summary, the current study provides additional evidence that children's understanding of war precedes their understanding of peace. Not surprisingly, older children had a better understanding of the complexities of these concepts than did younger children. Peace primarily was drawn as what it is not and as interpersonal interactions. The children's drawings reflected a concrete understanding of war and emphasized the negative emotions and consequences of war. In addition, they described war as group conflict, and a few used fantasy images in their illustrations of war.

Implications for Research

The children's drawings proved to be a rich source of qualitative data. They provided us with a nonthreatening strategy to learn about the meanings children give to peace and war. As with any method of data collection, however, limitations exist. Just as language skills may inhibit or facilitate a child's ability to articulate his or her understanding of war and peace, so might artistic skills. Thus, a thorough understanding of artistic development is crucial when analyzing children's drawings.

Equally important during the analysis were the children's accompanying verbal statements. The descriptions of the children's drawings not only clarified the content, but also provided data not necessarily presented visually. For example, war repeatedly was associated with negative emotions in the children's verbal statements about their drawings. This theme may have gone unnoticed if only visual elements had been analyzed, because the children did not always represent the described emotion in the faces of their figures. Sometimes the children drew smiles but said the people in their drawings were sad. The children's verbal descriptions of their drawings also helped prevent us from projecting our own values and ideas onto a drawing by making assumptions about what the child was trying to communicate.

The cross-sectional design of the current study limits our understanding of how the meanings children give to peace and war change as children grow older. Instead of merely comparing definitions given by children of different ages, longitudinal studies are needed to examine developmental changes over time. Also, the small nonrandom sample prevents generalizations beyond those participating in the study. All the children participating were from small to midsize cities in the Midwest. The sample does not represent the diversity of U.S. children. To improve generalizability, future researchers should include a more representative sample. Despite these limitations, the current study provided us with insight concerning how children understand peace and war. The use of qualitative methods allowed us to move beyond adult conceptualizations and categories and provided an opportunity for the children's authentic meanings to be recognized.

Future research in this area is needed to clarify differences between what children *say* and what they *draw* and how these two modes of expression might help us understand the meanings children give to peace, war, and other concepts. There also is a need for cross-cultural compar-

isons in future research. The comparison of the current study's results with those of previous studies from several countries was helpful but limited because of methodological differences (e.g., the analysis of drawings versus verbal interviews). Investigations of non-Western cultures also are needed. Researchers, however, must keep in mind that drawings are not culture-free, and collaboration with researchers intimately familiar with the cultures being studied is needed to help recognize and interpret culture-specific symbols and related concepts.

Furthermore, it seems likely that the attacks of September 11 and the current war in Iraq may significantly impact the meanings U.S. children give war and peace. We have begun a third wave of data collection to pursue these questions further. The visual nature of widespread television coverage may influence how children will draw war and peace. Related topics such as U.S. children's understanding of terrorism, enemies, and Islam also deserve future investigation and are included in our third wave of data collection.

Conclusion

Clearly, children are aware of war even when they are not directly involved in a conflict. In their drawings and accompanying verbal statements, the children in this study associated war with group conflict and identified the violent activities and consequences of war. Children in the U.S. cannot avoid exposure to depictions of violence in the media. Acknowledging that children are impacted by this exposure is the first step to helping them better understand the realities of war. In the current study, some children understood war in terms of fantasy stories and fictional characters. Video games, movies, the Internet, and other media impact the meanings children give to war. Supervision and communication are key to helping children navigate the reality and fantasy of events presented to them through the media.

Most importantly, however, children need examples of peace labeled for them. Peace is not commonly defined in American pop culture, and children need help in understanding peace as more than what it is not. Art therapists can help children identify positive, nonviolent actions they can take in response to war. Helping children to see peace as something they can *do* may help them cope with events they cannot control. Furthermore, sharing their understanding of peace with other children and adults through drawings or other forms of expression may help them visualize a world in which they feel safe and know peace.

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E r r a t a

In issue Volume 20, Number 2, p. 103 (Martin, "Symbolic Graphic Lifeline"), several mistakes appear in regard to Table 3. Text refers to information in Tables 3 and 4 that is fully contained in Table 3 (there is no Table 4). Further, within Table 3, the frequency distribution for descending line quality should have included 73 instances under "scared," and the phrase "approaches significance" should not have been included in the first footnote ($p = .57$ is unequivocally nonsignificant).