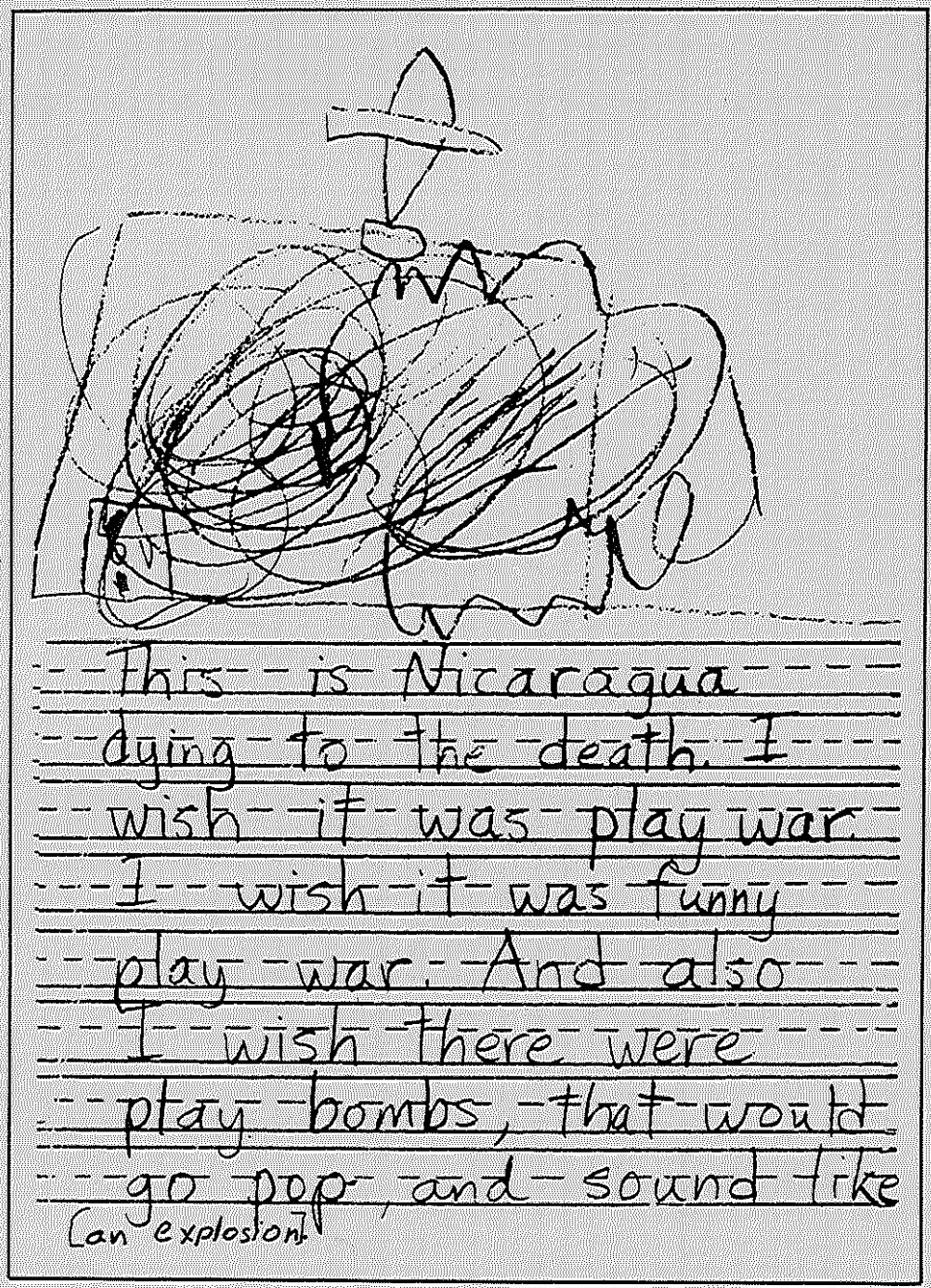
North Dakota Study Group on Evaluation



Brenda Engel

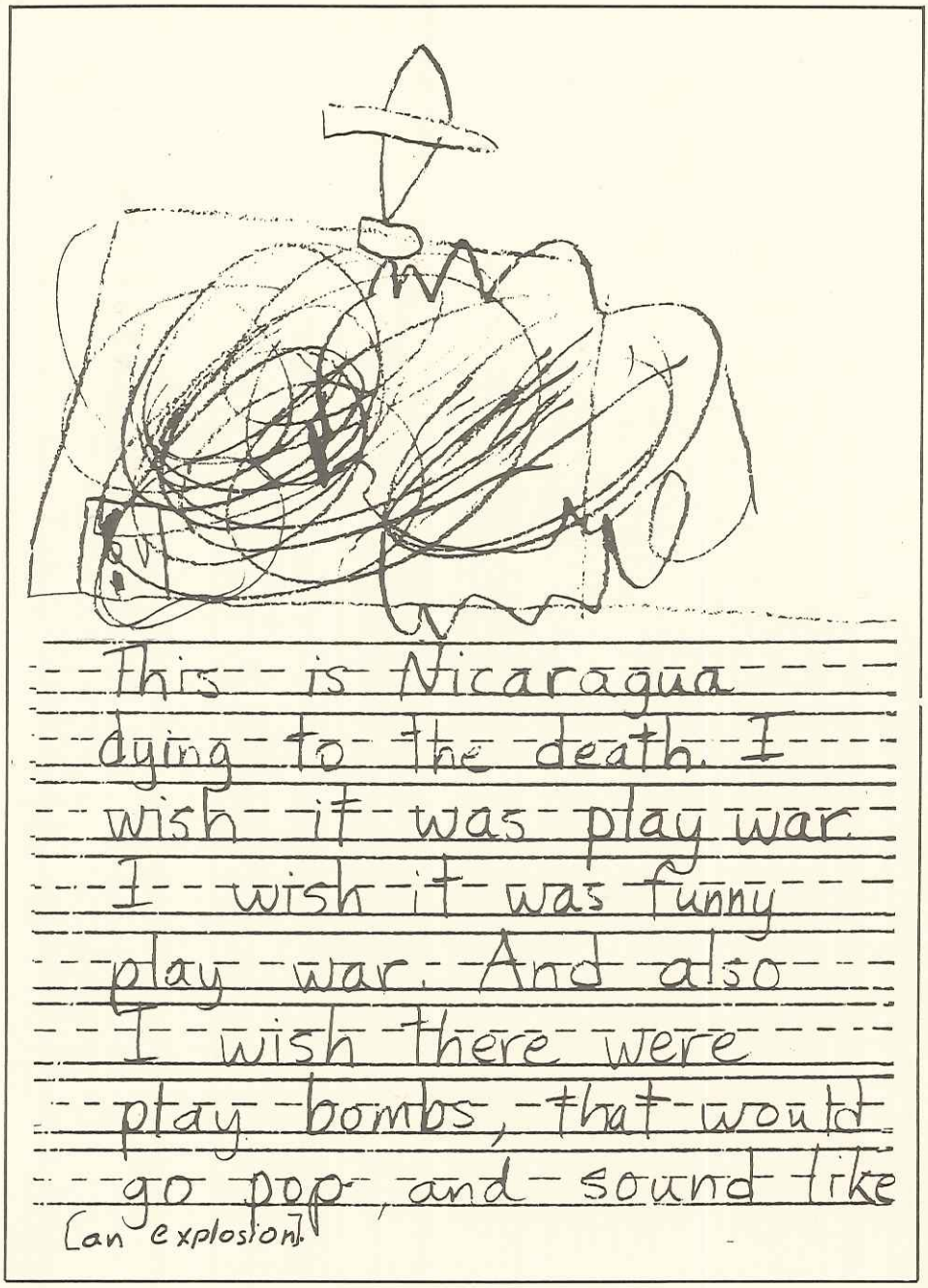
BETWEEN FEELING AND FACT

In November 1972, educators from several parts of the United States met at the University of North Dakota to discuss some common concerns about the narrow accountability ethos that had begun to dominate schools and to share what many believed to be more sensible means of both documenting and assessing children's learning. Subsequent meetings, much sharing of evaluation information, and financial and moral support from the Rockefeller Brothers Fund have all contributed to keeping together what is now called the North Dakota Study Group on Evaluation. A major goal of the Study Group, beyond support for individual participants and programs, is to provide materials for teachers, parents, school administrators and governmental decision-makers (within State Education Agencies and the U.S. Office of Education) that might encourage re-examination of a range of evaluation issues and perspectives about schools and schooling.

Towards this end, the Study Group has initiated a continuing series of monographs, of which this paper is one. Over time, the series will include material on, among other things, children's thinking, children's language, teacher support systems, inservice training, the school's relationship to the larger community. The intent is that these papers be taken not as final statements--a new ideology, but as working papers, written by people who are acting on, not just thinking about, these problems, whose implications need an active and considered response.

Vito Perrone

North Dakota Study Group on Evaluation



Brenda Engel

BETWEEN FEELING AND FACT

Center for Teaching and Learning
University of North Dakota
November 1987

ERRATA PAGE

To marginal notes, page 9, add:

The subcommittee is deeply indebted for theory and procedures to Patricia F. Carini and the Prospect Center, North Bennington, Vermont. We used the formal processes developed over the years at the Center at our meetings to add together our thoughts and perceptions while remaining focused on the children's work. Much of my own efforts conceptualizing the structure of the monograph and sorting out subject headings was done during a summer institute at Prospect Center. There I not only profited from the experience of a group of reflective, imaginative teachers but also from the direct help, interest and insights of Patricia Carini.

Page 43, the first word, "interrelated," should be followed by end quote.

Page 47, the first marginal note should be followed by end quote.

Page 52, the illustration is printed upside down.

Page 55, footnote should read <u>The Bastable Children</u>.

Contents

Introduction

Enola Gay, the B-52 that dropped the atomic bomb on Hiroshima August 6, 1945, let loose into the atmosphere, along with split atoms, a host of troubles that will be with us, it seems, forever. Like the winged creatures that escaped Pandora's Box, the Bomb can never again be contained. Knowledge of its devastating potential represents for our times the knowledge of evil and the loss of innocence associated at other times with expulsion from the Garden of Eden. Growing up in the nuclear age means being initiated into a world on edge.

In the face of young children's knowledge or lack of knowledge of nuclear threat, our common experience as parents and teachers is uneasiness. We wonder if, in their contact with the world outside, the children have learned about the bomb and its awful potential. And we worry about their worry. We're not sure how to broach the subject, how to ask them about it.

Discussion of the possibility that humanity might wipe itself out seems somehow inappropriate for young children in spite of their general familiarity with violence at home, on the street, in school, in the newspapers, on television and radio, by word of mouth, in comics, in books. The scale of violence here is different; in fact, scale makes all the difference. And sooner or later the subject is both appropriate and inevitable: we're all in it together. There's no way we, the adults, can be easily reassuring as we have been other times in the face of danger. Although the hazard seems tremendous, we have no precautions to suggest and little comfort to offer our children or ourselves.

Yet, since the situation is what it is, we have to admit it. Ignoring or denying the threat of nuclear war is not to do away with it but to force it into the dark where it can only assume even more pervasive, protean forms and exercise an even more sinister influence over everyday life. This is not to say that all children are equally concerned about this threat. The extent or even existence of their concern has been, in fact, a subject of heated dispute among psychologists, educators and parents. Some discount children's fears almost entirely, others see them as largely confined to children from upper middle class homes, while still others see nuclear holocaust as the central, terrifying contemporary theme for both children and adults. The fact is that no one

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knows, and no one can know, the extent of children's fears.

Fears are often deeply buried, often unarticulated, often unrecognized. Sometimes they emerge years later. Many adults in their 30s or 40s can recall the terror they experienced during atomic bomb alerts in the public schools in the 1950s when they were required to huddle under their desks--terror most did not communicate at the time. It was a subject of discussion neither at home nor at school. An observer might have concluded that most children took these bomb alerts in their stride, as part of school routine.

In the present situation, we can't be sure, either. There are children, particularly younger ones, who seem not to be particularly aware of or anxious about the likelihood of nuclear war. But some doubtless are. And some are some of the time. It is important that feelings of fear where they exist be admitted, be recognized, and not be closed off. Adults should be prepared to hear children's expressions of concern and respond to them as intelligently and as helpfully as we can.

One way of picking up clues to the quality of children's feelings is by paying careful attention to their representations of the world in both words and images. The imagination relies on words and images, and its products--paintings and poems, playacting, speculative conversations--all reveal something of the inner person.

This monograph is an attempt to do that. It describes children's responses to the nuclear threat, their feelings, attitudes, values--as revealed through the products of the imagination. And, since it would be both frustrating and anti-climactic simply to describe and analyze without offering at least some suggestions, it also considers, in the final section, some ways in which adults can respond to children's concerns about the future, at home and at school.

Between Feeling and Fact originated as a project of the Curriculum Subcommittee of Educators for Social Responsibility.* At first we intended only to collect and look with care at work by children below high school age, work which had some reference to the subject of nuclear war--pictures, writings and, if possible, recorded discussions--to see what they suggested about the children's thoughts and feelings. When we started, there were surprisingly few findings from research on children's anxiety about the nuclear threat. Over the last several years, there have been more. Most, however, have been quantitative and/or "head on"; that is, the result of questionnaires and interviews more or less directly aimed at soliciting information on the subject of interest ("What does the word 'nuclear' remind you of?").

By taking a close look at a body of expressive materials, much of it spontaneous or indirectly

*Members of the Subcommittee responsible for so many of the ideas in this book are: Sara Hull, Beth Lerman, Anne Lynch, Anne Martin, Anne Nash, Sabra Price, Peggy Schirmer and Pam Seigle.

suggested, we hoped to gain some understanding of what lay beneath it; what impulses and feelings had given the work energy and influenced its forms. The particular manifestations of the imagination, in art, play and talk, are like windows into the minds of their creators. Children, like adults, play out their feelings in the context of the world they inhabit. Since both form and content can therefore be assumed as intentional, the manifestations are significant. By looking at and through their words and created images, we believed we might come to understand more about the children's wishes, fears, hopes, and concerns and, consequently, be better able to offer them support. At the very least, we hoped to be able to recognize their anxieties and not simply superimpose our own.

The children's work informing this book is a focused selection. We have considered only compositions, drawings, or conversations that made reference to war. We do not know, even roughly, how many children are thinking about these matters or how much of the time they do it. For the work we have selected, though, we make two claims for validity: the repetition of characteristic themes and their recognizability to us as ex-children. Certain images recur, over and over--escape to another planet, for example, sci-fi utopias depicted in both words and pictures--and the mere fact of their repetition gives us a sense of their importance, even urgency. Our vivid memories of the elaborate forts, hideaways, romantic landscapes of our own childhoods enable us to understand the impulse behind these inventions in their traditional and contemporary settings.

Many individuals and groups contributed, both materially and intellectually, to this monograph. Parents and teachers collected examples of children's work, recorded conversations and discussions, attended meetings, and, in general, supported with enthusiasm the process of the study. The Subcommittee was responsible for the project's conception, for soliciting and receiving the materials, and, finally, for planning the monograph. As a group, we met for over two-and-a-half years, every other week. Guided by the content of the discussions, I then wrote the text.

The text is divided into four parts. The first part consists of examples of children's art, writing, and recorded conversations, surrounded by or interspersed with comments on the basic themes and meanings perceived in them. The selections represent a variety of ages and media. The purpose of this first part is to illustrate the immediate results of the method of analysis; to show, sometimes line by line, the way we found meaning in the materials. The meanings derived are closely tied to the words or lines on the page and relatively little space is given to context and setting.*

*A section of Chapter 1 appeared in the *Harvard Educational Review*, Summer 1985.

The second part picks up and discusses themes identified in the first part--nature and science, power, social continuity, order and disorder--citing other instances where they appear and discussing their significance. The third part elaborates on dichotomies in the selections which we have termed "modes"--playing and reality, knowing and not knowing--and particular modes of expression such as humor and irony. The fourth part discusses the implications of the findings for adults who have close, everyday connections with young children. It offers some suggestions for enabling children to make their own statements about the world as they find it and, at the same time, to imagine other possibilities. The book ends with a brief statement suggesting some of the hazards and opportunities in peace education.

1

Examples*

*Children's work is worth taking seriously, not merely as reflecting the fits and starts towards some ultimate goal of adulthood but in its own right. The limitations in children's experience of the world and in the knowledge and skills that derive from that experience are obvious. Within the limitations of that experience, however, we can see children as thinkers, with ideas they want to explore and express and purposes and intentions which underlie their activity. In these respects children are no different from adults. Their activity and expression can thus be interpreted not only as evidence that they have reached a certain "stage of development" or "level of understanding," nor simply as evidence that they have more or less understood an idea that we have intended to put across to them. Their activity can also be interpreted as representing or expressing an understanding of the world which can be significant to us. It takes a considerable effort of the imagination to empathize with young children sufficiently to begin to understand their perspective on the world...***

The first of the following three conversations between a mother and her two children, Sam age 8½ and Rebecca age 6½, took place on a car trip.*** The father was driving, the mother sitting beside him on the front seat, the children in back. The conversation began with no forewarning as such conversations are wont to do. Both at home and at school, they frequently catch the adults off guard, their defenses low. Unanticipated questions seem to come up most often during moments of relaxation--at bedtime, during rest periods or, as in this case, while being lulled by the vibrations of a car's engine. The mother, who was a member of our study group and thus particularly alert to children's spontaneous questions and speculations about the threat of nuclear war, took out a pad and pencil and wrote down as much of the conversation as she could, as it occurred. The second and third conversations which follow it are briefer and were also noted by the mother at the time:

*The examples included here, contributed by parents and teachers, were drawn from conversations, writings and drawings by children ages 5 through 14. They were selected in particular because they seemed both vivid and representative of children's thinking and feeling about the nuclear threat. By themselves they should be immediate and real to the reader; that is, recognizable as thoughtful, genuine expressions by children--*their* language and, more deeply, *their* ways of thinking and making connections. The selections are also emblematic in that they contain themes and exemplify modes of expression central to the substance of this monograph.

Comments on the selections are based on my distillations of, and additions to, the discussions of the Subcommittee. At each bi-monthly meeting, we considered one piece of work; I tape-recorded the group discussion, then did a combination transcription and summary which I used to inform my writing of the text, incorporating my own thoughts along the way.

**"Classroom Enquiry: An Approach to Understanding Children." Stephen Rowland, *Outlook*, #53, Autumn 1984.

***I want to make clear that the meanings (themes and modes) we identified came primarily out of the material rather than from our own preconceptions, categories, expectations or wishes.

1. S: What would you do if our city was about to blow up?
2. M: What?
3. S: What would you do if you heard on the news that a bomb was about to blow up our cities?
4. M: What do you think you could do?
5. S: Come *on*, Mom!
6. M: I'd hold onto you both real tight and wait.
7. R: No, *really*.
8. M: There's not much you *could* do. It depends on what kind of bomb.
9. S: What if you heard it was going to drop in five days?
10. M: Then I'd put us all in the car and drive as far as I could as fast as I could, but it would be difficult because everyone else would too.
11. S: Why not get into a plane? (Some discussion of this.)
12. R: If you're driving as fast as you can you might go over the speed limit.
13. M: I don't think they would care about the speed limit.
14. S: Even if the bomb doesn't hit you the mushroom cloud can get you.
15. R: What does it do?
16. S: It makes you sick.
17. R: What if the whole world was going to blow up in nine days?
18. M: I'd think about all the things I wanted to do with you and do them; let you do the things you want to do, eat what you want.
19. R: Really, Mom--let us eat all the candy we want?
20. S: I would go to the rocketport and learn how to fly and fly us all to the moon.
21. R: If I was a grownup without children I'd go to the moon.
22. M: Why the moon?
23. R: Because you can live there.
24. M: Why only if you didn't have children?
25. R: Because in a space ship you can't really go this young.
26. S: I'd try to go underground.
27. R: I'd take the outside of bombs and put them on my walls and then they couldn't break them...bombs can't break bombs.
28. S: I would make a space ship when I grow up--a satellite space station and if a bomb came everyone would put their house in the space satellite. It would be like another world with streams and forests. If the world blew up you could watch it and have a nice sunset; then make another ship to the moon; have another thousand houses on the moon.

----- A few days later, at home:

29. S: (holding out his hand, palm up) This is an atom.
30. R: You can't see it.
31. S: I know, even under a microscope you can't.
32. R: Is it an atom bomb?
33. S: No, that's millions of atoms all compacted. Then when it hits something or something...
34. R: They explode?
35. S: Yeah. You can also have an oxygen bomb.

----- After a Mother's Day peace rally, at dinner:

36. R: Is the world going to blow itself up?
37. M: Who's been saying that?
38. R: The woman at that place.

[M comments about bombs, no one wants them to go off; grownups working to stop the possibility of this happening.]

39. R: I have an idea: everyone could decide not to use them.

The very first question put by Sam, "What would you do if our city was about to blow up?" is, to use a phrase with closely related implications, a bolt from the blue. Why bring up an unpleasant, jarring subject just when the family is setting out on a supposedly pleasant expedition to the country? By some natural law, positives often suggest negatives. Someone I know says she can't view a peaceful landscape without thinking of nuclear war. Sam, too, probably enjoying the peaceful family occasion, thinks of catastrophe. In the conversation which follows Sam's destabilizing question, it becomes clear that speculation about bombs and nuclear explosions is not new for him, that both children, in fact, have been concerned with the possibility of nuclear war. As they ask questions, make comments, offer solutions, a number of the themes come up which will be elaborated later on in this book, themes like escape, sci-fi, natural and man-made laws, magic and superstition. It seems worthwhile, in this first illustration, to do a line-by-line analysis in order to make clear how we, as a group, derived meaning from the data of which the recorded conversation is part.

The mother's initial response (line 2) indicates that she is caught off guard at the particular moment the question is put. She has no prepared response and could be seen as even stalling for time. Sam insists, specifying the question further for his mother's benefit (3). She then employs an established tactic, turning the question back to Sam (4). He will have none of this, demands an answer (5). One can almost hear the inflection of rising impatience in the voice of an

8½ year old. The mother offers a reply which reflects her own despair, perhaps reinforced by images of horror which have occurred to her in moments of low psychological resistance (6).

This time it's Rebecca who rejects her mother's reply as being inadequate, perhaps too passive, and consequently not appropriate for a powerful adult (7). The mother still searches for a reasonable response and demurs a bit by saying it depends on "what kind of bomb." Probably all three knew "what kind of bomb" they had in mind: *the* bomb (8). Sam again puts the question to his mother in more specific terms (9). She pulls herself together and suggests an action but immediately undercuts her own suggestion as she imagines the probable character of the hypothetical situation (11).

Sam begins to take on some of the responsibility for a solution at this point (12), although the elaboration of his idea is missing from the account. The mother, as recorder cum responder, necessarily missed some sentences. Rebecca then makes the first of several statements which illustrate a six-year-old's respect for, even awe of, rules and the established order (12). The mother has perhaps had nightmarish visions of all order breaking down (13), of "they" being terrified victims along with everyone else.

Sam shows off information he has picked up somewhere along the way (14). His sister believes in his superior knowledge (15) and, in fact, it turns out that he does have at least a somewhat accurate idea of radiation sickness (16). Rebecca returns to numbers (17). There are echoes here of number games and rhymes; she could easily go on to "what if in 12 days...14 days...16, etc.?" Repetition and ritual. The mother offers an idea which is designed to cheer everyone up a bit even though it doesn't offer a solution to the predicament (17 and 18). Rebecca is incredulous that rules could be set aside (19) and perhaps loses sight, in her surprise, of the awful nature of the crisis being envisaged.

Sam again comes up with a plan, a utopian, sci-fi plan which he probably believes in on the level of feeling, not as so-called objective reality (20). Rebecca echoes her brother although she alludes to an age requirement (21). Their mother now becomes the questioner, perhaps with a sense of relief (22). Rebecca explains quite simply her reason for choosing the moon (23). The mother asks for further clarification (24) and Rebecca cites another bit of lore about the order of things (25). Sam produces a second sci-fi type plan (26). Rebecca then describes her own plan for the defense of her private space, a magical formula which has overtones of incantation, fairy tale, folk myth, and children's games ("You can't fight fire with fire," the game of scissors-paper-stone) (27).

Sam's final plan in this dialogue (28) makes an initial concession to objective reality ("When I grow up"), then goes off into a utopian fantasy complete with technicolor images and literary detail ("streams and forests" are not everyday language). He intends to recreate the familiar, transporting "everyone" and their houses to a new unspoiled setting, presumably leaving behind anxiety about the bomb. The old world and its troubles would end up as a nice sunset.

In the second conversation, Sam is demonstrating scientific knowledge to his sister (29). Rebecca gives the expected, almost ritual response (30). Sam emphasizes the point about size and Rebecca, through an imaginative leap, shows she understands the reason for Sam's interest in this tiny thing in his hand, the existence of which she is willing to take on faith (31). For both children, the atom apparently has some magical qualities, its power perceived as almost mythical, like a genii in a bottle. Sam goes on to explain in correct vocabulary the make-up of an atomic bomb (32) and Rebecca again supplies the expected words (34). Sam gets oxygen and hydrogen confused (35). His grasp of these concepts is partial and may be mainly derived from comics and TV.

In the final conversation, Rebecca again brings up the obviously frightening idea of the bomb, seeing it as impersonal and out of control, an aspect of the world itself (36). Her mother answers with another question (37). Rebecca, like Sam, shows that she too picks up ideas and feelings along the way (38). Her mother reassures her. Rebecca then produces one of those simple, clear, sensible ideas which make adults feel like fools, villains, or both--ideas which are impossible to respond to adequately and which make the whole essential grotesqueness of the arms race come into sudden, heartbreaking focus (39).

The classroom discussion which follows took place in a small, private urban elementary school. The children, as will be evident, came from a variety of backgrounds which influenced their beliefs, needs, and interests and informed their political views (many of which are being expressed here).

The teacher has invited the children, a mixed group of kindergartners and first and second graders, to speculate on a wide-open subject: what they would do if they were bosses of the world. In other words, how they would like to see things changed for the better. They are being encouraged to measure their feelings, their wishes and their fears, against the world as they see it, to bring the two realms--of feeling and fact--closer together through the creation and exploration of a third realm, that of the imagination. The subject of nuclear war is not specifically mentioned at first, although its

shadow, at least for us as eavesdroppers, lurks behind the apparent innocence of the topic.

Since we knew of this teacher's practice of open discussion with the children in her class and since the nature of the topic the children were invited to consider offered us a likely opportunity for insight into their thinking and feelings, we arranged in advance to have a tape recording made of the discussion. To make it easier to locate the passages under discussion, I have interspersed commentary and transcription.

It seems clear that most of the children do know something of the state of the world and about nuclear missiles, even if they do not always have all of the facts under control. At the very least they do get the main idea. The images they are describing, the ideas they are elaborating, allow us to understand more exactly in what terms they know and how they are handling their knowledge:

> Teacher (T): I know that you have all had a little time to think more about what you would do if you were boss of the world, and that some people have done some writing about it, and now I would like to hear your ideas.
>
> Sally: God is really the boss of the world.
>
> T: Does that mean that it's hard for you to think about if *you* were boss of the world?
>
> Sally: No, but I think that God is really the boss of the world. 'Cause he made part of it.
>
> Alex: I don't think there should be a boss of the world.
>
> Martin: If I was the boss of the world, I'd try to make a lot of people happy. I wouldn't make a mouse happy but, like, make things for children and a math machine and something that can help people. Like, people that were in wheelchairs, they'd be luckier than just having wheelchairs, they couldn't go in the quiet loft. They'd have a machine that you'd press a button and wooooo, out comes some wings and you'd fly around. Only, everybody would start getting hurt because they'd want to go in the wheelchair.

At the outset, Sally makes a claim for God as the agent responsible for running the world. Martin makes a basic point, one which had been implicit in the teacher's original proposition: essentially everyone wants to be happy if he or she can manage it; the happier people are, the better. Martin then takes off on a joyful imaginative

binge, only to return abruptly as he remembers the reality of life in classrooms; everyone, he says, would be competing for a turn in the wheelchair. This is the first of several occasions in which a flight of fancy ends with a reminder of the world as we know it.

Jory: If I was boss of the world I'd make a lot of toys, you know what I mean? Like Shogun Warriors, or something like that, and stuffed animals.

T: Jory, the other day you wrote on your paper that you would want to get rid of nuclear missiles--what does that make you think about having a lot of Shogun Warriors?

Jory: They're just like--George brought one--the Sky Hawk up there.

George: Sky *Lark*.

T: You think it's OK to have warrior toys?

Jory: Yaa...

George: If I was boss of the world I would think it wasn't fair to people who were in wheelchairs not to be able to get up into the loft, so I'd make a machine that you would drive in under, and then you'd press a button so it was like an elevator that would lift your wheelchair up, and also I would make a lot more Shogun Warriors like what Jory said, because there are only a few Space Dragons left in the world. They're a kind of Shogun Warrior that are in Japan and I think there's one in America.

T: What is that? I don't think I know about them.

George: It's like a dragon. It's all mechanical and stuff.

T: Was it built, or how did it come to be?

George: Oh, it's not true; it's just a toy. That Sky Lark I brought in was one of the miniships that launched from it. The Space Dragon is like a base up in the sky.

Lars: The word Shogun came from Japan or China, an emperor called Shogun.

Yana: I don't want there to be war, and I want people to be happy but I don't want it to be--you know, the people who want to fight war will not be happy. If there isn't war. Because that's what they like, and

I want them to be happy, so what I would try to do is just calm them down and not think about war any more.

Cal: Well, if I was boss of the world, I would stop war but I would still make toys of war and stuff because they're not really killing. They're not killing things.

T: When Yana said that some people want to fight, you said something softly--do you remember what you said?

Cal: Ya, nobody wants war.

T: Sometimes it *seems* like people want war.

Eddie: They want to fight just for dumb things.

Cal: Soldiers, like, when they go in the army, they want to fight for their country.

Jory's mention of Shogun warriors gives the teacher an opportunity to make explicit the question which has been on her basic agenda all along: How can one enjoy war play while advocating the abolition of weapons in the real world?

George, after returning briefly to the wheelchair theme and offering more information about Shogun warriors, makes a passing remark which can be seen not only as a response to the teacher's question about war play but also as the underlying theme of the entire discussion: "Oh, it's not true, it's just a toy."

After Yana offers her compromise solution to a different paradox--you want people to be happy and you are against war, but what do you do about people who are made happy by war?--Cal reinforces George's clear distinction between playing and reality: "They [the toys] are not killing things," a statement with profound implications. We, the observers, must also recognize this distinction as making all the difference.*

Dana: Um, I would have like, sort of, you know, more amusement parks, more big amusement parks like Disney Land and I would stop most of the pollution, and um, --I've forgotten.

Kevin: I would make the price of cars and houses lower, all prices lower. Like, cars would be two dollars and houses would be four dollars.

T: I'd go and get a new car right away, I know that much!

*D. W. Winnicott, in *Playing and Reality*, traces the origins of the arts and play, as well as "imaginative living" in general, to a created realm: "The third part of the life of a human being, a part that we cannot ignore, is an intermediate area of experiencing, to which inner reality and external life both contribute. It is an area that is not challenged because no claim is made on its behalf except that it shall exist as a resting-place for the individual engaged in the perpetual human task of keeping inner and outer reality separate yet interrelated."

The therapeutic value of play has long been recognized. Adults, however, who see children caught up in war toys and war play, often lose sight of its value and misread investment of feeling for loss of the ability to distinguish between playing and reality. To have meaning, play has to be serious; it can't serve adequately as a "resting place," in Winnicott's terms, unless disbelief is partially suspended and feeling attached to the created realm. One kindergarten child said, in another context, "I know it's not real but you have to *pretend* it's real." Johan Huizinga's characterization of play in *Homo Ludens* as "pointless but significant" shows a similar understanding of the meaning of play. (Huizinga is actually quoting Romano Guardini, *The Spirit of the Liturgy* (Freiburg: Ecclesia Orans 1, 1922) in order to point out a

characteristic common to both play and liturgy.) Although play cannot bring about a true or lasting reconciliation of the inner and outer realms, it can at least provide a place where they may coexist and where the individual can, for the moment, live relatively comfortably, even happily, with both.

Amy: But first you have to get a license.

Robin: A license a cent.

Amy: No, but you have to work for it, you have to go through tests.

T: Also, you have to be a certain age, and you have to learn how to drive, and you have to show that you know how to drive safely, but it's true, certainly lots more people would be able to afford a car.

Sally: I think it would be fair if my sister's dream came true. She dreamed about kids' land and grownups' land and when the kids grow up they go in the grown-ups' land and when babies are born they are put in the other land, but I think if people be boss of the world, they wouldn't show up, like God.

T: What do you mean, they wouldn't show up?

Sally: My mother told me He's everywhere--and He don't show up.

T: Oh, you mean, He wouldn't *show up* so you couldn't *see* Him--is that what you mean?

Sally: Yeah. Like He's everywhere. And I would make a lot of toys. But you can't make a music box, cause it looks like you're invisible making a music box.

T: So you think that if you were the boss of the world you'd be invisible? Because you'd be everywhere.

Sally: I think God *is* boss of the world 'cause He thought up lots of worlds and made the clouds, and everything. My mother told me.

Ian: Instead of making cars cost two dollars, I would make them just cost one cent.

In this discussion, Dana, Kevin, and Sally each demonstrate the existence of wishes and concerns having nothing to do with nuclear bombs--desires for both luxuries and necessities which, for them, have importance. Some of their speculations are brought back to earth by mention of everyday requirements for licenses, tests, and the like, which temporarily dampen the spirit of invention:

Dana: You know what, I would have this giant crystal ball and I would look into it, and if somebody wished something good, I would decide if I wanted to make it

come true. And I would have blue sky all the time and there's sun, and there would be rain too but there would still be blue sky. And I'd have everybody have enough money to have at least one trip on the plane.

T: Dana, have you ever been on a plane?

Dana: I've been on a sea plane but that's all.

Martin: I have one thing for Dana. What if you were not home--you weren't at your house--and there was something good happening? I think the crystal ball should decide if something good's happening or not.

Dana: Well, if I wasn't home, it would sort of contain the spirit of my mind, freeze me for a second, and then see what decision I would make.

Martin: I get it. Now, I have one thing for myself. If I were boss of the world, I would mostly make things that, well--some war toys make people think of war and then they wanted to be in war, and that's why my mom doesn't get me like guns and caps, 'cause she really hardly thinks that if you get a gun with caps then, when you're older, you might start thinking that war is good, when you're older. On *Sixty Minutes* once they showed how there's a boy who's ten years old and he's always playing video games, and he has some fish and he plays video games with his fish! He's so totally zonked that he just makes up a little control thing and he looks in the fish bowl and he goes, blub blub blub blub...boom boom...blub blub.

T: Martin, I want to go back to something you said. We have several kids in our class who like to play with toy weapons and--well, let's see, George, what do you think about what Martin said? If you play with toy weapons?

George: I play with toy weapons--like, I have a lot of space Legos, and some even come with miniature guns. And I already have a wooden battle axe, but I don't use it on people, only swing it where people aren't 'cause I don't want to hurt them. Once I had a plastic sword and battle axe, and when Robbie came over and we were hitting them together--but we were making sure that we weren't hitting too low, and we were also sometimes using them in slow motion.

Cal: Well, that can be true about the video games. People--well some people--well most people--I don't know--well, like me, I play war a lot, and I draw war and I do games of war, except if you're a teenager and you're playing video games too much, that means you're addicted to them.

T: Well, what do you think about what Martin said?

Cal: Well, it doesn't really--well, my mom's not crazy about weapons, except she buys them once in a while. She doesn't really think that--like, I have a wooden battle axe too--she doesn't think it should be used for war...until a long time ago...

T: Well, and what do *you* think?

Cal: I think it's all right to have at least one weapon, a toy one.

T: One thing Cal wrote earlier was--what?

Cal: I would stop war.

T: And yet he is someone who does like to play with war things.

Mel: I like to draw war because I like the sound of guns but you know, once when I was washing my car in the summer of '80, I used, like, a pistol that shoots water, and now I'm using that a lot and I'm thinking that guns wouldn't have to be used for shooting people. In the future there could be a book that has a button that makes a spray that makes the picture change. There'd be these weird kinds of guns and in the future a gun would be like a name tag. You'd hang a gun on the table and it would mean you're there. In the Middle Ages the shape of a gun didn't mean, "Oh, that's a weapon!" See, in the Middle Ages a gun was a cooking tool, you stirred with it, and you would shoot little capsules into a carrot, for the soup.

Dana: Martin, like you were saying earlier about someone playing video games with his fish--I don't know why anyone would kill his own fish.

Martin: He was playing "Fish Attack."

T: He was playing as though his fish tank were a video game?

Martin: He wasn't like me or Cal, going, "This is fun, I'd like to play this tomorrow"--like we want to play a certain tag game every day.

T: I want to stop you because I want everyone to have a turn.

Kevin: I, I think it would be good to sell cars for just one cent but you wouldn't get that much money a

day, 'cause a cent is a lot less than two dollars. You'd get a lot more money than if you just charged a penny.

T: I have one more question and then we're going to go outside. A lot of people's ideas are things to make people happy. Also a number of people talked about wanting to get rid of war and weapons. My question is, do you think there would be some people who would not be happy?

Amy: There might be two or three people, but not many.

Dan: President Reagan.

Bill: He wants to make weapons.

Dan: Nuclear bombs to threaten each other.

Amy: They wouldn't want to destroy half the world.

Bill: All the nuclear bombs in the world can destroy half the world.

Dan: Or could damage the world.

T: President Reagan, and we've said this before, is not someone who wants to have wars. He's doing what he thinks is the right thing in order to not have wars. A lot of people don't agree with him and others do agree with him.

Orin: He, like, tries to make everybody happy and tries to stop wars but....

Lars: That isn't really true that he tries to stop wars, because what is he doing to El Salvador? He's giving El Salvador lots of weapons to wreck the country. It's not a very good war in El Salvador. So he's killing a lot of people there, and I don't really think he wants to stop war.

Cal: Well, El Salvador dropped a bomb on the American navy.

T: No.

Cal: Yes, it said in the paper.

T: When, today?

Cal: No, about a month ago. It said in the paper that El Salvador dropped a bomb on American navy territory.

T: I don't think so, Cal, I think you're mistaken.

Cal: No, my mother read it to me.

T: Well, I haven't heard anything about that. I think you might have misunderstood.

Lars: If they don't do anything to stop it, then how could they believe in stopping wars?

Amy: It doesn't matter what you say, it matters what you do. President Reagan is always saying in the newspapers that he wants to stop war, and even though he's doing that he is making a little more of nuclear bombs.

Dan: To threaten people.

Bill: I know. He said he wouldn't.

Martin: It isn't President Reagan that's fighting. He's telling other people to fight, but there's been a lot of protest in--not El Salvador, but somewhere around there. They're protesting because President Reagan wants to put or, like, store nuclear aid in the deserts there. Storaging nuclear aid there--and people don't want that in their country because they're afraid. What if something goes wrong, or something? But they're not using it on them but just storaging it there. But President Reagan's wrong on that because--why doesn't he store it in his own country? And also I got a peace letter from President Reagan, with all these peace words.

T: We have to stop. There are just a couple of things I want to say before we do. First of all, it sounds like a lot of people are hearing about nuclear weapons and things in the newspapers and from your parents, but you all need to know one thing that's very, very important. And that is that there are no nuclear wars going on anywhere right now, even though there are wars going on that were not started by President Reagan, there are no nuclear wars any place. People all over are working really hard to make sure there won't be any. If anyone has more to tell me, or has questions, will you come up to me outside?

Martin eventually turns to his own wishes and starts to consider what kinds of toys he would have if he were boss of the world; then he stops, remembering his mother's opposition to war toys. His mother has evidently told him that playing with guns when you're young may lead to militarism when you're older, to thinking war is good. Martin is reminded of a 10-year-old boy on a TV program

who was hooked on video games, the logic of the association becoming apparent from subsequent statements interspersed by Martin and Cal during the rest of the discussion. The next time Cal speaks, he elaborates on Martin's perception that war play and war drawings are different from forms of true addiction: "I play war a lot, and I draw war and I do games of war, except if you're a teenager and you're playing video games too much, that means you're addicted to them." Martin, after more exchanges, again returns to the theme of addiction: "He wasn't like me or Cal, going 'This is fun, I'd like to play this tomorrow'--like we want to play a certain tag game every day." For Martin, the 10-year-old's game of fish attack was not play; it was not voluntary and probably not even fun. It had become obsessive and delusional, unlike their own games of tag. Martin and Cal understand addiction to mean loss of control, specifically of the ability to distinguish between playing and reality, along with loss of the ability to return at will from the world of the imagination to the real world.

In the meantime George has elaborated on the idea that toy weapons aren't meant to really hurt people, that you can use them thoughtfully and with care, even "sometimes using them in slow motion." What they *are* meant to do, perhaps, is extend the small amount of power possessed by the relatively powerless, giving them, for the moment, a feeling which may carry over to some degree into reality. The arm is an agent of power and the gun or pistol, whether real or toy, is an extension of the arm. It is not illogical, after all, that weapons are referred to figuratively as arms.

Cal offers a plan that is a compromise between his wish for war toys and adults' concerns about them, a plan which he hopes will be acceptable to both adults and children: "It's all right to have at least one weapon, a toy one"--this in spite of his outspoken opposition to war.

Martin's wildly inventive and quasi-literary ("in the summer of '80") trip into the future and the past is intended to further rationalize the possession of weapons by explaining their possible non-military uses: pistols can shoot water as well as bullets.

The teacher, despite her persistent interest in her own agenda--war and war toys--was willing, even delighted, to go along with the children's inventive ideas: "I'd get a new car right away, I know that much!" It is perhaps this willingness which makes the children willing, in turn, to give her questions due consideration. There's a kind of give-and-take, back-and-forth quality to the discussion. Towards the end of the discussion, she returns to her more ordinary teaching responsibilities: she straightens out facts and corrects misinformation. She also assures the class that there are no

nuclear wars going on in the world. Even in her defense of President Reagan's intentions not to have war, she supports a feeling of confidence in what the Presidency stands for: authority, justice, and order--principles on which the children's sense of security rests. Finally she leaves the door open for further communications about the threat of nuclear war, no matter the guise in which it appears.

The discussion is both about, and a demonstration of, the relationship between playing and reality. The children periodically take off into the wonderful world of imaginative invention--playing with ideas and images of flying wheelchairs, more Disneylands, affordable cars and houses, kids' land and grownups' land, crystal balls, guns that serve as cooking utensils. Just as periodically they return, sometimes rather abruptly, to the real world of competition over getting a turn, pollution, required driving licenses, teenage addiction, nuclear bombs, and El Salvador. Much of the explicit content is also about playing and reality: Cal's lucid statement, "Well, if I was boss of the world, I would stop war but I would still make toys of war and stuff, because they're not really killing," is echoed in the words of the other children. It's as though the children are trying to reassure their teacher, "Don't worry, we know the difference between Shogun warriors and El Salvador."

Both the assigned topic--"If I were Boss of the World"--and the teacher's agenda--war and war toys--aim towards a particular area of concern which, for the children, is probably only one among many. Children have always had and still have many fears. Powerlessness is felt not only in relation to government policies but also possibly in relation to one's father, mother, sister, brother, school principal, or neighborhood gang. Nonetheless, there are kinds of fears, like kinds of knowledge, which somehow seem more appropriate or natural; there are others, like fear of the bomb,* which we think should be unnecessary because we have brought it on ourselves.

Even though the topic had been assigned in advance and the children had had the opportunity to think about it for a couple of days in both words and images, the discussion itself represents a further working out of the issues, a kind of group thinking--a process likely to occur only when such exchanges are part of the everyday life of the classroom. The children quoted feel free to expose their wishes and dreams. If the class had not built up a habit of respectful and trusting group communication, the subject might well have been awkward and embarrassing, its introduction seen by the children, perhaps, as an invasion of privacy. Their responses might have been, as a result, guarded and dry, with none of the idiosyncratic and inventive imaginings which lead so directly to useful perceptions. The

*Anna Freud and Dorothy Burlingham wrote in 1943, from the midst of the London blitz, "We shall know that peace has returned when nothing is left for the children to be afraid of except their own former ghosts and bogeymen."

familiar situation of the father who has to work up his courage to explain to his son the "facts of life" illustrates the point well. Subjects laden with intense feelings are embarrassing if brought up only on special occasions. It takes practice to expose to the light of day ideas which might betray strong associated feelings.

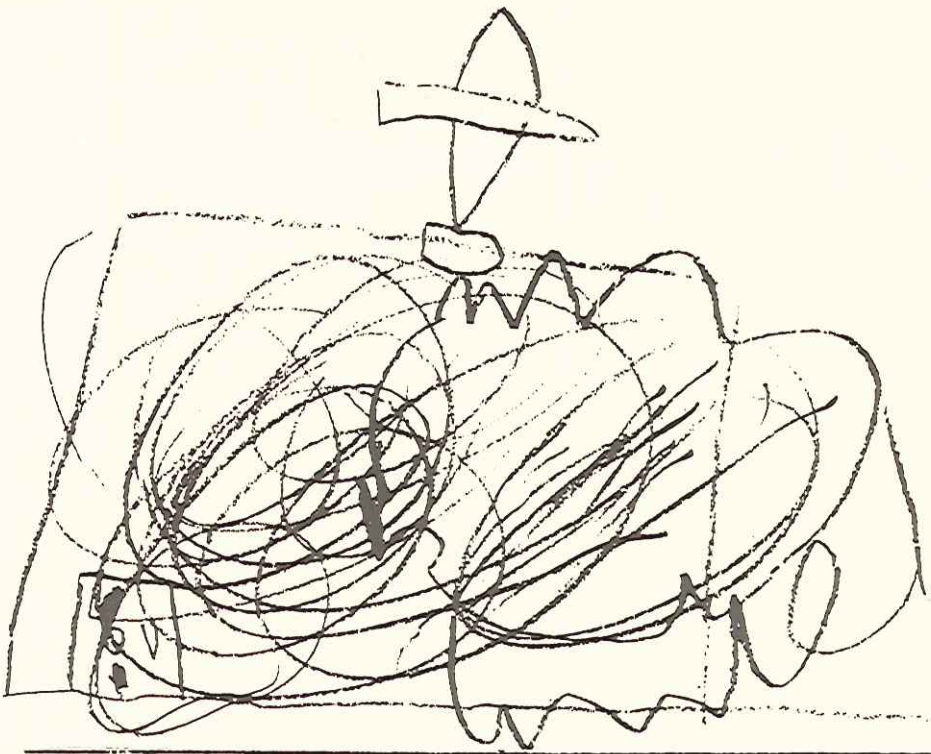
To the adult, at first reading, many of the children's ideas and speculations seem whimsical or off-the-mark; the discussion seems to drift and, at times, seems in danger of going off altogether. We wonder if they are really listening to each other, if they remember what they were supposed to be thinking about. After some further thought, however, some new understanding occurs, and we can see that there is hardly a sentence which doesn't add to the clarification of the subject at hand: how to improve the world. The important themes recur with startling persistence, and all the images offered are of immediate interest.

The form of the discussion is not linear, like an essay with a beginning, middle, and end. It is more like the process of painting a picture: areas are first sketched in, later returned to and elaborated. To extend the metaphor, the teacher can be seen as having "framed" the question from the start, thus keeping it within bounds. The children's impulses, articulated and given form in their wishes and dreams, are the wellsprings of their thought: Cal, recognizing his own pleasure in war toys and, at the same time, adult uneasiness about them, comes up with a workable compromise--possession of "at least one weapon, a toy one."

Through what might be termed "free play of the imagination," the subjects of war in general and nuclear war in particular are worked over, brought up in various connections and related to other issues: control (God, the President, magic crystal ball); powerlessness (the disabled); happiness (entertainment, travel, security); the economy (needs of the poor); and international relations and morality (El Salvador, the bomb). Just as the discussion was not a unique event, its elements constitute a fabric of concerns and interests which may have come up on previous occasions, although the issue of the nuclear bomb may stand out for some children, as it would for some adults, as a particular kind of horror.

The information offered by the children, though often inaccurate, is characterized by what might be termed "logic of feeling." Thus, the children associate pollution, the bomb, high prices, El Salvador--all events which for them bear some threat to happiness and which they would do away with if they were bosses of the world. And essentially, of course, we know they're right; these events are in fact integrally connected.

Facts, *per se*, are relatively easy to come by, and Martin, Sally, Cal, Amy, and their classmates will have opportunities, as they grow older, to correct their



This is Nicaragua dying to the death. I wish it was play war. I wish it was funny play war. And also I wish there were play bombs, that would go pop, and sound like [an explosion].

Illustration 1

misinformation about the world. Even now their teacher, in her role as responsible adult, is straightening out facts whenever she thinks them far enough off to cause serious misconceptions.

The picture and accompanying dictated story (Illustration 1) is the only example we have from a child who has actually experienced war, a 5½-year-old from Nicaragua. Poignant and longing, conveying a sense of deprivation, it has a distinctive tone.

The story begins with a stark reality familiar to this child. "Dying to the death," a striking phrase, reminds us of "stone dead" or "dead as a doornail." Young children don't necessarily see death as permanent; in this case, some sense of extremity, even reality, is being emphasized. Nor is "playing dead" what Carlos intends to convey to his audience. "Dying to the death" is emphatically real.

In the next sentence, Carlos longingly mentions play, reminding us that play, not war, is the proper domain of childhood. Carlos wishes the events he witnessed in Nicaragua not to have been true. The transition from the first to second sentence is abrupt; there could have been a sentence between the two, something like, "This is *real*, not play;" and then "I wish it *was* play war." Carlos' version, without the softening transition, is more dramatic, more effective.

The next sentence repeats the previous one, with one word added, "funny." "Funny" is probably being used as an adjective meaning "fun." Real war is no fun, no joke; play war is. Like Mel and Cal, Carlos likes the idea of playing war--making sound effects, pops and bangs. He would probably have had a "funny" time playing with them. Mel too said he "liked to draw war because I like the sound of guns." Carlos' knowledge of bombs, however, comes from experience.

The drawing which goes with the story shows an airplane going straight up, leaving a scene of devastation: Nicaragua "dying to the death." There seems to be a rectangular house with a door, possibly, on the lower left. (It's hard to say what the three vertically arranged dots on the door represent.) The picture has two kinds of "action" lines scribbled over the house: one, smooth and circular, could be smoke or simply a representation of general chaos; the other, with sharper, less regular segments, could be the bomb itself, exploding--not a "play bomb."

Carlos' images came from an almost unbearable reality. Images for the other children whose work is discussed here and who have not experienced war pick up on and use a miscellany of ideas and images which come to them via the surrounding culture--television, movies, comics, books, overheard conversations. In the early years, they combine these ideas and images with little regard to consistency of time or place; George, for

instance, plays war with both space Legos and battle axes. It's the idea that matters and the young imagination can draw freely, for its furniture, from many sources. Science fiction, in particular, flourishes as both a source and outlet for imagery (even though space science itself, since the first walk on the moon, has become relatively dull, militaristic, and, except for a few dramatic blast-offs and threatened catastrophes, dryly technical).

Sam uses sci-fi ideas combined with romantic images from literature ("streams and forests") to formulate his personal escape plans. (Utopian solutions nowadays are frequently located away from Earth altogether, somewhere in outer space or on the moon, rather than simply away from civilization and civilized constraints like Huck's raft or Tarzan's jungle. Dana's crystal ball comes from the literature of fairy tale and myth and Mel's offbeat notions about the Middle Ages seem to come from some misreading or misunderstanding of history.

In this next example, by a fourth-grade girl in a public elementary school near Boston, words and images come from several genres: science fiction, tales of mystery and adventure, and traditional ghost stories, all framed within a convention of realism. The realism of the opening, underscored by the date and everyday school setting, is meant to encourage belief, somewhat as Conrad's Marlowe invites the reader to believe his tall tale. The choice of three endings is reminiscent of choices in myth, folk tale, and fairy tale (three wishes, three caskets, three doors).* The story is, in fact, making use of a recent convention in children's literature by which the reader is given a series of binary choices, each of them fully written out:

*We are also, accidentally but strikingly, reminded of the end of Jonathan Schell's *Fate of the Earth*; Schell lays out only two choices for humanity: a future or self-destruction.

The Haunted Fortress

It is 1986. Class III is studying computer. After class school will be dismissed. Jamie is studying Algebra, computer, and composition.

"It is real hard," he said to Miss Squire, his computer teacher.

"I know, but it is worth it," she replied.

The bell rang and Jamie shot out like a wildcat. He went to his clubhouse, the Haunted Fortress. It was like a graveyard, the clubhouse was. He told the "guard ghosts" the secret password. Since he was a devil they let him pass, but they warned, "Our club is in grave danger! No one but members shall pass. The chief is screaming hysterically and hopping up and down. He has seen an all out ghost alert on the video. They say, as he relates it, that the soldiers special guns create nuclear fallout worse than the bombs themselves!! They are advancing very rapidly. We shall try to hold them off and use our special

escape plan, while our Haunted Airlines plane drops bombs...."

TO THE READER: If you choose to have the escape plan go into effect immediately choose #1. If you prefer a surprise ending choose #2 or #3.

(1.) They use the escape plan and the bomber. They roll up the magic carpet, duck down the escape hatch with it and fly away, while the cat gets his bomber out of the hanger. The cat distracts the soldiers while the others escape, then he flies off to join them.

(2.) Jamie runs into the clubhouse, trips over the table and the escape plan blows away. They are trapped. The nuclear fallout guns disrupt the video scanner and the soldiers are victorious. The devils, goblins and ghosts are wiped out.

(3.) Jamie runs into the clubhouse, grabs the escape plan and shouts "No! No! This will never do! We must make them understand we are friendly spirits." "Are you nuts?" yells the chief. "We'll all be killed."

"No," says Jamie. "I've got a secret weapon, my aunt, the good witch is in town. She'll cast a spell on the fallout guns and neutralize the radio-activity."

"Hooray!" shout the spooks. "Jamie and his aunt have saved the day!"

The slightly futuristic, although still everyday, tone in the first paragraph is set by use of the present tense, the date, and the school subjects (the story was written in 1983 when such subjects were already fairly ordinary in the curriculum). In the second paragraph, the tense switches to the past ("he *said* to Miss Squire"). The everyday quality of the story ends with Miss Squire's reply and the sound of the bell which signals both the end of school and the cross-over into a different world. Abruptly we find ourselves in a kind of nuclear Halloween, graveyard and ghost images intermixed with video and nuclear alerts. (It's hard to know if "grave danger" is an intended pun.)

In this spooky realm, ghosts, goblins, and devils are the good guys who are being threatened by soldiers armed with nuclear weapons. The atmosphere, secret and conspiratorial, is conveyed through words like "club-house," "password," "escape plan"--the paraphernalia of mystery and adventure. Once the scary atmosphere is established and the plot developed to a point of crisis, all is suspended in mid-air, so to speak, as the author addresses the reader, soliciting involvement.

The endings themselves are all surprising. In (1), a *deus ex machina* in the form of a hitherto unmentioned cat along with a magic carpet provide for the escape (echoes of Snoopy and the Red Baron?). Solution here is through deception and Odysseus-like wiles.

In (2), we are surprised by the main character himself messing things up so the "devils, goblins, and ghosts" are all quite abruptly "wiped out."

The third ending brings in a different *deus ex machina*, a powerful, magical adult, actually related to the protagonist. She, the good witch/aunt, and Jamie will be able to neutralize the threat and thwart the enemies' designs. This ending, however, also hints at a different possibility for solving the conflict which is neither escaping nor being killed but negotiation, "making them understand we are friendly spirits."

Right from the beginning the story makes use of elements from the lore of both magic and science/technology. Among the magical elements are the castle-like Haunted Fortress, ghosts, devils and goblins, magic carpet, secret password, good witch, three choices. Science and technology are represented by special guns, nuclear fallout, alert, video scanner. The moral weight, however, is felt to be on the side of magic. Not only are the magical characters the good ones, but the most satisfactory solution to the conflict depends on casting a spell.

One can't help speculating here about the fact that the story, written by a girl about a protagonist who is a boy--a story possessing many of the characteristics of boys' adventure tales--is finally more typical of a girl's imagination: the third and preferred ending is conciliatory in spirit and relatively non-violent. Magic turns out to be more efficacious than science/technology and its application perhaps more ethically acceptable.

As children reach the upper elementary and junior high grades, their expanded cognitive abilities allow them new ways of looking at themselves and the situations in which they live. It's as though a part of the mind can now detach itself from its habitation, travel into the past and future, as well as out into space, and look back with a new perspective, simultaneous with the old one. Thus the discovery of irony, a wonderful, although at first often over-used, tool for effective criticism. Irony--as humor; in its crude form, as sarcasm; or more elaborately, as satire--becomes a frequent and recognizable mode of expression at this age, as in the following, very literary and quite bitter story by a seventh grade boy (not otherwise identified):

The Lords of the Future

The lords of the future first discovered the papers as they excavated what was once known as "earth." These ancient documents were at least 1000 years old. They all had the date "Oct. 27, 2002" under several titles like "The Local Times" and "The Daily Herald." Each had captions declaring "London Destroyed in Accidental Bombing," "Russia

Destroys West Coast with 90 Megaton Bomb" and "Mass Suicide Reported in New York."

These crumpled, yellowed papers were an important link to the past, where creatures called "humans" roamed the earth. The earthlings seemed to enjoy hurting and destroying others of their race.

The future lords found books containing censuses of the "rivers, lakes, streams and oceans." Once flowing clean and clear, these bodies of water were polluted by "acids" and "chemicals" found in the earthlings atmosphere.

The lords found papers written by school children, begging for a future and an end to nuclear war. They discovered formulas for energy, ancient histories dating back several thousand years and the diary of an important official. The diary [told] of "mass killings" and huge riots. The lords were annoyed with the fact that the humans killed animals (and themselves) to the point of extinction and dumped chemicals into their life-giving waterways.

The future lords realized the world which the earthlings lived in was not a pleasant place, and they were glad that they hadn't been there to witness the slow, painful killing of the planet.

The very first sentence sets the ironic tone ("what was once known as...") which continues through the last sentence. The implications are clear and, for us as readers, ominous. Something catastrophic has occurred and, knowing what we know, it's not hard to guess what.

The "lords of the future" have been investigating the remains (made up, interestingly, of many kinds of papers) of our civilization which has come to an abrupt end at least a thousand years previous and almost exactly twenty years after the actual date of the composition. There is a striking contrast in the first paragraph between the factual coolness of the headlines and the horrors they convey, an intentional contrast which heightens the dramatic effect. (One is reminded of a parody of the *Boston Globe* which appeared some years back with the headline, "Hub Man Dies in Nuclear Blast in New York City.")

The second paragraph takes on pseudo-history textbook style and language (dinosaurs or packs of wild dogs are sometimes described as "roaming the earth" in earlier times). "Humans" becomes an almost sarcastic term; one can't help understanding it, in this case, as a term of contempt, contrasted to all we would like it to signify --the appealing qualities we describe as "human," "humane," or "humanistic." These "humans" or "earthlings" (another put-down term) are clearly cruel and immoral.

The lords begin to emerge as morally superior beings, presumably above hurting or destroying their kind. They

no longer even use "acids" or "chemicals" (the quotation marks setting off the two words again indicate unfamiliarity or distance). The "great and pure bodies of water" which have been polluted by these heedless earthlings can be seen as symbolizing goodness and moral purity. We are reminded of the loss of Eden; evil, here in the guise of science/technology, has corrupted the realm of natural good.

The fourth paragraph adds another perspective to the writer's ironic view--the children's. In fact, the writer aligns himself, emotionally and intellectually, with the children of the literal present, children of the fictitious past ("begging for life") and, by dint of being author of the story, with the lords of the future (now become simply "future lords"). The lords again appear as morally superior beings, "annoyed" with the stupid, murderous, short-sighted ways of humans. The writer also betrays, however, some lingering admiration for the humans' know-how, their intellectual, scientific achievements in making up formulas, keeping systematic records and histories "dating back several thousand years." Science, although evil and destructive, still has some of the old magic and appeal to the inventive imagination.

In the final paragraph, the understatement, "not a pleasant place," reinforces the condescending quality of the lords' attitude toward the self-destroyed civilization. They themselves have evidently achieved a pleasanter as well as more virtuous way of life.

The composition is finally a moral tale, a parable in which the lords represent the principle of good--out of time and space, literally above it all, abstract, thoroughly uncharacterized. Only towards the end does their lofty annoyance verge on human feelings as they recognize the pain suffered during the "killing of the planet."

The tone of irony, of almost exasperated despair, is sustained throughout, the tone of a Cassandra trying to warn of catastrophe while recognizing its inevitability. A further dimension to the irony is that wisdom is found in the mouths of school children, "pleading for a future and an end to nuclear war." It is they, not their parents, who truly understand and see the situation for what it is.

2

Themes

The comments on the selections in Chapter 1 by no means exhaust the meanings to be found in the work. We looked at the children's drawings, compositions, and recorded conversations over and over from many points of view--aesthetic, developmental, pedagogic--and each time different insights emerged. But, as a study group, we had an interest in mind when we began looking at the work, which is not to say that we looked *for* any particular form of concern. What we did do was look closely and carefully at and into the work to see what it contained which might have some bearing on our interest--children's reactions to the threat of nuclear war. Describing this work to each other, we noted relevant characteristics, some of which we later found echoed in other children's words and images. Qualities thus began to appear as patterns--ideas, images, modes of thought common to children in these times.

In the two chapters which follow, I want to discuss and further illustrate some aspects of the children's work which were evident in the preceding pages. In this chapter I have organized the discussion thematically: nature and science, power, social continuity, order, and chaos--themes fairly clear and identifiable in the children's work.

*Nature and Science/Technology**

There is a tension in children's imaginations between their natural empathy with nature and their delight in science/technology. Children tend to love, be interested in, and turn for comfort to nature; they are likely to admire, be leery of, and be intrigued by science/technology. They often see the latter as a threat to the former. Sometimes children align themselves on one side or the other; sometimes they live with the conflict. It depends on the age, sex, and disposition of the individual.

Children's feelings for and identification with nature have long been recognized. Because of this empathy with nature, the brutalization of nature by mankind is often felt almost as personal pain. Children consequently are easily rallied to causes like saving the whales and pollution control; and the enemy,

*In the following discussion, much of the time I will use the awkward combination, "science/technology," since it is difficult to separate the two fields. Science is closely implicated in technology: scientific discoveries have, every step of the way, made technological inventions and development possible. In fact, only in recent years has a distinction between the two become common. Daedalus, Frankenstein and Oppenheimer were each both scientist and technician. In the popular imagination, it is science which has had the more dramatic appeal; the Mad Scientist has been around for a long time, both fascinating and terrifying children. But it is technology which is more directly responsible for the damage being done.

science/technology, is, these days, frequently symbolized by the bomb.

> *There's going to be a World War III. [Someone] says there's gonna be. And everyone and everything will be destroyed. Then the flowers will grow to be the size of trees after one night and the people will be humanoids. (student, grade 2-3)*

> *The lords of the future [coming back to earth] found books containing censuses of the 'Rivers, lakes, streams and oceans.' Once flowing clean and clear these bodies of water were polluted by 'acids' and 'chemicals' found in the earthlings atmosphere. The lords found papers written by school children begging for life, pleading for a future and an end to Nuclear War...(student, junior high; quoted in Chapter 1, in its entirety)*

Animal and plant life (and now even the seas and outer space) are felt to be overrun and endangered by man and his inventions. The sense of threat has been building for at least two centuries. In 19th century America, the railroad symbolized for many an irreversible incursion by machinery into an unspoiled landscape.* For children, the Bomb and miscellaneous evils children somehow associate with it (pollution, destruction of wildlife, cultural trashiness) threaten the natural world in similar fashion. As with the railroad invading the landscape, there is a quality of inexorability to technological "progress." It is headlong, one-directional, apparently unstoppable. It appears impersonal, out of control and, above all, unresponsive to children as they "plead for a future."

A teacher in a rural school wrote about the children in her class, ages 11-13:

> *As I see it, nuclear war, which comes up a lot, is symbolic for the kids of a coolness, remoteness, impersonalness in the society. That is, I don't think they can grasp nuclear destruction as an actual threat--that's too huge, too removed from people. However, the remoteness and impersonalness of pushing a button and destroying the world stand, I think, for other feelings and powerlessness and detachment that are a part of their experience.*

Nature, by contrast, is warm, gentle, responsive, soft; in short, motherly (Mother Nature):

> *I miss my youth the most. Not so much when I was 8 or 9 but when I was 12, 13, and 14. I can remember summers of playful fun, grass, trees and flowers. Picnics and swimming. My first boyfriend*

*Leo Marx, in *The Machine in the Garden*, cites Hawthorne's description of an interlude in a natural setting:

'"Observe the pathway," he writes, "it is strewn over with little bits of dry twigs and decayed branches, and the sear and brown oak-leaves of last year that have been moistened by snow and rain, and whirled about by harsh and gentle winds, since their departed verdure..." And so on. What counts here, needless to say, is not the matter so much as the feeling behind it. Hawthorne is using natural facts metaphorically to convey somesomething about a human situation.'

Hawthorne goes on in his account to describe how the scene is violently interrupted by the "whistle of the locomotive--the long shriek, harsh, above all other harshness...."

and kiss. Oh, how carefree and young I was. It seems as if I grew to be 100 in fifteen years.

There were winters too, full of learning and music--vacations of sledding and skiing. By just writing about it I start crying. I can still remember how badly I wanted to be a poet or a fiction writer.

We're sending out probes to other planets now, searching for a livable environment.

But sometimes, on a very clear day, the outside sunlight filters in and our colony's leader...turns off the lighting system so that we could have a day of natural light.

It's on those days that I really miss my youth. I usually sit for hours and stare out at the dying world we used to call Earth. (girl, junior high)

This story, only a segment of which is printed here, seems quintessential adolescent romantic longing. It has the poignancy of nostalgia, the desolate sense of having missed out, a tone of intense emotion. Although the mood is familiar, what is new is that the story is set in a nuclear bomb shelter. Technology is contrasted to nature and our sympathies are enlisted on the side of nature.

We saw a similar dichotomy expressed in "The Lords of the Future" in Chapter 1, a story in which science/technology was the runaway instrument of the Earth's destruction. Here, too, all good things are associated with nature and the natural world: growing things (grass, flowers, trees), sunshine, youth, simple pleasure, love, freedom, the arts (music, poetry, fiction), even education. The author is describing a kind of childhood Garden of Eden where it was possible to be truly happy and carefree. The end of the good life, of freedom, ignorance, and bliss, has come, we assume, as a result of nuclear war. Now natural light from the sun is the only reminder of what once was. The world is dying and the author has spent 15 years in a controlled, artificial environment, scientifically designed. The choice of words in the story reinforces the contrast between the technological present and the remembered past: feeling words like "crying," "carefree," "remember" contrast with technical terms like "probes," "lighting system," "colony."

Another story by a junior high student begins:

The Chinese lamps cast a warming light on the silent porch. The lilacs hung from their twisting vine, giving a purple tint to the area....

and ends with the dropping of the bomb:

Then she stops, lays her face down in the grass and closes her eyes, embracing the earth. It is the end. (girl, junior high)

The tension between nature and science expressed in these works is echoed and extended in other children's work. On the side of nature are peace, god, animals, the moon and sky, the good life, weather, ecology, warmth, and, above all, feelings. Science and technology are often characterized as cold, detached, empty, new, mechanical, phony, plastic, destructive, and unresponsive.

"Ten, nine, eight, seven, six, five, four, three, two, one," a mechanical droning voice spoke. The rocket shuddered a moment, then flew off with a sudden burst of energy. Lonely, empty faces pressed against the cold window pane, watching earth which was now trembling. "She's gonna blow," someone called; and she did, the Earth which once held such false dignity blew up in one shuddering bang...(student, junior high)

A totally new world was in front of them. Was there food, air, life, flowers, rain, snow?...Would the people from Earth be at war with each other on Mars also? Being hostile and ignorant, ruining nature, love and other beautiful things...And what about phony, plastic Hallmark greeting cards? Would they ever come back? (student, junior high)

Younger children, using different terms, also hold humanity and its thoughtless technology responsible for the destruction of nature. Their words frequently assume a highly moralistic, superior tone as they point out specific instances which represent the direction things are taking. Children can and do allow themselves the license of strong moral feelings without the need adults have for figuring out viable alternatives.* We, whose views have been more complicated by experience and envy, sometimes resent the clear statements of young children even as we recognize their truth and value:

I wish people couldn't just go and blow one country to look like junk. (student, kindergarten)

A lot of countries people have lots of war and I think they should be stopped. I think we should not cut down trees because we need them to breathe and keep alive. Someone was moving a house and cut down a lot of trees. The person moved it all the way to Framingham....I think some animals should not be killed because animals should be able to live too. There are not a lot of animals any more....(Letter to the Editor, second grade, class newspaper)

But even as science and technology are suspect and blamed for the trouble the world is in, they provide a unique and wonderful playground for the imagination, an opportunity at other times provided by history, folktale,

*For centuries, philosophers, poets, psychologists, novelists, and educators have written about the closeness of children to nature. Rousseau, at the beginning of Emile, appeals to the Mother: "You can remove this young tree from the highway and shield it from the crushing force of social conventions. Tend it and water it ere it dies. One day its fruit will reward your care."

Froebel also saw the educator as a gardener, responsible "attentively to follow the nature of the plant." Wordsworth celebrated God in nature and wrote of children as yet uncorrupted by the world:

> Not in entire forgetfulness,
> And not in utter nakedness,
> But trailing clouds of glory do we come
> From God, who is our home.

In our own times, although views of childhood are perhaps less unabashedly romantic, we still see the child as close to nature, interested in guppies and gerbils, the sky and sea, trees and flowers. The first books given to young infants usually picture animals, even books for urban children not likely to encounter "moo-cows" in the normal course of events. Richard Lewis, echoing Wordsworth some 175 years later, said, "Children have wisdom they bring with them about the natural world; they ascribe a consciousness to nature."

Edith Cobb, in *The Ecology of Imagination in Childhood*, attempts to explain scientifically and logically, the affinity between children and nature. She places the young child at "the point of intersection between biology and cosmology" with childhood "a combination of the uniquely cultural and therefore human, and the wholly natural and therefore biological." According to Cobb, all forward movement towards the acquisition of culture and knowledge comes from the child's sense of wonder about the natural world sympathetically experienced from the beginning of life; wonder comes from "the child's ecological sense of continuity with nature ...."

and fairy tale. Children of today (boys perhaps still more than girls) are delighted by science, their lives and thoughts influenced by its images. Computers, computer games, space ships, and robots have enormous appeal for children who see science operating, as it does, on the shifting border between magic and everyday life, between the imagined and the realized (certainly part of the secret of its appeal).

Here is another conversation between Rebecca, age 7, Sam, age 9, and their mother (who were quoted in Chapter 1):

R: Will I be blown up?

S: Probably only a few people will survive.

R: I'll take a horrible ride up to space and live in space.

M: Why horrible?

R: You have to stay in it for three days and eat that horrible ice cream and be squished in that horrible tiny thing.

S: If it really comes to leaving the Earth in case of a bomb they'll probably build something like huge passenger carriers that carry about 1,000 people at a time.

R: That would be a HUGE carrier. Maybe they would make something like we saw in the Science Museum --you know, the fastest bicycle in the world.

The line between what's possible and what's not (yet) possible has lost definition and it's hard to know what will turn up tomorrow in the Science Museum.

Sometimes, in the hardware world of science fiction, nature is left out altogether. The textures, in fact, are notably unnatural: colors are chemical and sounds, even voices, electronic. Frequently the natural world, the world which has come down to us, is portrayed as an almost abstract setting for scientific exploits: outer space with its stars, planets, galaxies or the interior of the Earth with its furnaces, chambers, upheavals. But it's the machinery, the wonderful inventions effortlessly set in motion by a touch on a button, flip of a switch, or pull of a trigger, which are in the foreground and which one often sees in replica on the playground; also, of course, the people--heroes and heroines, villains, slaves, apprentices, faithful companions--who inhabit these made-up worlds of sci-fi. They, the primary actors, tend to be recognizably human even though they often wear bizarre headdresses, shining fabrics and, in some cases, have superhuman powers.

Dr. Who, a literary and TV favorite, is one of the most realistic: a flawed, even somewhat silly, flesh-and-blood Englishman with wild hair and a long, English schoolboy scarf wound around his neck. Dr. Who, in spite of his down-to-earth qualities, lives in a sci-fi world and, in at least one episode, manages successfully to survive the outbreak of nuclear war. Although he assuredly lives in our times, he seems to represent some slight tongue-in-cheek view of the miracles of the sci-fi world. His appeal may have to do with a double, or ironic, view of technology: pleasure in it tempered by skepticism (in the form of humor) about it.

Nuclear weapons or something closely resembling them are frequent elements in sci-fi plots. Nuclear weapons can be turned against nuclear weapons; a nuclear gun can "vaporize" and render innocuous a nuclear missile (fighting fire with fire). Thus we can see two ways in which science/technology can provide comfort: 1) Sam's type of solution: colonizing another planet or, alternatively, creating a livable satellite or space ship; 2) the Star Wars type of solution: inventing defensive/aggressive nuclear weapons which can successfully counter enemy missiles.

Science has a kind of glamour--perhaps because it is new, shiny, and on the move--which nature, relatively old hat, lacks:

> *Many kids brag about having a computer but I will have to admit I do it a little too. I think a Digital Vax is close to the best but Japan's computers are coming up fast...a computer can do math in a matter of seconds that would take a person days. (boy, grade 2)*

Even in the story of the shelter, quoted above, the subject of the narrative eventually goes down to

> *Probe Chambre III to see her brother Gabriel and to ask if any information has been turned up yet. Gabriel is the scientific genius in our family; he helped design this place. As a reward his family is allowed to live here.*

Phrases like "scientific genius," and "the wonders of science," convey the admiration, even awe, with which our culture regards science and technology, which children and adults recognize as responsible for many of the comforts and much of the excitement in their lives. The view of science as magical and wondrous is reinforced daily by the media--through ads for the products of Dupont, IBM, and Westinghouse, among others.

Another passage from the same story (about the shelter) describes the sci-fi setting in a tone which betrays the writer's almost reluctant admiration for technical achievement:

The large dome that protected the colony within is made out of a scientific plastic coating that tinged the glass it covered so that looking out is like peering from behind a giant pair of sun glasses. (girl, grade 7)

These days, science offers almost irresistible opportunities for creativity, imagination, and invention. The actual horrors of war are often forgotten in the enthusiasm and energy which go into its representation.

In Illustration 2 (by a boy, grade 2), "The Good Guys Protecting their Control Box," it is not at all clear to the viewer what is being controlled or why. One could speculate that the good guys, representing the Good, are in control of the situation so no one need worry. The person in the lower right appears to be at the main control box. A guard, gun in hand, stands in the evidently impervious vertical central shaft, perhaps on guard over the entrance to the upper offices, which contain more control boxes, switch operators, and a guard. Missiles of some sort, resembling cannon balls, are being shot in all directions, leaving heavy black trajectory lines behind them. Even though the plot may be somewhat obscure, what is clear is the imagination and energy which have gone into the image of the machine with all its connections, switches, and contrivances.

In Illustration 3 (also by a second-grade boy), wit--outwitting the enemy--is the interest of the artist. Things are not what they appear to be and the attackers are being fooled. The covers of the underground shelters, camouflaged as hillocks, are apparently invulnerable to attack from above. The individuals hiding beneath are safe. A number of space age images and symbols (from Star Wars? TV games?) are depicted in this encounter but it is essentially below ground, in the tunnels and chambers, where the good guys are going to have to survive.

Invulnerability, a particular challenge for inventiveness, is a common and important theme in children's representations of science. Technology can produce protective covers or shields, like traditional armor and fortresses. We remember Rebecca's idea for armoring the walls of her room with the "outside of bombs" and the "scientific plastic coating" protecting the shelter in the story quoted above. As I've already mentioned, technology can be seen as offering a solution to the problems that it, along with science, has helped create.

President Reagan, in his March 8, 1983, "Star Wars" speech in Orlando, Florida, offered his own sci-fi solution to the arms race--defensive weapons in outer space, a solution also based on the appeal of invulnerability and perhaps in its own way no less imaginative than the children's. Science fiction, introduced to children

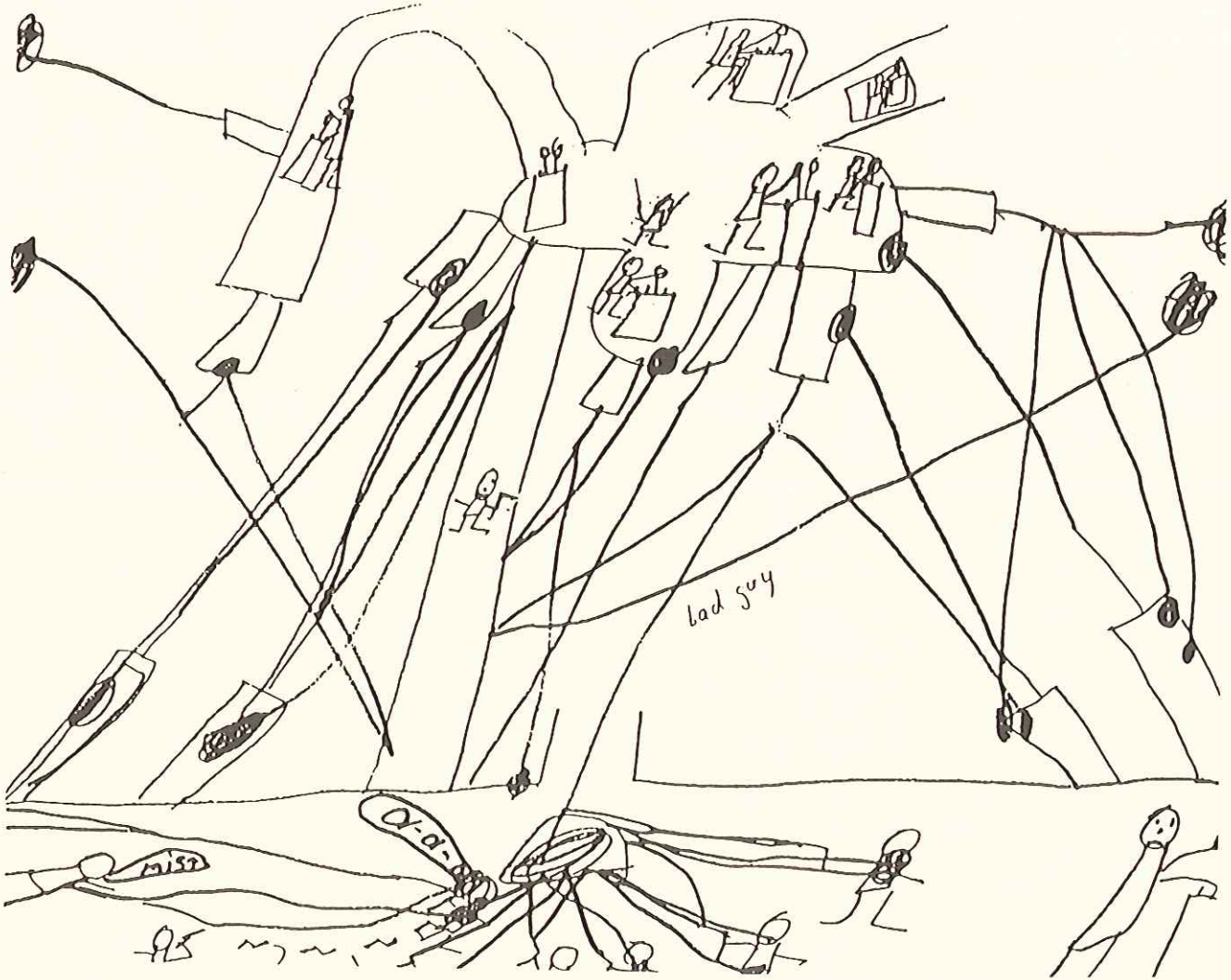


Illustration 2

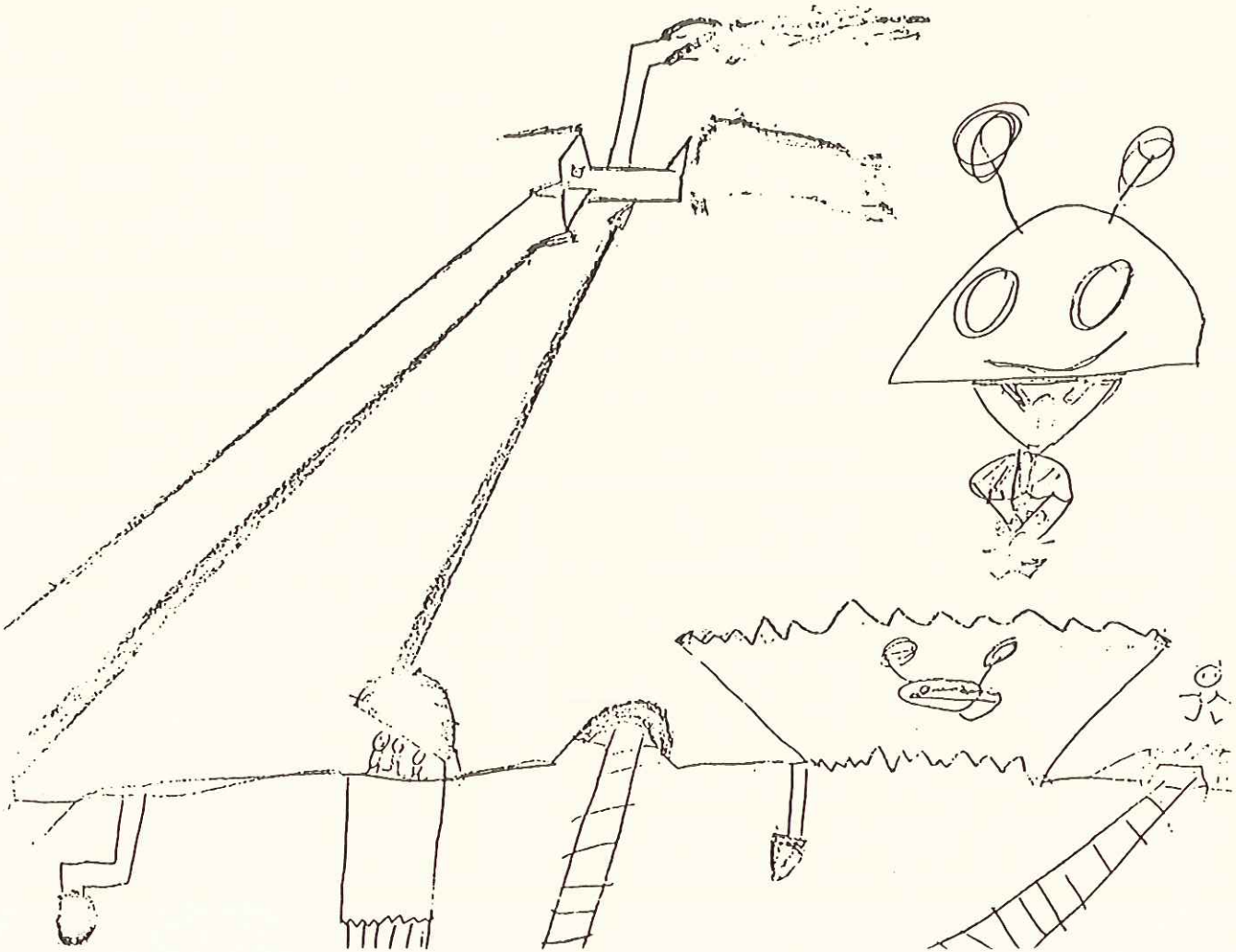


Illustration 3

through movies, books, comics, video games, and television programs, provides an arena for the imagination verging on the magical but validated by Science, one in which anything is possible. Children themselves, in their talk, writing, drawing, and playacting, invent ways of escape, means of fighting back and winning, protective devices, and ways for survivors to live in a post-nuclear world:

> *We made an estimate and found out that in four years the world would be covered in water [because of the melting of the polar ice caps after a nuclear explosion]. So we had to do some quick thinking. And then we came up with an idea, the best one yet, of building cities on land and then sinking the cities (the cities were water tight), and sending the people left in the world down to the cities. We offered the idea to the United Nations at their assembly place in the hills of Scotland. They accepted the idea, so most of the men left in the world set to the job of building the underwater cities.*
>
> *We designed the cities with the help of other scientists from other countries. There were to be about 1,000 cities, and about 10,000,000 people to each one.*
>
> *Then the United Nations decided that the world would become one, so that there would be no wars, and there was to be Nuclear Disarmament. Then the cities were ready in the year 1987, on the day of the 25th May. The cities were a great success! (student, junior high)*

The tension felt by children between science/technology and nature is not absolutely inevitable. It is the runaway state of science, its lack of reasonable balance with the natural world, which arouses suspicion and hostility.

Power

> *The Destroyer is a very large ship. It has many guns and lasers. It has many kamikaze capsules and it is always ready for war. As you imagine it was very powerful. No one ever won a battle against the Destroyer. The Destroyer always won. Everyone that tried either got kamikazied in two or got destroyed by its powerful guns. The Americans did not own the Destroyer. The Germans owned it but the Americans own the next powerfulest ship the Eliminator. The Eliminator was very large too. It was the only ship that ever survived a fight with the Destroyer. Still it usually came out with a lot of damage. Whenever they met they always got damage all over them and it*

was always a great war. Many times the destroyer would attack the Americans' fort. But they have a powerful force field. Every time they tried to get in it they bounced out of the field. The City of Boston decided to have a meeting in the town hall. First they discussed what the Destroyer's weaknesses were. Finally they found out it was the engine. A guy named Buck knew a lot. And he said the Eliminator would only have one shot. When they approached the Destroyer the Destroyer was heading for them. They missed their chance. They escaped except they couldn't help getting a lot of damage. They went back. The leader said why did you miss your chance. He was very mad! They said at least we tried. We will have to take a risk. Got it! Got it! Here's my plan. As you know our force field is weak. Now if we open the force field and close it when the Destroyer comes into it. Yay yay yay yay. All right. Turn off the force field. Here she comes. All right boys. Now now close now. We did it. We really destroyed the Destroyer. Yay yay yay yay. We are free, we are free. (boy, grade 2)

This account of a power struggle between two battleships has the elements and quality of myth: moral struggle (evil Germans against the good Americans), heroic proportions (large, powerful, undefeated battleship), magic (the force field), a central weakness or flaw (the engine), resonant, emblematic names (Destroyer, Eliminator, Buck). The plot itself is almost formulaic: a realm in thralldom to an evil power, the power challenged by a lesser but good power which, given one, possibly two, chances, wins out through the use of wit and strategy. In the end there is relief and rejoicing at deliverance from thralldom and at freedom regained. (Echoes of events such as the delivery, by Theseus, of the Athenians from 27 years of tyranny under King Minos of Crete or, even more vividly, of the legendary battle, during the American Civil War, between the Merrimack and the Monitor.)

The story is a particularly vivid example of Winnicott's third area of experiencing. It is an original creation; that is, a story which has never been told in the same terms before. It reflects both the author's inner concern with power and, at the same time, his awareness of events in the world having to do with power such as battles and war. Like play, the story is located in the created area between inner and outer life, between private and common experience. "It is an area," Winnicott wrote, "that is not challenged because no claim is made on its behalf except that it shall exist as a resting-place for the individual engaged in the perpetual human task of keeping inner and outer reality separate yet

interrelated. Much language today reflects concern with power--super powers, power struggles, empowerment, power plays, even power plants--the latter often identified by children, for obvious reasons, with the nuclear bomb. The nuclear bomb itself is perhaps the ultimate power symbol, a force capable of destroying the world. The creators of comic books, always bellwethers of popular feeling, responded imaginatively to anxiety about the bomb by inventing superheroes who, through some semi-mystical encounter or event, became endowed with the superhuman power of the bomb itself. In general, however, the superheroes used their mystical power for good ends, often to save the world from destruction.

A generation of children, now well into adulthood, was raised on, their imaginations fed by, Marvel Comics: the adventures of the Fantastic 4, the Incredible Hulk, Spiderman, and the Silver Surfer among others. The first of this series of superheroes, the Fantastic 4 (the Human Torch, the Thing, Mr. Fantastic, the Invisible Girl), were dreamed up by their creator, Stan Lee, in 1961, 16 years after the atom bomb was dropped on Hiroshima, a period of renewed concern about the potential of the nuclear bomb. The bomb and the anxiety surrounding it are the background against which the superheroes perform their mighty deeds.

Each of the superheroes possesses some special magical power the source of which is "cosmic rays" to which they have been exposed during the test flight of their new space ship. Susan, girlfriend of Dr. Reed Richards who designed the spaceship, had urged the test flight against the better judgment of a colleague, Ben Grimm.

> Ben: You know we haven't done enough research into the effect of cosmic rays! They might kill us all in outer space!
>
> Susan: Ben, we've got to take that chance unless we want the commies to beat us to it.

After their fateful exposure in space, the Fantastic 4, true to mythic conventions, continue to pass as ordinary humans most of the time, only undergoing their magical transformations at moments of need, in order to do good for the world.

> Reed: Together we have more power than any humans have ever possessed.
>
> Ben: We've got to use that power to help mankind...

It turns out that much of the help mankind needs is against mysterious universal forces, Russian plots, conspiracies against the peaceful use of atomic energy and the like.

A slightly later Stan Lee creation, the Hulk (alias Dr. Bruce Banner), is the product of accidental exposure to the "incredible G-bomb...the most awesome weapon ever created by man." The exposure occurs during a desert trial more than faintly reminiscent of the testing at Los Alamos. The Hulk's first heroic encounter is with Igor, the Red Spy. Spiderman, one of Lee's most popular and successful heroes, is in real life Peter Parker, a sad, unpopular high school bookworm. Parker is mutated into Spiderman after being bitten by a radioactive spider during an atomic science demonstration. The Silver Surfer, mysterious in origin, is a creature from the galaxy, originally come to Earth to help "hapless human beings," dwellers in a world "which could be paradise, reduced to a planet of greed and fear and hatred...." Stan Lee, tuned into public concern about the Bomb, war, the Russians, radiation sickness, initiated a highly successful series of heroes and adventures. The *raison d'etre* of the superheroes (*raison d'etre* meaning in this case both origin and purpose) was the Bomb and each adventure was a power struggle between two forces, one good, one evil, the good force always prevailing in the end.

Comics like these, although authored, share some of the characteristics of mythology and fairy tales in that they reflect public concerns and, at the same time, provide reassurance; hence their popularity. Lee himself has reported the extent of public input into the development of the Marvel Comics plots and characters: "We learned what they [our readers] liked, what they didn't like, what they wanted to see more of...and less of. After a while I began to feel I wasn't even the editor; I was just following orders--orders which came in the mail."

For children, as for the Hulk and the other Marvel superheroes, the Bomb itself represents the ultimate in destructive power. It is usually described by children in terms of large numbers and quantities: how many people would be killed, countries wiped out, how many tons a bomb weighs, how much explosive power it has:

> *Their [Japanese visitors] coming convinced me that bombs are deadly. Millions of lives are removed by bombs. I am against bombs 100 per cent. (unidentified)*

> *Wars destroy the whole world because nuclear weapons kill everything. (student, grade 2)*

Power on "our side," however, represents relative safety--"us" having more than "them," the more bombs, the more power. Young children discussing relative power frequently get caught up in a kind of numbers duel or competition:

- It would be good if there was a thousand and one--on our--team, and only one on another team.
- No, only ten on one team.
- No, because then the other team would win.
- No, because we have a thousand and the other only has ten.
- Oh, our team would have a thousand? But they would probably get some of them. (conversation, kindergarten)

By junior high, numbers are no longer totally persuasive, not always simply equated with superior power; a note of skepticism enters: the thought that the U.S. and Russia may be wasting energy and money on overkill, that once you get into a nuclear exchange, it's not going to matter a whole lot if you drop--or have dropped on you --500 or 1000 bombs.

Children throughout the school years are acutely aware of their own lack of power, their vulnerability, fear, and need for protection. Their sense of vulnerability is undoubtedly heightened by the spectre of the Bomb:

Dear President Reagan, I am writing to tell you how I feel about war. War is scary when you are small... (unidentified)

It's so scary, sometimes it can be so scary thinking about robberies and plane crashes and meteorites coming down and thinking of them possibly coming down and injuring someone badly or maybe killing them. Thinking of things like the ship Titanic, thinking it might happen. Thinking of lightning and thunder, thinking of buildings being burned to the ground, thinking of...everything. (discussion, grade 3)

- Because, like, if there's a war then so many people get killed and everything like that and it just scares me to think that there might be war in our country some day...
- How do you know anything about that?
- Sometimes I just hear it on the news.
- You hear things about nuclear things on the news?
- Power plants...I don't think it is peaceful because our president wants MX missiles and all that stuff... blow up things like we did to Japan. (discussion, grade 3)

Russia and the US are enemies. They might have a nuclear war. That would be awful. It would be very scary. Many people would die. You might die. I might die. Everybody might die. I'm scared, are you? (composition, grade 2-3)

For comfort, and as compensation for feelings of weakness, young children, like many adults, try to talk themselves into feelings of power. The following discussion took place in a kindergarten-grade 1 class after the teacher had read aloud *Bang Bang You're Dead*, a vividly illustrated story book about a play fight turning into a real fight between rival groups of children:

Observer: But how about Big Mike? [character in the story]

Andy: I could pick up a chair!

Ollie: Watch! He could pick up a chair so high, watch!

Observer: Yeah, but wasn't Big Mike strong too?

Andy: I could pick it up with one leg!

Observer: Andy, wasn't Big Mike strong too?

Andy: He couldn't be able to be strong. Look, see? [lifting chair] I'm stronger than him.

It is not surprising that children, usually well below junior high school age and boys more often than not, also seek to extend what seems to them like inadequate personal power through imaginative play with weapons, even nuclear bombs. In our culture, guns have for a long time played a prominent role in games--cowboys and Indians, cops and robbers--and before guns there were bows and arrows and swords. New weapons are added to the repertoire as they are invented although, frequently, ancient ones remain in the act as well:

I am a soldier. I walk around to kill people. (dictated, caption under picture, kindergarten)

- What if you were in that fight, how would you feel?
- I'd take my BB gun and put rocks in it and shoot them at Big Mike.
- I don't have a gun but my brother does--he has twenty of those. He goes BANG BANG BANG.
- Well, guess what? I got a toy machine gun at home. A-a-a-a-a! I play with it and point it at people and pretend I shoot them. I only point it at kids I know like my cousin John. He pretends he shoots me. I shoot him back with my machine gun.
- Do you think if you have guns and an army suit you'd be protected?
- You'd need a radar gun, machine gun, a bow and arrow and a shield and sword. (conversations, kindergarten)

Some of the tough boys in my class, you know, if they don't like someone they say "I'm going to drop a nuclear bomb on you" but what they don't seem to know is that they'd blow themselves *up and lots of other people also. They seem to like nuclear war, not peace. (conversation, 9-year-old)*

War play is supplemented by endless drawings of battle scenes--on the ground, on the sea, in the air, in outer space. Children's battle and war play, whether acted out or in the form of drawings, bring mixed and often inconsistent responses from parents and teachers. Our own feelings of uneasiness about the violence in the world which we have not been able to curb and for which nonetheless we can't escape some sense of responsibility, makes us particularly sensitive to the sight (and sounds!) of young children acting out violent scenes.

War play*, according to the available evidence, does not necessarily lead to adult bellicosity. Rather, it allows children to deal with their violent, aggressive feelings whether these are natural and inevitable or the result of our culture. Winnicott's theory, if applied to war games, would provide a rationale similar to those quoted in the margin here, that such play provides a space in which the individual can recognize inner needs --for power and survival, for instance--in a threatening, warlike world.

Basic questions about war play remain essentially unanswered: how necessary is aggressive play or war play to the development of self? If violence in the world miraculously diminished, would war play diminish accordingly? Could the apparent need for power be represented in some ritual forms, less likely to do damage?**

In addition to extending their sense of personal power through weapons and play, children turn to other real and symbolic representations of power. For younger children, particularly, adults have all the required attributes--size, strength and authority:

Teacher: You feel that the peace marchers will keep this war from happening?
Student: Yes, grownups are really trying hard for there to be peace. (discussion, grade 3)

I want to be a grownup and have dynamite. (boy, kindergarten)

Asked how he might go about resolving a specific conflict, one kindergarten boy offered the following:

I would just go and tell my parents and probably my parents would call their *parents and talk it over... and if they can't figure it out then we'll just have to figure it out ourselves.*

*Playing war, like playing cowboys and indians or Robin Hood, is a symbolic activity which, according to Barbara Biber, gives "the child an opportunity for identification by means of which he can project and release his feelings of conflict and anger, his frustration over being young and weak, all without incurring the chastisement which would follow if he gave vent to these feelings directly, in his real relations with things.

Sybille Escalona has taken very much the same view: war play allows a safe way for the child to project his/her own violent feelings.

**Plato, in Chapter VII of *Laws*, as translated and quoted by Huizinga, suggests that art and play themselves are appropriate, preferable alternatives to war. "God alone is worthy of supreme seriousness, but man is made God's plaything, and that is the best part of him. Therefore every man and

woman should live life accordingly, and play the noblest games and be of another mind from what they are at present... For they deem war a serious thing, though in war there is neither play nor culture worth the name, which are the things *we* deem most serious. Hence all must live in peace as well as they possibly can. What, then, is the right way of living? Life must be lived as play, playing certain games, making sacrifices, singing and dancing, and then a man will be able to propitiate the gods, and defend himself against his enemies, and win in the contest."

Throughout elementary and junior high years, the President and other world political leaders are the primary sources of power:

> *Ronald Reagan rules over us. He decides things. He decides whether we should have nuclear weapons or not. The reason most people are against Reagan is because he makes nuclear weapons. (composition, grade 2-3)*

> *For my kids the government* is *President Reagan..."How come he...?" It's always "he." (teachers meeting)*

> *After I sent this letter to President Reagan I had a dream. I dreamed that all of the leaders of the world were gathered together in the White House to hear some letters kids had written. I read mine aloud and when I was done all of the leaders like Reagan, Margaret Thatcher and Brezhnev (he was still alive) linked arms and marched away singing songs of peace...I know this wouldn't really happen just like this, but writing the letter gave me a lot of hope, as you can see. (composition, 11-year-old)*

Frequently letters to the President take on an adult-derived, scolding tone, as though the writer gained authority (power) from sounding like his/her own mother or father:

> *You are not being very smart in letting this country fight the way it is....*

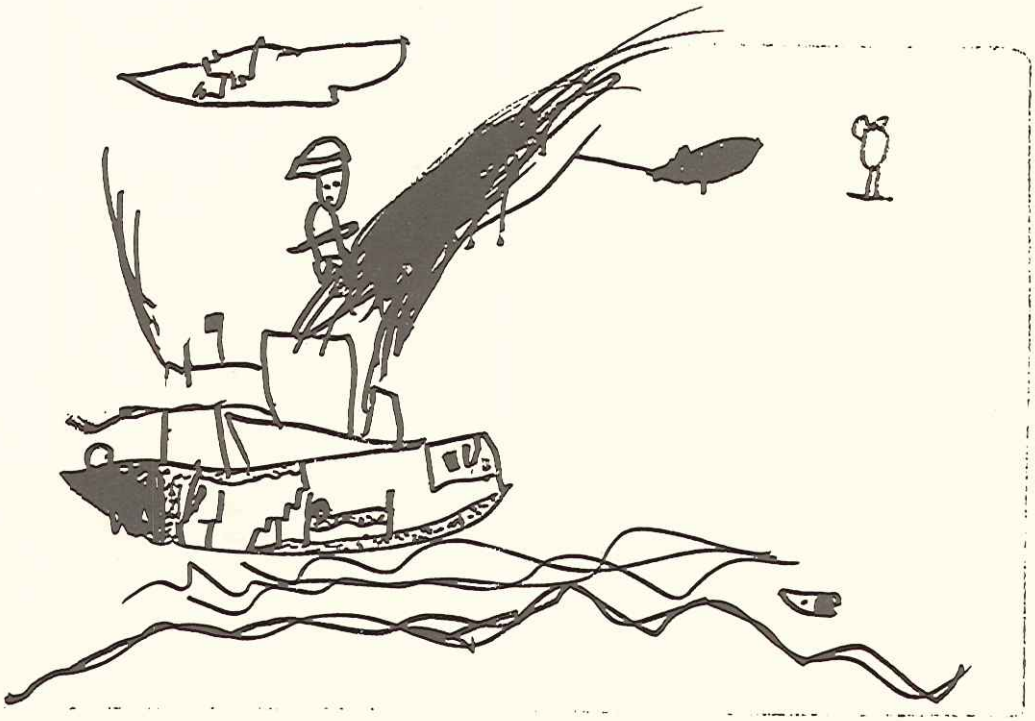
> *There are other ways of solving things besides using* war. *Like you could compromise or just talk to them and try to get your point across using words and other nonviolent systems! NOT WAR.* War *is a ridiculous way of getting your way in my point of view. ABSOLUTELY RIDICULOUS.*

> *Stop or you really will be a idiot. We are giving you a second chance but this is the last one! So shape up, pull yourself together. This is your last chance.*
> *(from letters, grade 5)*

In the caption under the drawing which follows, the voice of the writer captures something of an adult's calm tone of authority: "I had asked him to stop."

By junior high, tones of irony and disillusion are added to that of anger:

> *Great! You've got 15 minutes to get 20,000 people into one tiny little town...which doesn't want those people in the first place. Thirty-eight people per room. So they can all be cremated together!*



Once there was an army man. He was the chief. He liked to shoot a lot, he had a lot of army men. One day he didn't shoot at all because I had asked him to stop.

Illustration 4

Do you know how many people believe them [the plans]? They believe in Ronald Reagan, and exactly what he says. It's like he's God...(from letter, 14-year-old, quoted by Vivienne Verdon-Roe)

Dear President Reagan, I think you are really acting stupid towards the whole situation with Russia, like two babies, really, like two babies who are fighting...(from letter, 11-year-old, quoted by Vivienne Verdon-Roe)

Later some of these students were very quiet about their reactions to this [discussion]; others expressed anger that 'they' don't do something to stop 'this' without being too clear who 'they' are or what 'this' is. (teacher, junior high)

In addition to weapons and authority figures, there is another kind of power to which, in one way or another, we all subscribe: unseen power. Words, to begin with, are recognized by children as having power:

Kids wanted to write Reagan but did not want to write a "friendly" letter or address him as "Dear..." (teacher, grade 5)

We have to use truth against power, which means we could write a letter to Reagan to tell him to stop making nuclear weapons... (student, grade 3-4)

For the religious, there is the power of God, the ultimate authority. Children from religious backgrounds frequently refer to God, either questioning why He doesn't do something to avert the danger of nuclear war, or demonstrating their belief in the efficacy of prayer, or affirming their confidence in God's wisdom:

First Student: This isn't about this [subject under discussion] but why can't God stop anything? I don't see why God can't, if there is a God, why can't He stop the wars?
Second Student: Because he leaves it up to the people to stop the wars.
First Student: But I don't think that's very fair--well, maybe to God it is, but if He has powers he should be able to stop it, but not just like that, it's hard for Him too, I understand. (conversation between two third graders)

In the little town there was war. Then they prayed to god to get the war out. Now there is peace. (caption under picture, K-2 class)

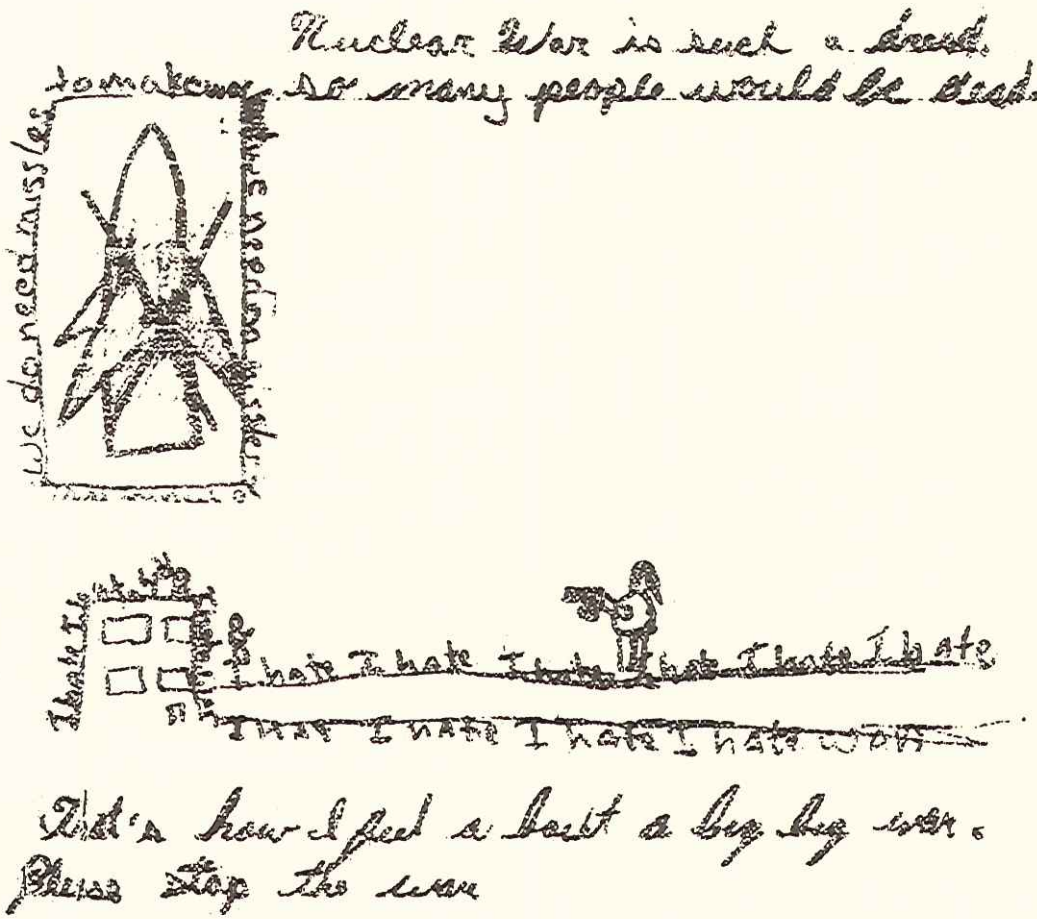


Illustration 5

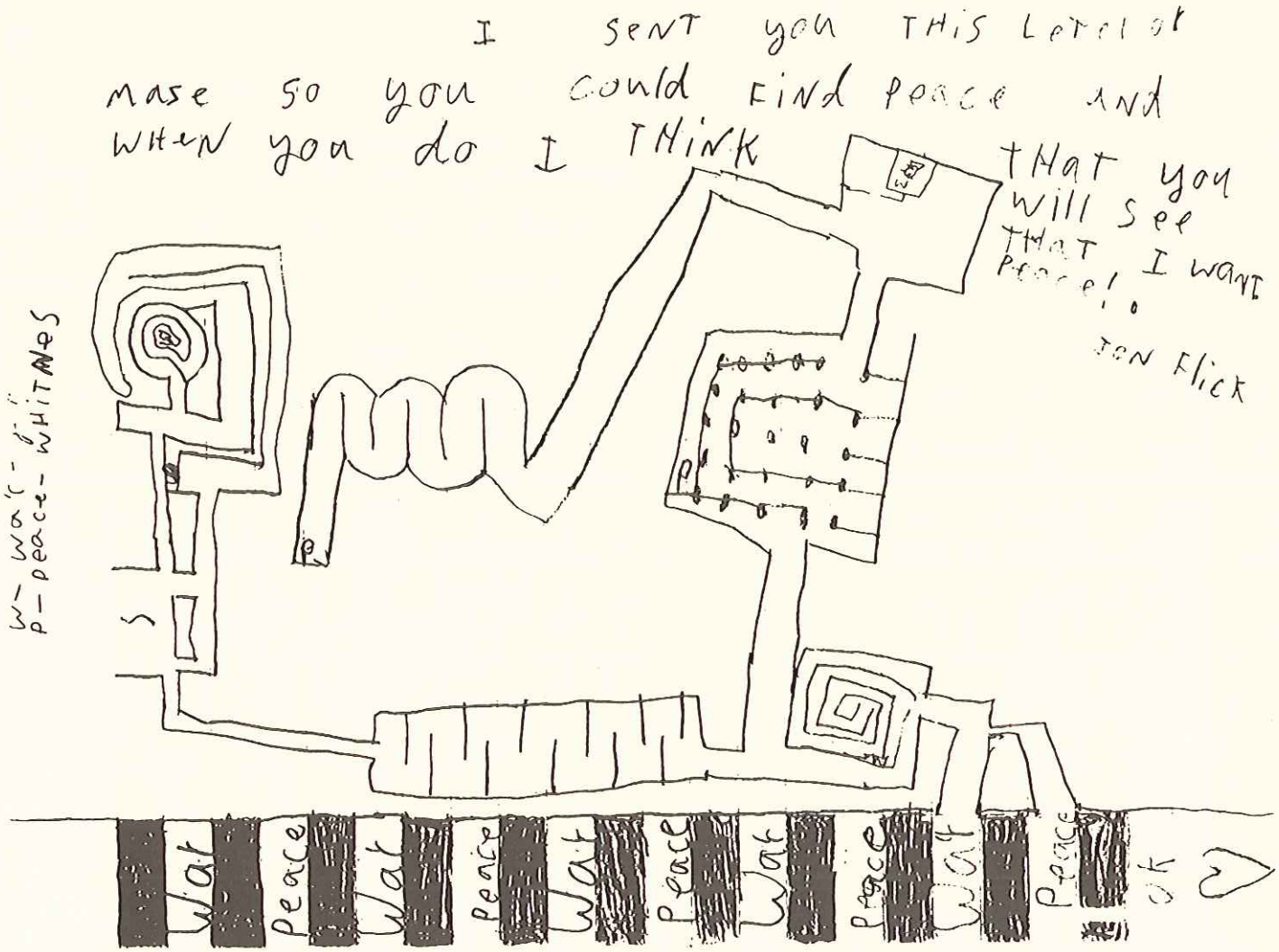


Illustration 6

There are 5 charms to this Earth. Great things given by god himself. Five cranes they are of different color and different charm. Bright blue for ocean, lake, pond, puddle. Deep red for man, for the blood which makes us able to live. Gorgeous green for our fields of grass and flowers. And last of all bright silver and gold. Gold for sun, Silver for moon. May I meet these 5 cranes some time. May the inner light live on. (composition, 8-year-old girl)

Others turn to the power of magic. Even as we write letters to the President and, if we are adults, vote, take part in demonstrations, and join political action groups, we keep our fingers crossed, read signs in the skies, carry good luck charms. There's an emblematic story told about a visitor coming to see Nils Bohr, the great Danish physicist. On approaching Bohr's house, the visitor noticed a horseshoe nailed above the entry. Surprised, he questioned Bohr on his belief in superstitions. Bohr reportedly answered that, of course, being a scientist he was not superstitious; then, regarding the horseshoe, he added, "But they say it works anyway." Children, too, invoke magic in the form of amulets, rituals, and incantations:

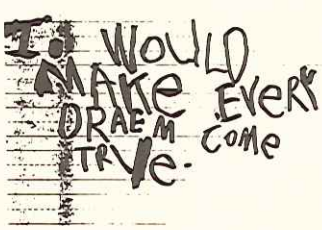
Children immediately start chanting, "bang, bang, you're dead, 50 bullets in your head!" (discussion, kindergarten)

Bombs can't break bombs. (6-year-old girl, quoted in Chapter 1)

There is a general belief among adults, often shared by professionals, that children believe in magic in their early years but eventually become rational adults, their lives guided by logical thought processes. Children's early fears are thought to be manifestations of relatively primitive thought systems.* Yet we all know that the "primitive" in us is never fully subdued. The rational and irrational continue to live in us all, child and adult. As Sigmund Freud wrote in an essay on war, "The primitive mind is, in the fullest meaning of the word, imperishable."

*See Fraiberg, Selma. *The Magic Years*. New York: Scribner and Sons, 1959.

The happiest exercise of power would be to bring Winnicott's inner and external realities into closer harmony. The composition on the left was written by a six-year-old boy in response to the teacher's question, "What would you do if you were boss of the world?"



Social Continuity

At the center of children's expressed anxiety about nuclear war is fear of death; death primarily representing

separation and loss rather than pain and suffering. Death isolates the individual from family, friends, the past, and the future. Its terror, particularly for the nonreligious, involves loss of meaning since much of the significance we see in our own lives, much of what seems to give our existence meaning, is our connections to other people across both time and space. For younger children the difference between the possibility of war and its actuality is blurred: feelings of dread can cause the possible to be perceived as the immediate or actual:

And think of the children you're killing! (from letter to the President, student, grade 2)

Dear President Reagan, I was writing to tell you how I feel about the war. I feel scared because everybody will die. (student, grade 4)

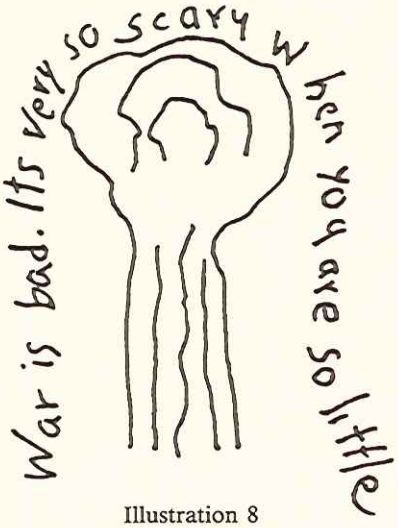


Illustration 8

(student, grade 5)

But if a war started and everyone ran, then you'd be left alone...and then your father and mother are at work and they're worried about you...(discussion, grade 3)

I would run home as fast as I can. I'll tell you that! I wouldn't stay, no way. (student, grade K-1)

The parents went out and they left the girl all by herself. She is 10 and a bomb went on her ceiling. The house blew up. The girl is sad. She's mad. She's afraid...(student, grade 1)

Observer: You think real war is scary?
Child: Especially when you're looking at it. And your father's in it or something. (student, grade 2)

- Dream of not having mom or dad
- My mother being killed
- Being alone with younger sisters without parents
(notes by teacher on associations made by fourth graders with the word "scary.")

I read this story where everybody left earth and went to Mars or wherever it was, and there was this big war on earth--a nuclear war--and everybody knew that the world was going to blow up, and so they all went home because they figured, "Why live when everything I've known and loved will be gone?" So they went back there to die...(14-year-old girl)

Anxiety about losing or being separated from parents is interesting in the light of most of classic English children's literature in which parents are characteristically absent or dead and children are managing very well on their own. Kipling's Mowgli and Kim are both paragons of independence and know-how as they negotiate their esoteric landscapes and adventures. Mary Ann in *The Secret Garden* is alone in the world, both parents having died of cholera in India; E. Nesbitt's five children contrive to escape from the surveillance of adults; even Christopher Robin, the perfect English pre-schoolboy, solves problems without adult help in the stuffed animal kingdom his father creates for him. The most dramatic example of children's romantic desire to manage on their own is, of course, *Peter Pan*. Never-Neverland is a full night's flight from the Darlings' home and Peter himself, outspokenly anti-adult, refuses ever to grow up.*

*See *The Jungle Book* and *Kim* by Rudyard Kipling, *The Secret Garden* by Frances Hodgson Burnett, *The Barnstable Children* by E. Nesbitt and *Winnie-the-Pooh* by A. A. Milne.

Though created by adults for children, this literature seems to spring from the authors' own vivid childhood imaginings. It may be that the playing out, in stories, of children leading independent lives helps children deal with their terror of separation; reassures them about their ability to cope on their own. Such is perhaps the case in the following story, by an eight-year-old girl, written after the teacher had read aloud in class *Sadako and the Thousand Paper Cranes*, a book based on the true story of a Japanese child in Hiroshima who died of leukemia some years after the dropping of the atomic bomb:

Today at lunch break Anna and I played that we were two little girls about our age walking home and the bomb dropped just as we were about to go inside. We went to our grandmother's house for help. She let us live with her and we had a happy time. We pretended we were in the bamboo class. (composition, 8-year-old girl)

The lack of affect in this story is at first reading rather shocking. But it can be seen, too, as an alternative, a happy ending to the story of Sadako: the fact that the bomb was dropped doesn't mean the end of the world, literally or figuratively. Even though home and family are presumably gone, one can still live happily ever after. The identification of the two girls with Sadako herself is clear: Sadako was also in the bamboo class.

Beyond home and family, the social context of the child, like that of adults, extends in space to include friends, community, country. It also can include identification with one's own people or race, with other "kids" or sometimes, for older children, with the whole human world:

> *The people who don't like Americans have bombs--like the Indians and the white people. Some white people have dogs to chase black people and they got bombs to throw at the black people--like when they wouldn't let them sit on the bus. (student, grade 1)*
>
> *Peace is being in one big group. (unidentified)*
>
> *Sitting on the seat of the bus that was to take us to Juvenile Hall, after having been plucked from the line on the road, I felt like my mind and stomach were going to burst, they were so full of rushed substances. Because the other kids were having the same feelings, I became close to them very quickly. (composition, 14-year-old boy)*

In the following paragraph, an adult describes how, in thinking of her own two children, the close-up, concrete, domestic world extends to the larger, more distant, more abstract world:

> One of our chief jobs as parents is to keep our children safe. We plug electric outlets and we teach them to cross the street--look to the left and look to the right. We teach them not to eat unidentified wild berries. These efforts may seem ludicrous when we think of the danger we are all in together. But we must keep right on teaching them to cross the street safely. When we work for nuclear disarmament, it's an extension of that same aspect of parenting, the most essential aspect of parenting perhaps, completely consistent with mending blue jeans and making nutritious snacks. Taking care of the small, immediate environment is part of taking care of the big environment.

The child's significant social context extends vertically in time, as well as horizontally in space:

interest in the past (felt first through personal associations) is extended through the present into the future, a future which appears uncertain and often frightening:

My grampa was in a war. He didn't get killed. He killed the bad guys. A lot of people get killed in war. (caption, picture by child, K-1)

My Dad was in a war, My Dad won the war. (caption, picture by child, K-1)

I know someone's father that was in the Civil War. Now his kids are my friends now. (caption, picture by student, grade K-1)

Through their personal connections to the past, children are interested in "roots," in their parents' childhood memories, their own participation in family history:

I want to grow up and have two babies and I want my babies to grow up...(student, grade 5)

Nuclear production will also affect more than the earth itself. It will affect the population. With the growing possibility of nuclear war or at least nuclear power, more people will not want to bring up kids in the nuclear age. (student, junior high)

Question: How old do you expect to live to be?
- I can hardly say. There is the nuclear war, or something. There's lots of diseases. Maybe I can get frozen or something so I don't have to be in on it, and then I can just come back later.
- I hope to live to be about 95 or 100 but I know I won't. If the world keeps up as it is and if there is a nuclear war, I want to die before it. (students, junior high)

I felt I was helping the world to live long. (11-year-old, at an anti-nuclear demonstration)

References to the threat of future extinction* are not hard to find:

- The threat of nuclear war must make growing up hard nowadays.
- You bet! Any minute we might all be destroyed. You at least got to live your life and experience it...we could all die before we live up to our potential. (interview with student, junior high)

If you think the world's going to end...there are certain privileges you expect to have later on you'll want to have now. (14-year-old boy)

*...What is threatened here is the sense of immortality that is part of the universal inner need for a continuous relationship to what has gone before and what will continue after our finite individual lives. This is by no means mere denial of death; rather, it concerns the appropriate symbolization of our biological and historical connectedness. (Robert Jay Lifton, *The New York Times Magazine*, 9/26/82)

What about people? What do people care?
No one thinks ahead/Into the future
About what is going to
Happen
When minds are left/Behind
And computers take over/Just to add one
Final/Click!/Then BOOM!
Pang!/Fire!/Pain!
What about us kids/that tried.
We tried to hold the peace/We had no choice
It was only arrogant adults/Making foolish decisions
Only for us to suffer with/Later on. (student, junior high)

Personally I feel it is hopeless--that it [the arms race and nuclear threat] is not going to stop and I'm going to die before my time. We take drugs because we're trying to make the best of the time we have got. (15-year-old)

Teenagers, who have a natural tendency to extremes of feelings and self-dramatization, frequently write and talk in terms of despair about the future. The nuclear threat, while certainly providing adequate grounds for such feelings, also serves to encourage a *carpe diem* philosophy which can undermine life at home and progress at school. Disbelief in the future hampers the ability to pay attention, to concentrate on work, and to take responsibility in planning for adulthood.

It can be said, of course, that awareness of death is the basic condition of life; that children have died of illness and accident in the past and have always been frightened by the spectre of death. Yet the threat of nuclear war seems different--because memory itself is at stake. It has always been some comfort to the individual to know that his/her place in the sequence of events will be kept, particularly in the memory of family and friends. The loss of the memory of humankind is total loss of meaning, the ultimate terror.

Although a child's security lies in feelings of being embedded within family/community/nation and within a continuum from the past into the future, an impulse in the opposite direction has to be noted as well: the wish to be distinctive, to stand out from the mob. Children often depict themselves as heroes and survivors, witnesses to the destruction of the world:

I'd stay and fight [in a mock battle] because it's excellent. I could never get hurt. I'm too strong. (student, kindergarten)

I have been living in this underground paradise for one year. About one million people live in this self-sufficient bomb shelter. I think it is almost

as good as the world was before the nuclear war started. (student, junior high)

I got in and pressed the green button then I pressed the blue button and away I went to the future time. A nuclear bomb had hit the Earth! It was just black. (dictated, student, grade 1)

Teenagers are often attracted by the idea of crisis as distraction from, or even a way out of, personal dilemmas. Running away, seeking adventure, joining the army or navy are ways to escape situations in which you lack distinction as well as being rites of passage. Young people often feel not fully recognized at home; in order to become individualized and distinctive, they need to break out, sometimes dramatically, from their accustomed context.

In addition, like the breakdown of order described earlier, war can be appealing as "time out." Raymond Radiguet, writing in a tone of slight embarrassment and apology, summed up what World War I meant to him as a 12-year-old French schoolboy: "A four-year holiday."

Nuclear war, however, would be as different in kind from other wars as it would be in scale. The difference is recognized by children even in the early elementary grades. The only possibility for heroics, drama, or distinction that nuclear war offers the imagination is as a survivor, a witness on the Earth through some miraculous circumstance or, more commonly, through escape to another world:

People crammed themselves into the rockets as if they were sardines, young children fell, tripped, confused, sad, unsure of themselves and everything around them. (girl, junior high)

We might recall, in this context, Sam's resonant statement quoted in Chapter 1: "If the world blew up you could watch it and have a nice sunset."

Order and Disorder

Children rely on orderliness, a sense of things being under control, managed by people and ordered by universal law. At the same time, they are attracted by images of excitement, disorder, or, less threateningly, by the temporary suspension of rules (eating lots of candy at Halloween, staying up late on New Year's Eve). They like to have rules in school even if they like, equally well, to break them. They like to know what time they're supposed to go to bed even if the appointed hour becomes a ritual subject for argument and complaint.

Concern with order, both man-made and natural, can be seen, in our collection of children's work, through references to logic, consequences, fairness, reciprocity, laws. War itself is often portrayed by children as a formal, symmetrical activity, a game played by rules, by teams of good guys and bad guys.

Rebecca's logical solution to the nuclear threat, everyone to "decide not to use them," is a good example of thinking at this age, finally irrefutable as well as enviably clear, simple, and reasonable. Young children go straight to the point and make us, as adults, yearn for the less complex, more understandable world which we fancy once existed; a world in which reason could prevail:

I wonder why they spend good money on ammunition when they could be using it for more important things. Without weapons there would be no war. (unidentified)

Why can't we just agree on something and stop nuclear war? (grade 1)

If I were the president, I'd just surrender and give up...(grade 1)

In the older elementary grades and junior high school, thinking becomes more hesitant, suggested solutions more qualified. Seeing the implications of paradox and taking others' viewpoints have become possible although the basic belief in rationality remains. In some cases, as in the last one quoted below, a note of irony creeps in. Children begin to blame adults, hold them responsible for the threat hanging over their own lives. The tone of mild disgust or impatience with adult stupidity, characteristic of the younger children, becomes one of resentment. With all that power, adults should have done better, been able to figure things out, and manage more reasonably:

I think there couldn't be [a civil war], not about nuclear disarmament, because the people who want it wouldn't want to fight. (discussion, junior high)

We probably shouldn't worry about how much money anybody has or if this country doesn't like that country because if we all die or something, that's going to be much worse. (interview, girl, junior high)

Dear Mr. Reagan, I think you should have all the nuclear weapons taken apart the way you put them together, and don't say you can't because we all know nothing is impossible! (letter, student, junior high)

Integral to childhood logic are ideas of fairness, reciprocity, and natural consequences, ideas which are frequently invoked by younger children, even without clear reference: "That's not fair!"--the accusation of a child who simply feels put upon by a parent, teacher, or another child. "That's what you get!"--a similar kind of statement, which refers to the natural consequences of another's act or attitude. Fairness, reciprocity and natural consequences, closely associated ideas, are often cited by younger children as a kind of personal justification for feelings or actions, but are stated more as principles by older elementary and junior high school children. Children of all ages feel, at times, that adults, by allowing the arms race to continue, have not been "fair" to them as children:

Teacher (looking at a child's drawing of a fight): 'What does this guy do?' Child: 'Walks around and kills people. It has to be fair...three against three.' (kindergarten)

I'd do it back to them that did it to me--throw rocks at them. (discussion, boy, grade 1)

Teacher: 'Do you think kids should play war?' Peter: 'No, their noses might get broken.' (kindergarten)

What am I supposed to do--he hit me first. (discussion, boy, grade 4)

How would you drop a nuclear bomb and not get killed yourself? (discussion, grade 4)

I don't think it's very likely we'd have a nuclear war because, you know, the Russians aren't that *dumb--they don't want to be blown up either. (9-year-old boy)*

The plane is getting ready to drop a bomb. It isn't a nuclear bomb because they know what would happen. The radiation would spread on the earth...it would spread so far it would get to the rabbits in the forest. (composition, boy, grade 4)

Why are you making weapons after you've been shot? I mean, really! You wouldn't have gotten shot if you had been smart enough to stop letting weapons be made. (letter to the President, student, grade 4)

We'll all die if anyone starts shooting off any nuclear weapons, because they'll start shooting back and pretty soon there won't be anything left of this beautiful world that's been around for millions and millions of years. (letter to the President, 11-year-old boy)

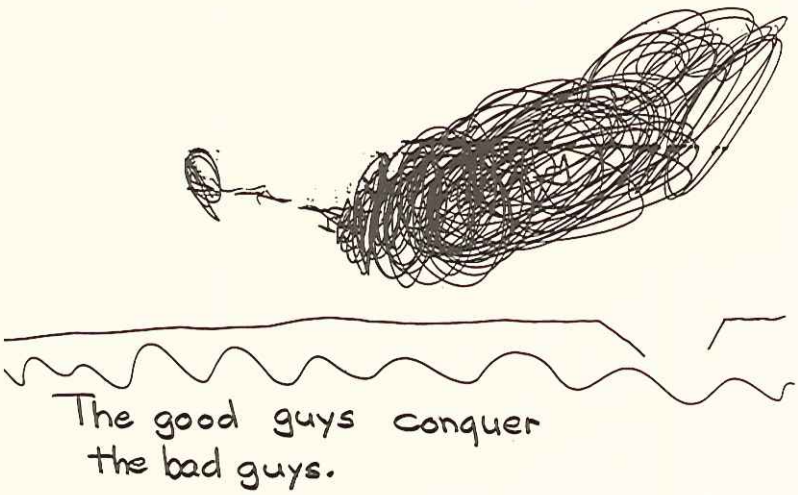
Why are you building those powerful weapons? It's unfair to the kids who are just starting out--trying to have a life of their own. (statement, student, grade 7)

Reciprocity and fairness are basic elements in all games and children frequently see war in terms of a contest between good and evil teams.

The wars are protection for the America team. There is two teams and they want their freedom. (caption under drawing, student, grade 1)

I am a soldier. I walk around to kill people. The teams fight and they're not friends. (caption under drawing, student, kindergarten)

Teacher: Why are they bad guys? [referring to illustration in a book] Student: Because they're wearing black suits. I can tell. (discussion, grade 1-2)



(student, kindergarten; caption dictated)

Student: They might have more [missiles] than us.
Teacher: Who is them?
Students: Russians, Argentines, French, Germans, Irish...
Student: We'll never give up our land because Napoleon gave it to us. We talked it over with Napoleon.
(discussion, grade 1, after reading aloud of Drummer Hoff*)*

Teacher: Who stops war? How do you stop war?
Student: Like one team runs out of nuclear missiles.
Student: Maybe the guys might be all killed.
Student: I have two answers. One is, one might just want to stop the war and give up, and give all the weapons or they might just run out of ammunition and stuff like that.
Teacher: The two teams might run out of ammunition?
Student: No, one team.
Student: One team might beat the other team...
(discussion, grade 3)

One common way to order the world and its events is by dividing it into the two realms of good and evil, angels and devils, good guys and bad guys, us and them. In children's descriptions of battles and wars the element of blame is oddly absent; causes are not gone into nor are ideologies expounded. The bad guys are just the bad guys, necessary to complete the symmetry of conflict. Battles are described in words or images and if causes are attributed at all they don't ordinarily bear much analysis.

The "bad guys" are the "other team." War seen in terms of games with opposing teams is not a surprising image given children's natural interest in games and their increasing concern, as they grow older, with rules and structures. Our national leaders reinforce these ideas for us all by referring to "supporting the good guys" in international relations,* by playing "war games," and by talking, in peacetime, of "the enemy" or "our opponents." *The New York Times* (March 13, 1983) referred to President Reagan, in Orlando, Florida, "delivering what has been called his 'Darth Vader speech' ...'America is great because America is good.'"**

Recently dichotomizing has become intensified through the confrontation between the USA and the USSR--capitalism vs. communism, Warsaw Pact vs. NATO, "them" vs. "us."

Children want very much to be on "the good side," "the winning team," and in pre-junior high years tend to describe conflicts in dichotomous terms:

The earth was trying to help the other planets to have surface too. And the space ships were fighting a team that wanted to kill the other team. And the

*Jean Kirkpatrick, U.S. Ambassador to the United Nations, quoted in *The Boston Globe*, April 25, 1983.

**Paul Fussell, in *The Great War and Modern Memory*, sees "gross dichotomy" as a particular legacy from World War I: "The physical confrontation between 'us' and 'them' is an obvious figure of gross dichotomy. But less predictably the mode of gross dichotomy came to dominate perception and expression

elsewhere, encouraging finally what we can call the modern *versus* habit: one thing opposed to another, not with some Hegelian hope of synthesis involving a dissolution of both extremes (that would suggest 'a negotiated peace,' which is anathema), but with a sense that one of the poles embodies so wicked a deficiency or flaw or perversion that its total submission is called for."

other team was fighting because they wanted to kill them because they didn't want the planets to have their space. The good guys exploded the bad guys with laser guns. The good guys won. They shot all the men of the bad guys. They finally won. And they went back to their base. (boy, grade 1)

Ideas of good and evil, of being on the right side, the winning team, are comforting. It's good to get back to your "base" and feel safe and know that order has been re-established in the universe. By junior high, children begin to see dichotomous friends-and-enemies thinking as simplistic, even dangerous:

It's like a game but it's getting so ridiculous because we have more than enough weapons to blow up the world and they can't decide whether to stop or when to stop with all these things they have. But they have to have enough to defend themselves if somebody starts to do a war...Well, we don't really have an actual enemy until somebody sets something off. (interview, 12-year-old girl)

Laws, in the younger elementary years, are givens, the basic rationale of fairness and not open to question or argument. They stand above rules which are more easily broken. Later on, even laws can be transgressed in the interest of a higher morality. In the example below one can sense a touch of pride in having broken the law:

Also, in breaking the law I was able to look for a short time at society from the outside. It was only a slight scrape with the law, but it was a scrape all right, and this was certainly made clear to me by those who were enforcing it. (composition, 14-year-old boy, after taking part in a demonstration at a nuclear energy plant)

As we encourage children in school to obey rules, respect the law, settle conflicts peaceably, it also seems important to recognize children's real attraction to disorder, represented by aggression and violence: wild play, explosive sound effects and explosive pictures, volcanoes, fires, hurricanes, monsters, robbers, even to war itself. Boys, for some reason, probably having to do with the structure of our society, seem to go in for overt violence more readily than girls. They have traditionally played with toy soldiers, set off fire crackers, gotten into playground fights--perhaps accommodating to the eventual role they think they will be expected to play as men. Girls too feel hostility but are less likely to express it in the same warlike modes.

Our collection of materials contains many images of violence:

Teacher: What happens when they shoot a real gun?
Robert: They can kill people!
Teacher: What do you think, Peter?
Peter: They could get dead. If the darn thing wasn't loaded they wouldn't die.
Teacher: What would happen if it was loaded?
[All children start to talk at once, making shooting noises and pantomiming. James is trying to talk through it all. He ends by saying, 'They fall off their horse in the west.'] (classroom discussion, kindergarten)

All the dangers fell down the wall and then there was a fire and the danger was all in the fire. I don't go to the fire, do you? And then they said they were putting them away...all the dangers. Danger is when you go inside and there is a fire and you get your face burned a little. And the bombs bursted and the letters came out and they were all burned. And the paintings spilled and they spilled on the fire; and the fire burned the paintings. And then the cow came along and bited. And a helicopter came along and fell down. And the letters fell down and the bottle and everything tipped over. The balloons popped and the danger came and the fire came and the danger didn't come back. The End. (dictated by kindergartner)

They drop bombs from planes. The bombs will blow up half this country. Men parachute from planes and shoot people. Tanks come and blow up houses and bridges. I know about it because my brother tells me. We have lots of kids on our street who play war and guns. (classroom discussion, grade 3)

Teachers of children from kindergarten into junior high are familiar with children's (mainly boys') intricate "action drawings" of battle scenes, tanks, planes, bombs, warships, explosions. These drawings, often accompanied by sound effects when done by younger children, can be remarkably detailed, skilled illustrations which are, in fact, virtually "readable." This genre of art demonstrates many of the themes being explored here: teams of good guys and bad guys (sometimes distinguished by their clothing), attraction to violence (explosions, sinking ships, crashing planes), consequences (the bad guys losing, sometimes literally "crushed").

The following drawing by a first grader is a vivid example of action drawing: clear, detailed, fully controlled, and confident. Lots is going on, on land, in the sky, on and under the water. Although the overall

composition is bold and original, many of the elements are depicted according to the conventions of the genre: parachutes, submarines, fish, machine guns, waves. The drawing could be described as a peaceful scene of violence; a sense of order dominates almost belying the explicit content. It came with an explanation written, *ex post facto*, at the teacher's request:

> *There are fuel tanks. They're for blasting off. They need fire to go off.*
> *This is an old, old submarine. It makes holes in the ship.*
> *These are regular submarines. The good guys are attacking the bad guys. The good guys are from Everett. The bad guys are from Boston.*
> *No one got hurt. The good guys won. The bad guys lost. Everybody got hurt in the bad guy team.*
> *This is an island. The man in the balloon is on the island. He almost got shot down. Everybody in picture is a good guy.*

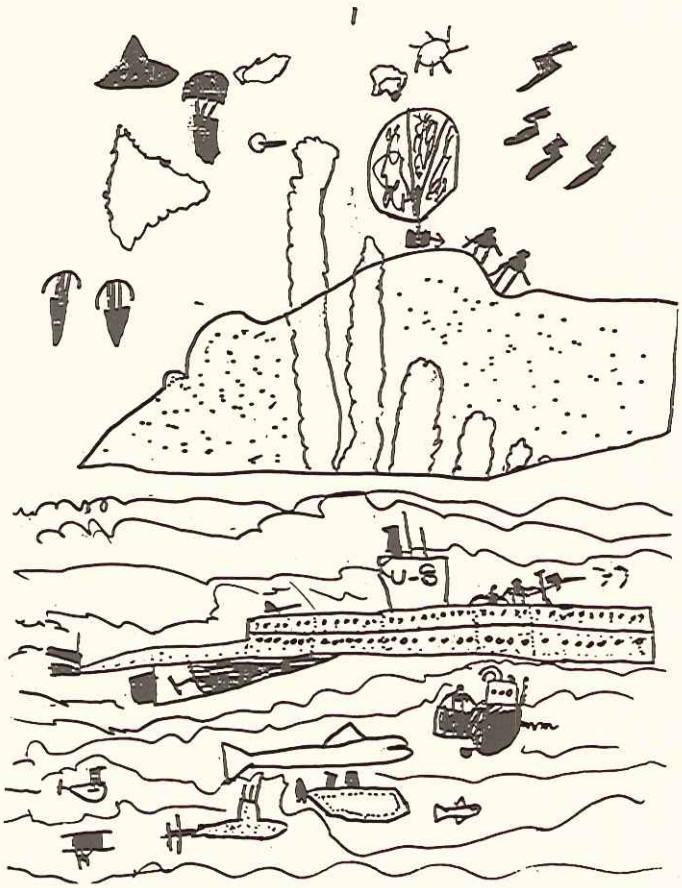


Illustration 10

The last drawing in this section, by a nine-year-old boy, can be seen as an allegory of history. Names and chronology are mixed up, but the idea is clear: history signifies violence.

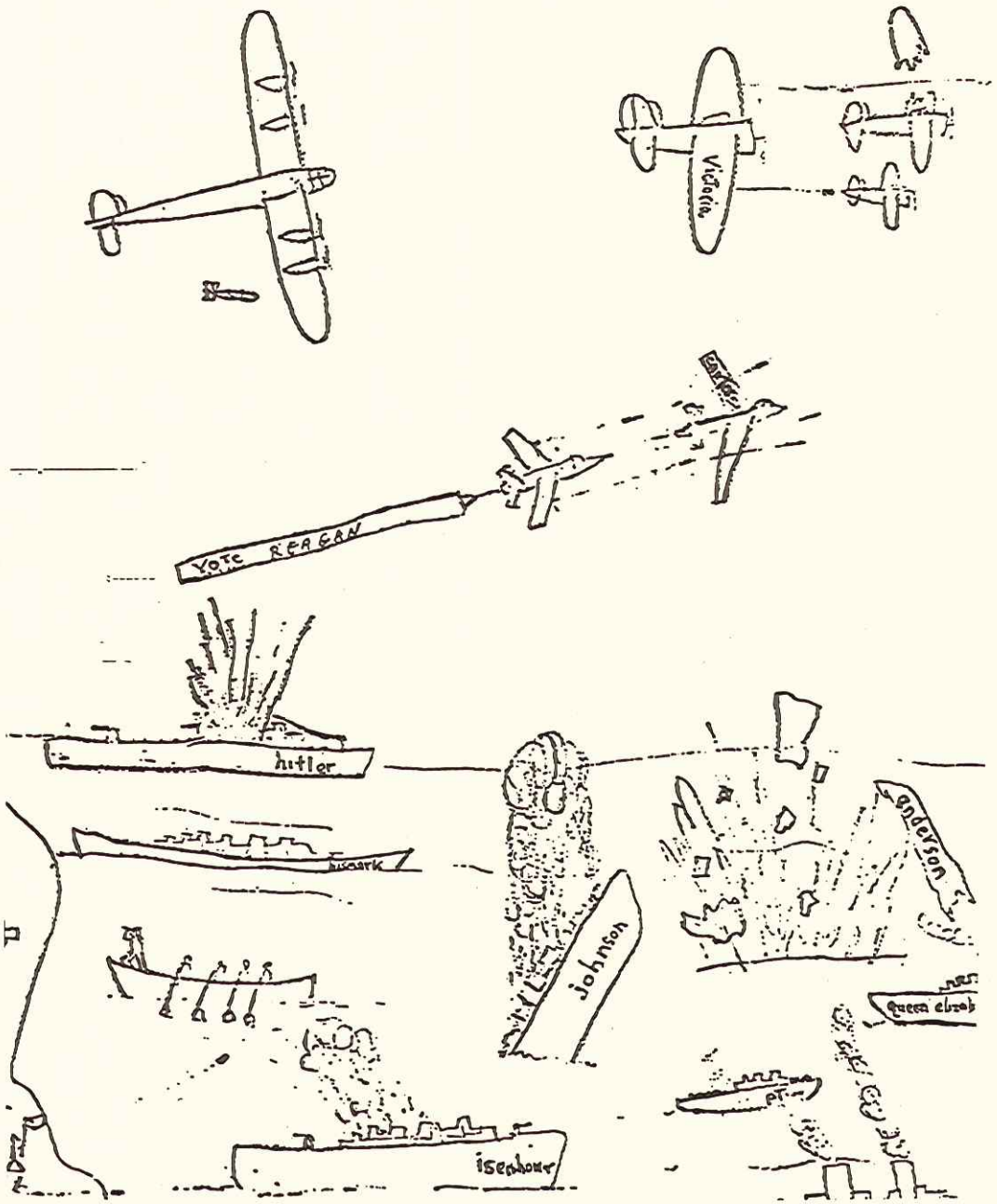


Illustration 11

3

Modes

Like everyone else, children carry on their daily lives reacting to conflicting impulses. Part of growing up, a part always difficult to work through, is learning to manage paradox and to settle for ambiguity in human affairs. In this chapter I want to discuss and illustrate two such pairs of opposing pulls in the ways children think about and come to terms with the world around them: playing and reality, and knowing and not knowing. Although the balance between the two modes in each case alters, depending on the disposition of the child and the climate in which he/she lives, both are integral to growing up.*

In addition, I want to discuss here some uses of irony and humor which demonstrate tension of another kind: between different views or understandings of an event--one usually the commonly held view and the other a more informed, perceptive view. The contrast between views is dramatized and the distance between them highlighted in order to make a point.

Playing and Reality

The tension between playing and reality is vividly illustrated (I'm tempted to say "played out") in children's stories, poems, pictures, play-acting, discussions, questions. The created world of art and play has to do with events taking place in the objective or "real" world at the same time that it reflects complex inner feelings --concerns, impulses, fears, hopes, and desires which are common to us all. As a meeting ground of the inner and outer, it is necessary and functional, as well being fun. In what follows, I use a broad definition of play to include various activities of the imagination, the products of which can be drawings, speculations, and stories (written, told, or acted out).

Teacher: What's the difference between toy guns and real guns?
Ben: Well, real guns do have gun powder.
Matthew: And there's different kinds of guns.
Jane: I have an idea why! Because real ones work and toy ones don't work.
Teacher: What do you mean by "work?"

*While we all look for certainty in order to confirm and justify already taken actions and already assumed opinions, more often than not there is no "right" answer, which is a realization that is hard to take. Naturally inclined to take positions, children are encouraged by our system of education to look for "right" answers even when there may not be any. In our schools, even art is often taught as though there were a right way--a right way, for instance, of drawing an Easter bunny or of painting a landscape--thus counteracting much of art education's potential benefit and leading children to turn once more for help to adults: "Show me how to draw____." But art, as well as play, in actual practice in the everyday world, both serves as counteractives to this dichotomizing of experience and forcing of choices: art because it allows no right answers, only the search for better solutions; play because of the built-in ambiguity between what is real and what is imagined. In fact, a good part of the educational value of both art and play is their actual dependence on ambiguity.

Matthew: For instance, real guns kill people and play guns don't.
Matthew: In matchbox toys I have some cannons and army things like trucks. But we don't have any more army men.
Teacher: Would you like to be in a real war?
All three students emphatically: No!
Teacher: Why not?
Jane: You could get killed*! (discussions, kindergarten)*

This discussion is similar to the one quoted in its entirety in Chapter 1, "If I Were Boss of the World." In each case, the children are very clear about the distinction between playing and reality ("For instance, real guns kill people").

In fact, most of the time children of kindergarten age keep playing and reality fairly well sorted out--i.e., understand the relationship between the two. But a degree of belief is necessary for play to be intellectually and emotionally satisfying; you have to *care*, which means temporarily suspending disbelief, "losing" yourself in the game. One kindergarten child, asked whether his toy gun was "real," replied, "No, it's not a *real* gun but you have to pretend it's real." He sees the reason for voluntarily relinquishing everyday understanding (that a toy's just a toy) in the interest of serious play.

Cal's and Martin's understanding of addiction (in "Boss of the World") has to do with intentions: whether you are in control of the play and enter the world of illusion willingly and consciously, or whether you are controlled by the play, taken over by illusion without ability to extract yourself at will. Cal and Martin see themselves in the first situation, as willing but conscious participants.

There are some circumstances in which both adults and children have difficulty keeping the relationship between playing and reality in focus: when, in fact, the distinction is not clear and when particularly strong feelings are involved.

We are not sure, for example, which weapons have already been invented, which are on the drawing boards, and which exist in the not-quite-impossible realm of the imagination. For young children, entering a complicated world full of shades of meaning and inadequately expressed concepts, there are infinite possibilities for confusion and misunderstanding. I can recollect how transfixed were members of a first grade class from a Cambridge public school, on a visit to a local anthropology museum, by a group of life-sized, life-like figures of American Indians portraying a potlatch ceremony. The figures, made of painted plaster, wore real clothes, had real hair, and were arranged in natural postures around an

obviously fake fire. One child whispered to the teacher, terror in his voice, "Are they *real*?" Only by promising a visit to the gift shop was the teacher finally able to move the children on.

It takes experience in the world to understand the difference between "alive" and "real" (the stuffed bear and dinosaur skeleton in the natural history museum), to know that the "real" and the "unreal" can be combined (the plaster figure with human hair), and to recognize that the line between the real and unreal is often blurred, even for adults ("docu-drama," "true story"). Some misunderstandings straighten themselves out with time and experience; others perhaps sink into a substratum of unsolved mysteries which can fuel nightmares.

Strong feelings, particularly of fear, terror, and horror, tend to break down the distinction between playing and reality. The picture book mentioned above, *Bang Bang You're Dead*, has been much criticized by parents and teachers for duping children into emotional involvement by means of the graphic realism of both the story and illustrations. The book has even been banned from many public libraries for this reason. The theme of this picture book is, in fact, the relationship between playing and reality; play fighting turns into real fighting. There's no doubt that children are fascinated/horrified by the pictures, the effect of which is heightened by the limited palette: black and white, with touches of red for the gory details.

In the following exchange, the children, deeply involved in the story which is being read aloud, momentarily forget, as they respond to the teacher's question, that they are not actual participants:

> [The teacher, after recounting the bloody fight between the rival groups of children over the hill and the subsequent compromise they work out, asks the children about the end of the book.]
>
> - Who got the hill?
>
> [The children answer spontaneously.]
>
> - All of *us*! (my emphasis)

The hazard is not that the audience will confuse the play fight in the book with the real fight in the book, the distinction the author is trying to clarify; rather that the vivid graphic rendering of children being hurt, the actual shedding of blood, will wipe out the protective distance between the children listening to the story and the fictional children in the story. The listeners are drawn in through their feelings of horror, probably half-willingly, half reluctantly, just as one is drawn into the Dartmoor of "The Hound of the Baskervilles" or to the water beneath which "Jaws" lurks.

Children and adults travel back and forth, either voluntarily or involuntarily, across the bridge of feeling between the real world and the world of the imagination, children more casually and easily than adults. The children in the account cited above entered the world of fiction through their feelings of fear and horror, intensified by the graphic details. Adults voluntarily enter the world of imagination for thrills and the relief, then, of returning to familiar reality. The screams heard, however, during showings of "Jaws" are without doubt screams of real terror and tears shed over the death of Little Nell are "heart-felt" tears of sadness at loss. We are "transported" (carried across) by our feelings.

There is a difference, however, between how well adults and children are able to control these transitions between the real and the made-up; sane adults almost always choose knowingly to enter the world of fiction--read the book, watch TV, go to the movie (even though they often overestimate their control over their feelings). Children, who tend to be less wary, can also enter the experience of book, movie, or TV less knowingly and have a harder time finding their way back. They don't always know what to expect and are more likely to go beyond their depth, become truly frightened, and suffer for it.

In the world of dreams, both children and adults lose the ability to distinguish the real from the unreal but children's dreams seem to persist even more vividly during the day than do adults'. Five-year-olds are still close to a time when the distinction between waking and sleeping realities is not all that clear. "I'm afraid I'm going to dream about it"--a scary possibility because in dreams we are at the mercy of our feelings without the comfort of being able to decide whether or not they are justified and without the possibility of relief through intentional redirecting of the imagination.

Sometimes the feelings aroused through dramatic play can, in almost dreamlike fashion, carry over to the actual and influence interpretation of events in the world.

A pre-school teacher observed the following incident in the playground:

> I was pushing kids on the swings when I saw them [four four-year-old boys] running about throwing balls into the air, then hiding. I was shocked to hear them say the word "nuclear." I listened to them more closely to find the balls were nuclear bombs.
>
> One boy seemed to have some information about what would happen if a nuclear bomb was dropped. I listened as he explained to the other children that the bombs would be dropped from planes and everything would be burned and broken. I was just thinking that

I would talk to them about this when I saw the boys start running across the yard to the school door. I was puzzled at first as they seemed very frightened. As I followed I realized a helicopter was coming into view above the school.

I caught up with the boys in the cubbyroom of the school. They were hiding, some with hands over their faces. The boy who had been the leader was saying, "Hey, come on, that was only a helicopter, come on!"

I talked with the kids for maybe eight or ten minutes. I was surprised at how frightened they were. Some kids then went outside again but two kids didn't want to. (account by pre-school teacher)

This kind of occurrence, however--accidental confounding of dramatic play with reality--is relatively rare. In their own play, children traditionally separate playing from reality by formal phrases like, "Let's pretend...," "Supposing that...," "You be the...," or commonly understood clues. After the scene quoted a few paragraphs back, an observer questioned one of the children present at the reading of *Bang Bang You're Dead*.

Observer: Was that going to be a real war?

Child: No, "bang bang you're dead" isn't real. It's just play.

Observer: How can you tell?

Child: When you just go "boom," "wheee."

Children's deep involvement in their play sometimes causes adults uneasiness and worry lest it be mistaken for reality. Children's ready access to the imagination can seem unhealthy, even a path to madness (the "overwrought imagination"). Under some circumstances, it can be resented. J. D. Salinger's story, "Uncle Wiggly in Connecticut," portrays an overwrought, disappointed young mother, only recently disabused of her childhood sense of open-ended possibility, who resents her young daughter finding solace in fantasy. In a moment of uncontrolled anger and frustration, the mother pushes the child over into the side of the bed carefully reserved by the child for her imaginary companion. In this case, the child's imagination is punished for providing a kind of comfort no longer easily available to adults. Forcing someone to "face reality," even if meant well, can be devastating, particularly when inner needs and outer events are at odds and the imagination is providing necessary respite.

Winnicott articulated the role of the creative imagination in the ecology of the individual consciousness:

> Of every individual who has reached to the stage of being a unit with a limiting membrane and an outside and an inside, it can be said there is an *inner reality* to that individual, an inner world that can be rich or poor and can be at peace or in a state of war. This helps, but is it enough? My claim is that if there is a need for this double statement, there is also need for a triple one: the third part of the life of a human being, a part that we cannot ignore, is an intermediate area of experiencing to which inner reality and external life both contribute.

A century earlier Nathaniel Hawthorne, in his preface to *The Scarlet Letter*, described a similar area:

> ...a neutral territory somewhere between the real world and fairy-land, where the Actual and the Imaginary may meet, and each imbue itself with the nature of the other.

It is in this "territory" that art and play take place. Art and play are not "real" in the sense that a trip in a car is real. However, a child can pretend or play-act a trip in a car and bring to that play-acting much of the intensity of feeling surrounding a real trip; the feelings suffuse the play-acting which in turn mimics experience in the real world--the sound effects, seating arrangements, and gestures descriptive of a trip in a car. Thus the play-acting brings together in a created scene (or territory) both intense feelings and knowledge of real events. Yet playing is not reality; nor is art (although some would argue with that). The picture can be torn up, the pretend game declared over. Art and play simply provide an area which, in Winnicott's words, can be "a restingplace for the individual engaged in the perpetual human task of keeping inner and outer reality separate yet interrelated."

Barbara Biber, commenting on her observation of a group of seven-year-olds engaged in "what appears to be bandit or cowboy play," described the function of play in similar terms, again intermediate between the real world and the world of feeling:

> The *realism* with which the roles are played reveals the depth of feeling which finds expression through this kind of play, for all the children. (my emphasis)

In their play and art children sometimes edge close to frightening, real world subject matter, depicted in shockingly direct fashion. They describe the effects of nuclear war in graphic detail elaborated on the basis of information from the media, movies, books, comics,

overheard conversations, and from their own active imaginations:

> *Hundreds of children were crying and wailing, radioactive sores already appearing on their faces. Heat penetrated the rocket making it glow. People shrieked in pain as their skin stuck to the rocket; charred, it peeled away from their arms, faces and legs. People screamed in horrible agony, the pain taking over their trembling bodies. (from story by 12-year-old girl)*

Nuclear horror stories like this are one way of "facing it," plumbing the depths, vicariously experiencing the worst, a way which appeals to certain children, particularly in the older elementary years. Sometimes children appear to be almost over-indulging themselves in horror.

Horror, of course, has enormous appeal for older children, partly perhaps as a way of making reality look good by contrast and partly as a way of testing themselves against the world: a demonstration that they are not helpless captives of feelings but have the ability and control to cross either way between playing and reality. The risk involved--of daytime terrors and bad dreams at night--gives added piquancy to the experience.

More commonly children dream up plans of escape: sci-fi ventures into other worlds and post-nuclear utopias (examples of which were excerpted in the previous chapter) or more traditional retreats into peaceful landscapes and safe places (forts, secret gardens). These refuges are often described in minute, concrete detail. Escape to the moon, the traditional symbol of the unrealistic and unattainable ("moon-gazing," "the man in the moon") is still a viable metaphor in spite of the exploits of the astronauts:

> *I would make rocket houses so people could go to the moon because some people would like to go to the moon because some people would like to explore the moon. (grade 1, dictated caption under drawing)*

Here is Rebecca, seven years old, and her mother, in the kitchen:

> R: Would you rather have a lot of money and be able to buy what you want and then be poor, or be poor and have a lot of money in the bank?
>
> M: What about you?
>
> R: I'd like to have money in the bank and be poor because if the world were going to end you could take the money and go somewhere else.

M: Where?

R: To the moon!

M: Why would the world blow up?

R: Because there are so many nuclear weapons and they want to get rid of them in an ending way.

M: What do you mean, an ending way?

R: War is an ending way because all the people blow up in an ending way.

Rebecca hadn't actually said anything about the world blowing up; it's her mother who read that implication into the questions Rebecca has been asking.

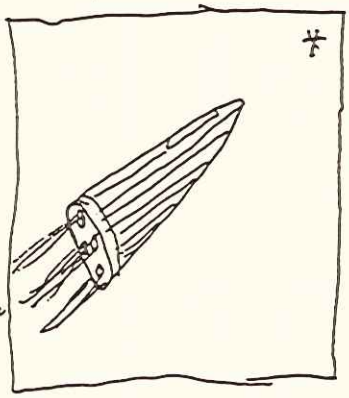
I would make a tunnel from earth to the moon so normal people could go to the moon, me too, and the moon would have lots of cities and rivers and it would have a shield around it so people could breathe and there would be toy shops and buildings. And all of these things would be gigantic and all the people would own their own homes so they would be controllable and the people wouldn't have to fix anything. Me too. The end. (composition, student, grade 2)

The wistful, twice-interjected "me too" in the composition above is a particularly moving tip-off to the writer's personal investment in his vision of escape. He definitely wants to be "in on it." His concerns are clear: for safety, health, and adequate housing, as well as for toys and the normal surrounds of both nature and civilization (rivers and cities).

Although the writer's concerns are not as clearly specified in the following "newspaper article" by a seventh-grade boy (Illustration 12), the article contains a tell-tale phrase: "set us free from earth." One might speculate that, because of their global scale, the "worries" from which the writer looks to be "set free" probably have to do with the possibility of nuclear war:

THE BOSTON GLOBE

Interselic system travel



Mr President has just found out about the interselic system travel which will set us free from earth, no more worries or anything, first stop Mars, then out of the system,

Cont. on pg. 6

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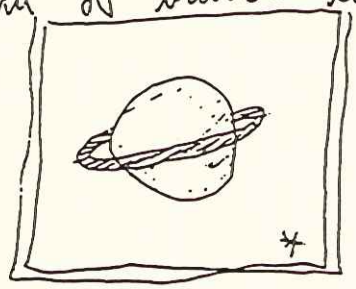
cont... From page 1

the travels will vary at first from 5,000 dollars to 10,000 dollars. This new system of travel will take about 6 hours to Mars for 12 hours to the next planet this new kind of travel is called Warpey.



*Photos from our ship.

Illustration 12

Tree houses, caves, attics, forts, secret hideaways in general all offer a promise of security. The observation which follows*, given in its entirety, illustrates many of the features of this kind of play: the "estate," surrounded by a wall, is secret, safe, and self-sufficient, a complete environment containing all the necessities of life within its confines. The players demonstrate wit and humor, give-and-take, invention, knowledge, a fair amount of sophistication and, most important, they are clearly having fun:**

*Observation by Patricia Carini at the Prospect School, North Bennington, VT.

**...this element, the fun of playing, resists all analysis, all logical interpretation. As a concept, it cannot be reduced to any other mental category...it is precisely this fun-element that characterizes the essence of play. Here we have to do with an absolutely primary category of life, familiar to everybody at a glance right down to the animal level. (Huizinga, op. cit., p. 3.)

The Estate

When I came in, Robert (age 11) and Andrew (age 10) were in the block room at work on a large scale construction. Nearby, Ian was completing a race track for cars [on top of the covered sand/water table]. Andrew said "hi," and Robert volunteered that the construction was their "estate" and continued,

Robert: We have the best armed forces of anyone anywhere.

Andrew: Yeah...now we're building the wall around it.

Robert: And no one can get in unless we let them.

Their enthusiasm for the construction was evident in smiles, conversational tone, and their eagerness to tell me about it. Since they seemed happy to have an audience, I asked what was in the estate, and was told the following by both boys in a smooth flow of alternating sentences, in which one boy picked up where the other paused for breath. Andrew began:

Andrew: We've got everything we need inside our wall, everything...

Robert: Yeah, we've got a race track and five Rolls, five Lamberghinis, five Jaguars, five Martins, and five...all those kinds, you know, all the fastest and best ones. (This last cheerily with a pleased, excited laugh.)

Andrew: And this is our house...mostly it's underground to be safe from you know, the, oh, Russians and all them.

Robert: And we got offices...a whole building full...

Andrew: Yeah, and it's all solar so we don't depend on anyone else.

Robert: And *this*--you know what this is? *This* (voice full of pride and pleasure) is the computer console. It's the most sophisticated one in the world...

Andrew: And he's the world's most famous and best computer expert...

Robert: Yeah, we have satellite [relays] in space so we can intercept any attackers' signals. And we have the best interception system of anybody anywhere.

Andrew: And if we find out that someone is inventing a weapons system, then I build us a safe building further underground. The wall we're building around the estate will only have one gate and to get in you have to know a special code.

Robert: It's a special electric signal that opens it...you have to have a security clearance number.

Andrew: Inside this wall we've got everything we need...house, dog, horse and car race tracks, a medical emergency unit, offices, a computer...we wouldn't ever have to leave here if we got devastated...This place is complete and it's protected and it's safe.

[Me]: Food too?

Andrew: Oh yeah...here's our fountain [a sculptural construction using triangular blocks], and our flowering gardens are all around it and it's all under a dome for protection.

Robert: This estate is the complete estate of three (?) quaint rich gentlemen.

(Both boys laugh at this and repeat the phrase together, "three quaint rich gentlemen.")

Andrew: Yeah, the richest in the world.

At this point Ian, who had been working separately on his track, came and stepped over the estate wall:

Robert: *Hey*, Ian...this is our walled estate, you can't just *step* over the wall. There's only one entrance and you *don't* have the *number*. (Said with emphasis but without any trace of acrimony.)

No response from Ian, who looks vague and bemused (rather deliberately so, it seemed to me). He slowly went back over the wall with an exaggeratedly high step, and sank down next to a semicircular structure outside the wall. From Robert's next comment, it seems that this was built by Ian earlier; he may, in fact, be the third "rich quaint gentleman" referred to by Robert:

> Robert (to Andrew): Now we should build our helicopter pad.
>
> Andrew: Do we have helicopters?
>
> Robert: Of *course*, we have helicopters. That's how the president comes in when he wants to consult us. (Robert laughs at this idea.)
>
> Andrew: We probably have a fleet of helicopters --you know, for little jaunts to Paris, to London...(With this, he does a little dance around, pulling his hat to one side to illustrate their elegance--definitely men of the world.)

Robert and Andrew both laugh and stand surveying their domain.

> Robert: This is sure some estate, we better be careful we don't go bankrupt.
>
> Andrew: I think we better add a hospital, too, just in case.

Robert glances over at Ian and says in a soft, pleasant tone,

> Robert: Hey, Ian, we can build you inside our wall, if you want. You can have your own place but be inside our estate.
>
> Ian (thoughtfully): Okay...sure (he picks up a long block as if to start the construction but hesitates). Actually, I don't think I will. I'll just live close by.
>
> Robert: Okay, and we'll give you a special entrance so you can just come in any time.
>
> Andrew: But, he'll need a number so we'll know it's him.
>
> Robert: Right...

Clean-up is announced. □

In the two excerpts that follow, taken from stories by slightly older junior-high-age children, the narrators each escape the common doom essentially because of their moral qualities: the first, because of rank and official responsibility; the second, because of virtuous character. Both stories could, in fact, be termed morality tales. In the selection immediately following, the moral tone is set by the title: "The Beast That Killed Its Master." (The "beast" refers presumably to mankind and the "master" to the planet Earth.)

The narrator, because of both rank and advance planning, has been spared from death by nuclear blast. He appears as a rather superior kind of person, often on the verge of saying, "I told you so."

> Thanks to our special shelter in the countryside, we weren't affected by the blast. Now, as we flew nearer and nearer to the heart of the city, the damage got worse. The helicopter touched down next to a crumbling building. My colleagues and I left the helicopter and surveyed the situation. I am General Dave Scottfield and my colleagues are Generals Fisher and Sumner. We were from the air force and we were here to check the effects of the nuclear attack on New York City...The mission was very organized and military. Everything of significance was noted and all procedures were followed...

The second story begins with the image of an impending holocaust, and then takes up the story of Mike, "a very rich young man" who hears the voice of God speaking to him in a dream:

> This is a warning to all mankind to save themselves while they can...you, Mike Dorsey, are a chosen person, chosen to inform your people about the upcoming danger because you are the only truly truthful and not greedy person on the whole Earth and we knew that you would not be scared to take a risk of losing your fortune for all the people on Earth...

In the end, Mike, his wife, and child are transported back to prehistoric times. Mike, become king, is about to address his people:

> He remembered what he wanted to talk about and he went on about how everyone should love and share with everyone else instead of being greedy and hateful...The Earth was given another chance to improve its people.

Fantasy, for these young people, has taken on a tone of righteousness and warning (similar to that in "Lords of the Future"), echoing the Old Testament as well as myths and morality tales. Escape to the Moon or

into the future--to utopias of whatever kind--indicates some giving up of hope for change in the present course of events and for the possibility of life on Earth.

Even though we know that utopianism is natural to older children for reasons which have little to do with the nuclear threat, it is discouraging to see this kind of solution heavily represented in their work. It is a relief, at the end of this section, to turn from the imagination of despair to the imagination of hope. Younger children, often with the encouragement of parents or teachers, are still willing to imagine alternatives on Earth. The following drawing was one of a series done in a second-grade classroom. The teacher's suggested subject was: alternative uses for weapons.

A Machine gun That Unclogs A sink.

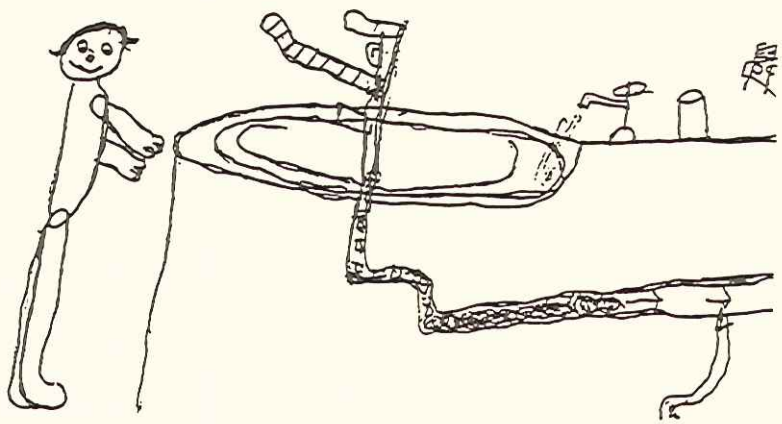


Illustration 13

Knowing/Not Knowing

"How much do they know?" "How much does the knowledge they do possess influence them, weigh on their minds?" With so many immediate and urgent things in the lives of children--friends, family, baseball, parties, school grades, worries about divorce, drunkenness, abusiveness, curiosity about sex, anxiety about money, the struggle for autonomy--it is sometimes hard to believe children can also be worried about such an apparently remote possibility as nuclear war.

Questions about children's knowledge of adult matters, whether they concern relationships among individuals or nations, can never be simply assessed; to begin with, it's not clear what constitutes knowledge. As I've mentioned before, a child can have the facts mixed up but still essentially "know," have an accurate sense of the "feel" of the actual or threatened event.

> *There's a fire-bomb in Watertown and it's scary. But we're going to write letters to the mailman and if he stops it we'll bring him flowers, 'cos they're lovely. But it's scary. (3-year-old girl)*

> *Observer: What do you think is a real war?*
> *Child: When we have cannon balls and real bad things, like Soviet...like real tugboats and shooting bombs....*
> *Observer: What do you mean, 'tugboats?'*
> *Child: Well, I don't mean that but boats that are shooting bombs and blasting and guns... (conversation, first grade)*

The three-year-old has a general idea of the danger of a bomb going off and that writing letters (which presumably her parents have been doing) can help avert the danger. The first-grader knows what weapons are all about even if his information is confused: there's no essential difference in meaning between tugboats shooting bombs and submarines armed with strategic nuclear weapons. Children pick up feelings "out of the air" and then frequently rationalize or back them up by explanations of their own invention, a sequence which often gives adults the impression that the children don't "know."

As children get older, they begin to sort out the facts. How much they do or don't know continues to depend on the feelings and conversations around them as well as on information in the media. The degree of their concern, however, continues to depend also on the circumstances of their individual lives--the hardships, stresses, and dangers they encounter from day to day and the hazards they perceive for the future. Thus for some children war

is "a very far-away kind of notion" since it has never been experienced here, unlike Europe and other places. At the same time, there's "incredible personal fear of violence that follows my kids...having violence done to them on the street...." (notes from teachers' meeting)

On the other hand, for some children the image of nuclear bombs has a very immediate and oppressive presence.* Consider the effect some observers claim it had on the first generations of children who experienced it. Frank Conroy traces the origins of American post-Second World War political apathy to guilt and secrecy about the atomic bomb, and his argument is convincing:

> It goes without saying that the effects of the bomb on the American mind were profound. We who were children at the time with our childlike sensitivity to mystery, magic, and the unknown, with our social antennae fully extended to pull in all sorts of information, regardless of its usefulness...were perhaps most deeply affected. We felt exhilaration at the indisputable proof that America was the strongest power on earth, apprehension because the power was mysterious, and most significantly we felt guilt, secret guilt that verged on the traitorous, guilt we could not possibly talk about.

On the grounds of this secret guilt has been built a remarkable edifice in the service of "not knowing." Children, at least some children, are willing to keep the secret until they receive a signal from their parents or teachers. Sometimes the unexpressed knowledge is onerous or exasperating:

> *I think society plays a lot in that because nobody really wants to talk about it, they're scared to talk about it and then the young people see that adults are scared to talk about it so why should they bother talking about it. I mean come straight down to the line, nobody wants to talk about it and that's why nothing's getting done about it. (high school student)***

Other children, in an ironic inversion of the usual assumptions, try to protect their parents, if not from knowledge itself, from having to air it.

> *Sometimes I want to, but it's hard to talk to my mom, because she doesn't believe that I should have to deal with this. I'm too young to have to deal with this and so when I try to, and so in a way, I don't want her to have to deal with it either. In fact I'm protecting her from it, so you know I talk about facts*

*It may be, as has been claimed, that children who feel concern are more likely to be suburban rather than urban or rural, more likely to have politically active parents, more likely to be children of upper middle class families. (See writings by Harvard psychiatrist, Robert Coles, particularly *The Moral Life of Children*, Boston: The Atlantic Monthly Press, 1986.) But these distinctions frequently break down; teachers in inner city and rural schools also report anxiety among the children in their classes. More important to us in this essay than trying to assess the geography or pervasiveness of anxiety among children, even if that were possible, is its quality.

**From *Growing Up Scared?*, Gould, Benina Berger, Susan Moon, Judith Van Hoorn, eds., Berkeley, CA: Open Books, 1986, p. 110.

and what we heard about in school, but real feelings never really come out. (high school student) [ibid]

Although secrecy is commonly associated with the Bomb, terror, and mysterious weapons, it can, in an ironic twist, also be applied to peace. In a world of tension and conflict, peace can be seen as a secret garden, a private solution elaborated within the realm of the imagination.

My Underground Hideout
I can have cookouts in it
I can play in it
Peaceful games
I'm the only one who knows where it is
I can bring friends and show them
It's in tall grass
No one can see the door. (unidentified)

"Not knowing" is part of a long tradition going back at least to Biblical and classical times, which warns against inappropriate knowledge, against curiosity and trying to "find out." The forbidden fruit, plucked by Eve, grew on the tree of knowledge; Pandora loosed troubles into the world as a consequence of curiosity; scientists throughout history have been accused, like Galileo, of heresy for prying into the secrets of the universe. Faust, in his bargain with the devil, agreed to damnation as the price of knowledge. In "The Day After Trinity," a documentary film about Robert Oppenheimer and the development of the atomic bomb at Los Alamos, Oppenheimer is compared to Faust in his obsessive need to find out, to risk all for knowledge. We and our children have inherited some of the cost of that particular knowledge and are paying for it with our feelings of guilt and day-to-day anxiety.

Curiosity has always been associated with the possibility of uncovering a terrible secret, destabilizing (to use contemporary terminology) the *status quo*, rocking the boat. As everyone knows, "curiosity killed the cat," "ignorance is bliss," and "what you don't know can't hurt you." The very young lack the ability to grasp the facts about weapons and the politics of the arms race even on the superficial level on which most older children and adults may be said to "grasp" them. They have little sense of people exercising power over events, including many of those which directly affect their personal lives, and they are highly susceptible to the feelings of those around them. It is no surprise, therefore, that they are particularly vulnerable to nuclear nightmares:

Turn that off! It scares me to hear that. (6-year-old, hearing a spoof on nuclear disaster on the radio)

Although "turning it off" provides necessary relief for some children, particularly younger ones, for others the need to know dominates. For them, the impulse towards safety takes the form of "finding out," "getting the facts straight." Children can be indefatigable and probing questioners on the subject of nuclear war and nuclear arms. This selection came from children in grades 1 through 5:*

*We have organized these questions by type rather than by grade level. Some of them were written by the children; some were asked by them aloud in class and recorded by the teacher.

Characteristics of the Bomb:

- How powerful is it?
- How big is it?
- How do you make a bomb?
- Is a cannon ball a nuclear weapon?
- How big would the hole be?
- How much money is it to build a bomb?
- What is a megaton?
- What is a nuke leak?
- What is the biggest bomb?
- Could bombs hurt each other?
- How would you drop a nuclear bomb and not get killed yourself?
- How many kinds of nuclear bombs are there?
- What are bombs made of?
- Does the size or the height of the bomb have anything to do with the destruction?
- How many bombs are being made?
- I would like to know what is inside, exactly, an atom bomb.
- Where are they made?
- Can you defuse a nuclear bomb or a missile?
- How many people can the biggest bomb kill?

History and Politics:

- Who invented the nuclear bombs?
- Why are adults so dumb to explode bombs that could destroy the world?
- Why do people fight?
- If Ronald Reagan and Andropov say they're not going to fire nuclear weapons, then why do they make them?
- How did the nuclear arms race start?
- Why is the US building first strike weapons? Is there any point in doing so?
- What countries have nuclear bombs?
- Why do they want to make nuclear bombs? Is the only reason because they want everyone to know how powerful the USA is?

Solutions:

- Why doesn't each country say they will only have so many weapons and no more?
- Why can't we just agree on something and stop nuclear war?

What can be done with the bombs that are already made? How can we safely get rid of them?

Direct expressions of anxiety:

What would happen if a bomb dropped now? Would the world explode?
Are we ever going to have a war ever again?
Will we be safe if we do have another war?
If a nuclear bomb dropped on us, would it affect places like Maine and Connecticut?
Does (radiation) cause cancer? Is it bad if you breathe it?
Why did we start this thing about war?
If Russia dropped a bomb on us, we would drop a bomb on them and we would both die so it makes no sense.
Why should you even build shelter homes? You won't be safe, they're just leading you into something.
Where would be the most likely place to bomb first?
How long does it take to die of radiation poisoning?
Do some people want to commit suicide after knowing about nuclear weapons?
There is no way to stop this? Just none?

Several different psychological impulses seem to lie behind children's questions: an impulse towards control, towards knowing and understanding as preliminary steps towards "doing something about it," "trying to get the situation under control;" the impulse to search for reassurance, "facing the facts," "knowing the worst" (and there's always hope that the worst may not be quite as bad as it had previously been imagined or felt); finally, the impulse to use questions as a mode of expression--of fear and anger, for example ("There is no way to stop this? Just none?").

One of the central problems in peace education has been to avoid imposing unsolicited information on children who are not prepared, intellectually or emotionally, to deal with it but, at the same time, not to deprive other children who are already deeply worried, of access to discussion, information, expression, and action. We don't want to support the conspiracy of silence but, on the other hand, neither do we want to create anxiety where it hasn't previously existed. In the long run, however, "what you don't know" *can* hurt you, physically and even psychologically, and at some point it becomes incumbent on everyone, as they grow into adulthood, to be informed about the arms race in order to become responsible citizens and members of the voting public. Children themselves offer the best clues to what kinds of knowledge and how much of it they are ready to deal with:

It's so awful I can't think about it. (fourth grader)

Something strange has happened in this whole business of talking about nuclear war. They've become very closed-mouthed; it's done a number on my relationship with them...I've always had a lot of discussions with them but recently I've found the discussions becoming more and more one-sided with me doing the talking... the reason being they didn't want to talk about it but they didn't want to tell me they didn't want to talk about it. (account by fifth-grade teacher)

If Russia drops a bomb on us we'll be dead. We'll be dead in a minute or so. Some people will make it to the shelter and some will not. Some will die. Oh, I hate this story! (first grader describing picture he has drawn)

- *Boy, this is really scary.*
- *Yes, it is.*
- *Yes, but you have to know about it, have to think about it. (discussion, grade 5)*

By the junior high years, students have broad access to information: through school science, social studies, sometimes English classes, and through television, books, newspapers, even the comics. Nonetheless they are frequently uninformed or misinformed about the facts.

[Teacher] has started course on the arms race. Has been trying to figure out how to teach it. Today he went through discussion of what is an atom bomb, fusion, different types of missiles and what they do... outline of history of development of bomb. Kids were amazed by information...that missiles [were] on subs, some land-based, etc. (notes on meeting with 7th-grade teacher)

Having been taught the facts, of course, is no guarantee of knowledge or understanding. A case in point is that of a junior high school class in which a sensitive, skilled teacher was teaching a unit on the history of the arms race, carefully presenting a range of views on subjects like deterrence, the nuclear freeze movement, the Reagan foreign policy. He encouraged the students to learn the facts, analyze the situations, use problem-solving techniques, reach independent, logical conclusions. After the class had gone through all these steps, it turned out that the opinions arrived at by individual members correlated almost perfectly with the views of their parents.

There's another reason we might cite here why knowledge can lack efficacy: the tenuous relationship between knowing and believing. Often people's actions are not

appropriate to their knowledge because, on a deep level, they don't really believe "it" can happen, at least not to them. Knowledge, if it is to lead to action, must be given due weight, taken seriously.

At junior high school age, also, unless there's some possibility of relatively dramatic action, action which promises to show some results, students tend to lose interest, turn off the whole subject.

> *There's not usually too much we can do about it... nothing seems to be happening right now. (interview, junior high girl)*

> *A ninth-grade boy, asked whether he was worried about the possibility of nuclear war, said he was "basically" but right then, since he didn't see there was much that kids could do about it, he was more anxious about what prep school he was going to get into for the next year. (interview, junior high boy)*

For children of any age, as we suggested above, it's possible to give too much factual information, more than they really want to know. We, their parents and teachers, often use facts as a blind: it's easier to handle a sensitive subject, one about which we ourselves feel nervous, by conveying information stripped of feeling. Sex education is frequently taught as a dry lesson in human biology, all associated feelings ignored or described, somewhat euphemistically, as "love."

In the case of the threat of nuclear war, fear of the Bomb, which is at bottom *the* important fact, is similarly ignored. We are wary of allowing expression in the classroom to feelings like the excitement of sex or terror of the Bomb. Once out, like the genii from the bottle, they threaten to expand to unmanageable proportions. However, we must recognize that plain facts are not always, or only, what children are seeking through their questions. Nor can we offer facts in lieu of a fuller treatment of the subject. A conspiracy of silence and a snowstorm of information both constitute evasions of the essential questions.

In the following account in a Friends School newsletter, the secret seems clearly to be out in the open and, even though the children are young, it has been stated in terms which they can, to some extent at least, understand:

> Today we [teacher and children] talked about Helen Caldicott and her work against nuclear arms, and about Dag Hammarskjold and the U.N. We read some poetry that Dag Hammarskjold had written. Some of us drew pictures of things that we felt were dangerous, painful or frightening and we talked about our pictures. It was not easy to draw them, but it felt good to talk

about them. Some of us had a bit of a problem with sharing blocks, and marbles for the marble shoot, so we ended up talking about how we could (maybe) have avoided the arguments we had. Some people came up with some very good ideas. (newsletter, grades 1 & 2)

The teacher has opened up the subject of war and the arms race during a class discussion, allowing the children to express their feelings if they wanted by drawing pictures. She then went from consideration of world events to discussing a classroom conflict, bringing the children's attention back to a relatively safe, personal level.

No one, child or adult, really wants to spend a lot of time learning and thinking about nuclear war: the facts are not appealing. Yet the possibility of nuclear war exists:

Knowing is terrifying
Not knowing is terrifying
But not knowing is hopeless
And knowing may save us.
(ninth grader)

Humor

Although nuclear war is not commonly considered funny, children, like adults, when they talk or write about it sometimes resort to humor for relief from the tension and anxiety it provokes them to feel. Making fun of the Bomb already has a tradition of black humor. (Terry Southern's Dr. Strangelove probably marked its beginning.) Humor helps to undercut the looming image of destruction. One can't say "put it into proper perspective" since any perspective is, ipso facto, inadequate. In our collection of materials from classrooms, four general categories of humor are represented: What we might term "humor of embarrassment" (laughter coming out of uneasiness), "black humor," puns and word play, irony and sarcasm:

Child: They're throwing rocks. This one gets a tooth out. He's banging him with a stick. He got blood. He got hurt. (Both children are giggling.)
Observer: You like that part?
Children laugh. One says: "That's funny." (observation, kindergarten)

The thing that happened in the discussion was that certain kids began to fantasize, make it into a joke. [The teacher] realized they couldn't cope with it [the discussion about nuclear bombs] any more: pointed out to the kids that some people need to do that

[laugh] and that was fine. (notes on teachers' meeting)

These are both examples of what can be called "inappropriate laughter;" that is, essentially laughing instead of crying or screaming:

Boy 1: Look at that car! When I grow up I want a car like that!
Boy 2: Don't worry about it. When we grow up all the cars are going to be different and better.
Boy 3: Don't worry about *that*. We're not going to grow up.

Question: Do you know where Christa McAuliffe went for her vacation?
Answer: All over Florida.

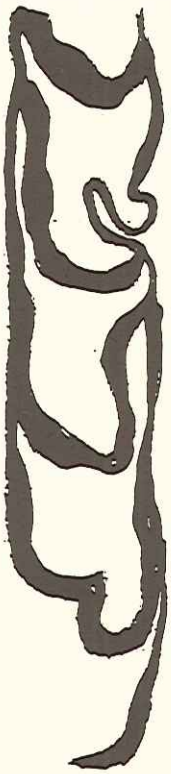
The thin skin of seriousness has been broken through, the surface tension has given. At some point things can seem so awful that no response seems appropriate and the only thing left is to laugh--although the laughter is usually of a rather nervous kind, quite different from carefree or joyous laughter. This sort of "black humor," which can seem the equivalent of despair, is typical of older elementary-age children. Both of these examples are shocking; the second one is startlingly bad taste. Both depend on word play and irony.

[Teacher] told of a child who drew "plants of today" which were ordinary and then "plants of the future:" she drew great big things with red tips and then she put on the top, "nuclear power plants"--like mutations; a fourth grader. (notes from teachers' meeting)

Rebecca: Let's say you were searching through some files about nuclear war and you came upon one, "Town Away." Would you think it was a town they bombed away?
Mother: Yes.
Rebecca: Me too. But it was just a file I put in there about a town called "Town Away."

This last example seems almost a flirtation with meaning: one awful possibility is suggested, then denied. Rebecca might be reassuring herself that nuclear war, although it seems possible, won't really occur.

Irony is also an effective mode of expression for children in the older elementary and junior high years:



Joke: what do music stores say about nuculer war?
no uses

auke is a interment
it's hazedas to your helth

Peace is swinging on a swing
Peace is to sing & Peace is
to care and share
Peace is to eat a pear! ☺ Ha Ha

Illustration 14

Teacher: What do you feel so strongly about that you'd be willing to go to war or to fight about?
S: This is sort of weird...to go to war to keep from going to war with Russia!
Teacher: Yes...there are a lot of ironies...a huge arms buildup to avoid fighting!
S: ...to fight about something like Reagan's policies on the environment... (discussion, 7th grade)

In most curriculums, there is included at least one of the four basic subjects: math, social studies, English, and science. They have now been replaced by courses such as: How to Make Nuclear Arms in the Classroom, or Warfare Made Easy.... Interestingly enough, it is the teachers in the high schools that are influencing the children to take part in these ridiculous classes. They believe that the knowledge received after "How to Make Nuclear Arms In The Classroom" will give students the only knowledge needed for life in America. (composition, 7th grade girl)

Irony depends on being able to consider more than one perspective at a time. Piaget's well-known protocol (in which the same volume of liquid is added to two glasses of different diameters) demonstrated that the ability to hold two perspectives in mind simultaneously depends on achieving a certain level of cognitive development. In "The Lords of the Future" (p. 29) there are four perspectives indicated: the perspective of the "earthlings" (our present population) who are greedy and heedless, the perspective of the present-day children who plead for a future, the perspective of the writer who foresees and warns of catastrophe, and the view, from the future, of the "lords."

When irony becomes available to them, children often lay it on so thick that it loses all subtlety and, in fact, loses its humor. The irony in the composition quoted above, directed towards the arms race and its social/educational implications, is distinctly heavy-handed. The tone betrays discovery of a new weapon for attacking ideas.* Younger children are likely not to understand, certainly not to use, this brand of humor, although they sometimes use sarcasm, a related but more unidimensional form of humor.

*Parents of teen-aged children will be familiar with the use and overuse of irony and sarcasm as a characteristic tone for rebuttal and criticism.

Sarcasm and irony can also be expressed visually. These cartoons, in fact, contain along with sarcasm and irony most of the other elements of humor typical of pre-high school children: black humor, puns, and hyperbole (exaggeration).

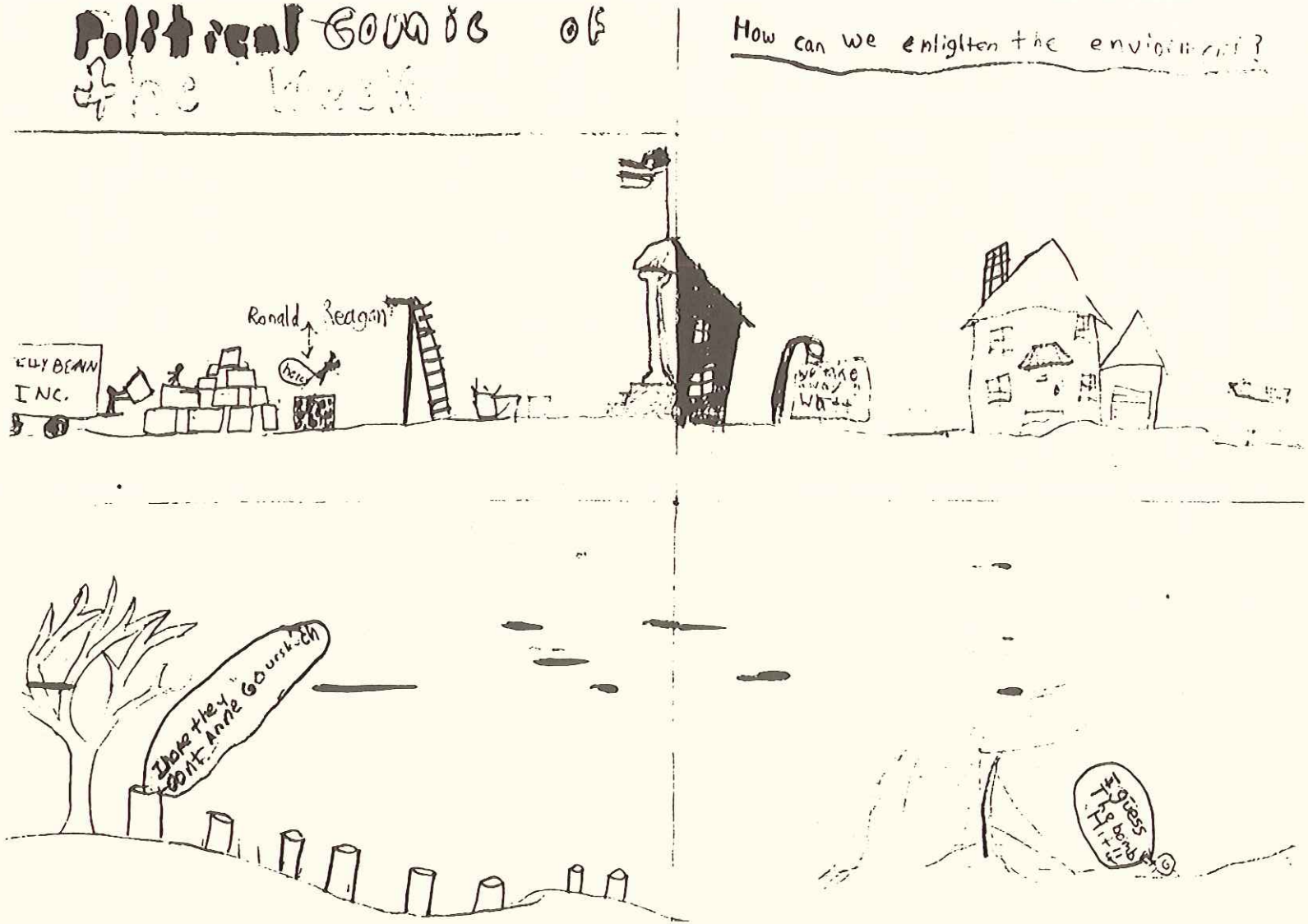


Illustration 15

Illustration 16

Most humor, even black humor which is sometimes hard to take, is essentially hopeful, an indication of spirit and courage. Jokes by children on the subject of nuclear war, like their recorded conversations, writings, and artwork, are serious expressions of concern, no less serious because of the tone in which they are cast. They are often strikingly inventive and devastating in their sharpness. Children's humor about the arms race is almost more poignant than that of adults precisely because of its quality of inappropriate and painful awareness. While we recognize the validity and truth of the humor, we also wish it had no claim to such validity.

The particular perspectives brought by humor to "the structures of consciousness,"* and particularly the ways in which humor can dramatize the dislocation between feeling and fact, contribute to the kind of imaginative thinking which is our best hope for reshaping the future.

*Douglas Sloan, in the introduction to a special issue of the *Teachers College Record*, Vol. 84, #1, 1982, wrote, "The long-term tasks of peace and disarmament education have basically two dimensions or orientations: those concerned, on the one hand, with the structures of society and, on the other, with the structures of consciousness."

4

Implications

Where has our discussion led us and how can increased insight into children's feelings and thinking help us, as parents and teachers, to bring the subject of the arms race into the open without running the risk of making children more fearful? How can we offer children some measure of relief without being false to them and to ourselves?

It may help, here, to consider these questions in the context of the purposes of "peace education" as it is generally conceived. First, peace education has to do with providing some support to children anxious about the nuclear threat, giving them some outlet and sense of community. Then it is intended to encourage children to think in constructive, original, and imaginative ways, to educate them for informed and responsible decision-making and political participation in a nuclear world. A third purpose, embodied in what is often termed "conflict resolution," is to educate children to be, themselves, peaceable human beings, skilled in non-confrontational strategies and aware of the positive value of difference.

All these purposes are interwoven: It is hard to prescribe for nations what the individual is unable to manage or what he/she has little experience of doing--i.e., constructing peaceful solutions. At the same time, the future of the world will depend on a broad representation of informed, responsible people, able to think and act perhaps with more clarity and imagination in the realm of international relations than have their immediate progenitors.

There are, of course, developmental issues in peace education which have to be taken into account: what is appropriate at what age. Certainly practice in conflict resolution is appropriate for elementary school age children; you can't start too soon. Much good material has been, and is being, written on this subject.* But what about imparting more specific knowledge about the arms race and nuclear weapons? As I indicated on the first page of this monograph, even though knowledge of the arms race and of the existence of the bomb is sooner or later inevitable, there is an important issue of timing--when children should become informed of such matters; when in the broadest terms knowledge is likely to do more good, psychologically, than harm. In actuality, of course, the timing is almost never within our control

*See, for instance: *Creative Conflict Resolution* by William J. Kreidler: Scott, Foresman, 1984; *The Friendly Classroom for a Small Planet* by Priscilla Prutzman, et al.: Avery, 1978; *Perspectives, A Teaching Guide to Concepts of Peace*, Educators for Social Responsibility, 1983.

and we have to be prepared for questions or pronouncements at unexpected times and in unexpected places. Nonetheless, as parents and educators--imparters of knowledge and makers of values--we have to think in terms of optimal timing.

Sometimes children themselves have the most to say on the subject:

> *Well, I think that when a kid wants to know what war is about, then someone should tell him, or when he's at that age where he's going to have to vote for it or something he should be told. I don't think you should pressure any kid into having to know. You want to tell your kid, you want to make sure he has knowledge of it, but you don't want to scare him, you don't want to pressure him.**

*Twelve-year-old boy quoted in *Growing Up Scared?*

There are questions about whether a curriculum in school on the arms race or unsolicited information about it at home are appropriate for *all* children before late elementary or junior high years. As I stated earlier, there's a wide variation in the level of anxiety felt by young children due to differences in the conditions of their lives and those of their families: social and psychological stress, economic pressures, physical and environmental hazards, religious beliefs, even geographic location and cultural traditions. As a consequence, there is a considerable risk, in programmatic peace education, of imposing information which can't be assimilated, of drawing attention to a threat which has passed some children by, of making the powerless (which young children inevitably are) feel even smaller and weaker than they already feel; in short, of perhaps introducing a new cause of fear and making things a good deal worse for children who have enough to contend with in their lives as is.

It depends, perhaps, on who brings it up--the child or the adult. Our view--that is, the view of the committee whose discussions inform much of the content of this monograph--is that the initiative should gradually shift, over the years, from the child to both child and adult. In the early years, primary and early elementary, it is altogether safer and more reasonable for the adult to look for signs of concern in the child and only to take initiative in imparting information or beginning a dialogue in response to questions, statements, or perceived signs of anxiety. Even then, it is important to try to find out what the question really is, what the statement or signs imply. In the meantime, of course, the value of peace, peaceful behavior, care for the human and natural environment, can be emphasized.

As the child gets older and the outside world impinges more, its structures becoming clearer, the subject can be introduced more confidently by adults

as well as being brought up by children. Good curricula for older children in peace education and advice for parents have already been written and published by a number of individuals and organizations. Educators for Social Responsibility has useful bibliographies as well as materials they themselves have developed and produced.

By the time children are 11 or 12 years old, in junior high, it becomes everyone's responsibility to address, in education, all aspects of the world young people will inherit, including the facts and issues of the nuclear age. By this time, too, children are capable of more logical thinking, of taking broader perspectives, and, equally important, of feeling enough separation and independence from adults (outside of their own families, perhaps) to express criticism, even anger, without risking their sense of security. Of course, it is at this point, in particular, that what is called the "conspiracy of silence"--the temptation, both at home and at school, to use children as alibis for our own reluctance to face the situation we're in--is most pressing in its claims, closing out questions and leaving children stranded with their fears.

Education about the arms race is thus sometimes regarded by teachers, administrators, and parents as a strategy or creation dreamed up by anti-war activists in order to indoctrinate children and rally public opinion--not as a natural subject, appropriate for school social studies. It is evident, after all, that anti-war activists are the prime movers in developing school curricula around the arms race and parents who discuss the bomb with their children are likely to attend peace rallies. The questions raised at school and at home are "Why teach about that?" "Why bring it up?"* Teaching about it, or "bringing it up," do not create the reasons for fear although it can, for some children, focus or intensify it. The fact is the subject does exist: the major powers are engaged in a well-publicized arms race. Not recognizing fear where it is strongly felt is likely to make it more, rather than less, disabling.

Silence, in some instances, is produced by American adults' feelings of responsibility, even guilt, for the world situation in general and for the 1945 nuclear bombings of Japan in particular and the threat this guilt brings to our national self-esteem (whether the guilt is justified can be argued but not whether it exists, at least within some people).

There are also fundamentalist religious groups who see the bomb foreshadowed in the Bible with nuclear holocaust as the backdrop for the last judgment.** And there are those, perhaps a majority of Americans, who recognize the nuclear threat but believe in the wisdom and necessity of the government's policies; for some of them, expressions of fear about the bomb imply criticism of military preparedness, government policies, and even

*For a number of reasons, some of which I've already described, it's been understandably difficult for us, parents and teachers, to relieve children by sharing this particular anxiety. In sum, what has been called a "conspiracy of silence" is due to feelings of fear, which we sometimes find it hard to face and certainly don't want to pass on to children; reluctance in general to cast a shadow over young lives; denial of, or blindness to, the nuclear threat itself; feelings of powerlessness signalled by expressions like, "What's the use of just depressing yourself?" and, for us as a society, what John Mack ("Resistances to Knowing in the Nuclear Age," *Harvard Educational Review*, August 1984) has called "collective resistance" based on "conformity with what the society regards as its essential political and economic purpose, values and ideologies."

**For a remarkably sensitive, intelligent, and perceptive account of fundamentalist views, see A. G. Mojtabai, *Blessed Assurance, at Home with the Bomb in Amarillo*, Houghton Mifflin, 1985.

the United States as a nation. Thus silence on the subject can mean approval, acceptance, or perhaps simply patriotism.

Recently there have been more breaks in the silence, more open discussion of the arms race in schools and probably in homes, some of these due to the much publicized TV film, "The Day After" (Winter 1984); also to the new curricula currently being developed and perhaps to a new sense of urgency. Maybe it's also due to one of those inexplicable waves of consciousness that sometimes sweep the country. With modern communications, there's no way children can remain long in the dark about the existence and nature of nuclear weapons, except in isolated, or under special, circumstances. Children pick up feelings, as we've seen, out of the air, then gradually, as they get older, fill in increasingly accurate information to back up or rationalize the feelings. (Adults continue to rationalize in similar ways.) Again, I have no disposition to argue the degree of pervasiveness among children of anxiety over nuclear war; simply to urge that where concern exists, it should be recognized and where it's recognized, it should be allowed further expression.

The first task, then, in helping children deal with the situation is to look at it ourselves, as enfranchised adult citizens sharing responsibility for the present and future conduct of national policy and, in some degree, for that of the past. The possibility of nuclear war as a fact of life must be admitted; otherwise there's no way we can hold realistic discussions on the subject with children. We have to come to terms--it comes, inappropriately, to the tongue to say "make our peace"--with our own feelings and thoughts, which doesn't, however, mean settling on a specific political position or plan of action. It is possible to begin by thinking about what we would like to have happen, not just what we hope won't.

Going back, then, to the question of what can we do about children's fears of nuclear war, I'd like to elaborate some thoughts of ways in which we, as adults, may be of help: first, through response to perceived concern; then through understanding the relationship between fact and feeling; the use of metaphor; and, finally, the creation of metaphor.

Response

The first three sections of this book are about the forms children's anxiety takes. It is important for us to recognize the usefulness of this analysis, the value of increased understanding *per se*. The usefulness of new understanding is not always obvious--it doesn't always indicate something you can "do" straight off; that is, point to directions for conscious, intentional

changes in overt behavior: but that's not to say that nothing occurs. Deepened understanding, sympathetic appreciation, is communicated in small ways: a look, a tone of voice, a shift in posture--expressive gestures which, though barely perceptible, are easily read. Children, from the first weeks of life, become highly skilled in reading the feelings of others from just such small signs.

Because learning and growth are subtle processes, we need to become more conscious of the impact of everyday communications between children and adults. In a society in which we're encouraged to believe in instant fixes and textbook solutions, it is well to remember that social and cultural changes occur over long periods of time and are not necessarily the end products of teacher-planned lessons and units.

An awareness of possible meanings in a child's detailed drawing of a space satellite, extended perhaps through the experience of other drawings in a similar mode, enables one to respond more fully, with more interest, recognition, and appreciation, the signs of which won't be lost on the child. Looking with care at a piece of work can serve as validation--recognition of value and meaning--of the work. Demonstrated interest and appreciation are, in fact, "doing something": setting up lines of communication and encouraging further work, invention, thought.

The same can be said of listening. We saw an example of appreciative listening in "Boss of the World" (p. 14). The teacher was clearly deeply interested in, and responsive to, the children's ideas. Physical signs of her interest might be readable by an observer if we had had the session on videotape. The only times she actually took initiative, "did" something about it, were in posing the original question and correcting some misconceptions near the end; otherwise she simply listened and responded. One might assume that the children in this class continued to play around with the ideas and images brought up during the discussion and perhaps, as a result, wrote stories and poems, made drawings and paintings.

Recognizing feelings on uncomfortable subjects moiling around in a person's interior can relieve some of the burden. Although the feelings will still be there, they will perhaps no longer be felt as exclusive nor quite so oppressive. Young children in the primary grades, as we've seen, can confuse the facts, give wildly distorted accounts of events even as they accurately convey the feelings--sometimes termed "affect"--behind them. It is the feelings, then, which are more likely to be reliable, to which we must first attend in order to lend meaning to our response. If we deny the feelings, the facts become relatively meaningless. Even when a child has the facts straight, as Sam did in the conversation quoted earlier about the behavior of

compacted atoms, the facts themselves can be loaded--with unstated anxiety. On reconsidering the exchange at a later date, Sam's mother had some further thoughts on handling sudden, unexpected questions; on how to leave the way open to expression of feelings without mistakenly "reading" them in:

> *The quoted conversation (p. 11) became one of an almost ludicrous search for realistic solutions to an almost inconceivable situation. The dilemma of finding an adequate response was compounded by not knowing where the initial question came from.*
>
> *Often I think it's important to both convey concern but also to hold back, maybe be a little diffident. Often that fragilely expressed concern goes underground again and had I said, "Have you been worrying about the city blowing up?" he might very well have said "No" and that would have ended the discussion. Nor do I want to assume that that was necessarily an expression of anxiety because often Sam likes to engage me, like a game, in discussing hypothetical situations which are often gruesome and strange.*
>
> *But we're still left with the problem of how to address any anxiety that might be there and I guess that, from hindsight, I'd say you sort of start off in one direction--"Have you been thinking about war?" --and if the answer is "No" you go off in another direction, very gingerly and listening very hard: "Why did you ask that?" or with a comment like "That's an unusual thought to be having." Or "Why did you imagine the city might blow up?" or you might share your own feelings: "That makes me feel scared. What made you think of it? Are your friends worried? Do they ever talk about it?"*

Sam's mother realizes confronting a child about strong feelings which have innumerable connections and ramifications can cause those feelings to become fugitive and thus possibly more destructive. Perhaps she actually chose the best course after all by accepting the question at face value and joining in a search for "realistic solutions." In so doing, she was leaving the way open to imaginative solutions.

Parents and teachers, in our psychologically aware times, are quite used to recognizing feelings in children caused by worry: "I know you're angry about the new baby but I can't let you hug her so tight..." or "I know you're feeling badly about losing your new baseball mitt ..." or "about hitting Jill on the playground..." It's more difficult to say, "I know you're worried about nuclear war..." The "worry" is everywhere, the threat is real, the consolations are few and far between. It might even be inadvisable to say anything because one could always be wrong and read the child's feelings incorrectly.

When the basic, painful questions are insisted on--"What would you do if...?" "What do you think will...?" --the most adequate and still honest response seems to be something like the one Sam's mother comes to in the third conversation, about no one "wanting them to go off..." and people "working to prevent such a thing from happening."

Feelings and Facts

As children grow in understanding and grasp of facts about the external world, knowledge, sometimes in the form of facts and figures, assumes more importance. For some children, as we've seen, knowledge brings a sense of increased control and thus a measure of safety. Because feelings are often associated with earlier years of childhood, with being babyish, they are more likely to be kept under wraps, covered over. They are also likely to be found embarrassing, although there are always some children who, for idiosyncratic reasons, remain extraordinarily open, their feelings up front.

Whatever reasons children in the middle elementary years have for concealing feelings, these have to be respected; it would be clearly invasive to presume to recognize feelings behind words and actions, as we sometimes can with younger children. Nonetheless, the feelings are there, as strong as ever, influencing if not always literal knowledge of the facts certainly their interpretation. Although initiatives for knowledge about the world's destructive potential should shift during these years from the child to both children and adults, teachers and parents still have to exercise discretion in how much discussion, how much information, the individual or group can bear, picking up clues to their tolerance from the children themselves.

The clues may be scattered, intermittent, and hard to read. We cited a fifth-grade teacher (Chapter 3) who gradually became aware that she was losing connection with her class during teacher-initiated discussions of the world situation. Although sometimes thirst for information can itself indicate anxiety--the list of questions on page 86 was generated pell mell, almost frantically--curiosity is likely to suddenly run out. Enough is enough and we have to look to the children to know when that point has been reached. We can also, as we've seen, recognize concerns for the world in attitudes towards nature and science, power, relationships, rules and order, and so on. Humor, particularly black humor, can be seen as a way of distancing a threatening subject, keeping some space between the person and the world, maintaining control over strong feelings.

Whatever the means of expression chosen by the individual or group, parents and teachers can take it

for what it appears to be and respond in kind: seek answers to questions, moderate discussion, perhaps, if possible, even laugh at jokes; also, of course, continue to observe and appreciate the products of the imagination--stories, poems, artwork--which I will discuss more fully later in this section.

At this age too, children can begin to take some kinds of political action (write letters, go to demonstrations, etc.). Among the caveats here are possible differences in political views between school and home. Most children of 9, 10, and 11 are still emotionally and intellectually tied to home values, however these are communicated. They're also highly susceptible to peer values and to the authority of the teacher. In other words, there is a multiplicity of ways they can get caught and made to feel like betrayers, guilty for their acts and even thoughts.

Children have to be allowed ways out; to be validated in their non-participation as well as participation, in their wanting *not* to know as well as wanting to know; they have to be allowed to hold minority views and still be accorded respect as members of the school or home community.

In one urban fifth-grade class, for example, there was a Vietnamese boy from a family of post-war refugees. The other children in the class came mainly from politically liberal homes. The Vietnamese child had strong, even bitter, anti-communist feelings informed by traumatic personal experience which he was eager to convey. He believed himself more realistic and politically sophisticated than his classmates with whom he hotly disagreed. The teacher, aware of the Vietnamese boy's urgent sense of inside knowledge, somehow succeeded in keeping space open for him and his ideas within an atmosphere of respectful disagreement--by no means an easy accomplishment in a room full of opinionated 9- and 10-year-olds. It was, of course, the teacher's own demonstrated interest in and respect for what the boy had to say which set the tone.

There are two other related issues, more ways children can get caught, which might be mentioned here: problems of macho-ism and expressions of fear. There's a risk that some women teachers (and most elementary teachers are women), offended by macho attitudes, perhaps even attributing world tensions and war itself to macho values, will, without meaning to, make male students feel uncomfortable about who they are, their family values, even their interest or participation in sports. The ethos of the bomb itself, patently the product of men's brains and initiative, and what the bomb represents can be seen echoed in playground behavior, in boys' drawings (particularly though not exclusively), even in the structure of relationships.

We have a hard time imagining five-year-old girls playing war as described on page 71--the boys running around outside the school pretending balls are nuclear bombs. Girls, of course, have their own outlets for aggressive feelings, but these are more likely to take relatively subtle forms--like social exclusion or "meanness."

Although the reasons for the evident difference between boys' and girls' play are little understood and are, in fact, frequently argued, we believe they're most probably the result of early socialization to different sex roles and responsibilities, a process which seems to be absorbed from the culture often in spite of parents' best efforts to avoid type-casting. Boys in our culture continue to play war, frequently to the dismay of teachers. Since criticism of behavior reflects on values and the values probably originate at home, critical reactions by teachers can be intellectually confusing and emotionally disconcerting to children.

Fear--fear for one's safety or life--even more than other emotions is often seen as shameful, again particularly by boys. Some fear, however, comes almost certainly with knowledge about the nuclear bomb. Even if the emotion is covered up, it inevitably erupts somewhere, in some guise--bravado, belligerence, absent-mindedness. Fear can be hard to recognize also because it doesn't remain in the individual at a consistent level: it flares up or dies down in response to events, inner weather, encounters with other people. It can act as a general depressant, graying down the world, or be specific and periodic, experienced as a familiar recurrent knot in the stomach. It is always undesirable; people sometimes seek out terror--short-lived fear--but no one in their right mind wants to live with fear.

Parents and teachers would do well to admit the existence of fear of nuclear war, validate it as a common and reasonable human response to an unreasonable situation. Expressions of fear are amply illustrated throughout literature, from the *Bible* to *The Wizard of Oz*, and turning to literature is one available means of validating it to children. One can also, in some circumstances, as teacher or parent, put one's own fears, past or present, on the table as Sam's mother suggests (p. 101).

During the pivotal years of junior high, knowing or not knowing is no longer the same issue. If young people don't seem to be aware of the existence of the nuclear bomb, it is for a reason. Knowledge, of course, doesn't necessarily imply interest, but ignorance, by now, has to be considered avoidance--either through unexpressed fear of the possibility of nuclear war or fear that a critical stance *vis-a-vis* adults will threaten the need to feel protected, to still believe, for one's own peace of mind, that adults are powerful,

benign, and in control of the world. Either kind of fear, if it remains bottled up, is likely to show up at home and in school in disruptive ways.

Understanding, grasp of facts, exercise of logic become increasingly important as ways of dealing with reality, along with the use of metaphor and political activity. These outlets for energy can, to some degree, counteract the well-publicized apathy and despair of adolescents and give them a sense of possibility, of increasing their potential effectiveness in the world as they move into situations of relative autonomy. The term "empowerment" is often used in peace education literature to describe "the positive effect on children of discovering their self-worth, their ability to make meaningful decisions, and their potential to act and make things happen in their lives.*

**Taking Part*, page 1, Boston Area Educators for Social Responsibility, 1984.

Curricula in peace education may have significant effect at this age, causing young people to exercise logic, question their assumptions, and perhaps even change their minds. It can also provide them with materials and tools (facts and techniques) for argument and action which will come in handy. But even as we educate and, most of the time, act according to a belief in rationality, we also act in response to feelings which are not made explicit and often go unrecognized. The story of Nils Bohr and the horseshoe over the door, mentioned earlier, is a parable of the paradox.

The very heat with which arguments are commonly conducted among junior high students betrays a deep vested interest, an interest in values, beliefs, emotional commitments which they--and the rest of us too--bring, usually undeclared, to discussion, debate, and the negotiating table. The counterpoint continues between feeling and fact. Facts, "the real world," rationality, are the usual stuff of education, the apparent guide to conduct, the principle by which we say we conduct public affairs. Feelings--although at least equally powerful--are elusive, pervasive, hard to define, often embarrassing; they may be best represented and understood indirectly, through metaphor, "played out" in that third area, the realm of the imagination.

The Uses of Metaphor

Metaphor, the currency of art and play, allows the possibility of dealing with feelings in non-confrontational ways. It also allows useful complexity since metaphors don't require a one-to-one relationship between one thing and another. The moon can be many things to many people, even many things to one person. Some images, like the moon, hold particularly rich possibilities for metaphor because of their universality, persistent presence, and aesthetic quality.

Literature offers endless metaphors or metaphorical situations, each one inexhaustible, which children can turn to their own uses. I'm not referring here to issues-oriented fiction although there are many good books for children, written over the last several decades, which deal directly with the threat of nuclear war. I'm referring rather to classic as well as new works of the imagination like *Alice in Wonderland*, *The Wizard of Oz*, *A Wrinkle in Time* (by Madeleine L'Engle) and tales like Goldilocks and Sleeping Beauty. These stories demonstrate or "play out" universally experienced relationships, tensions, fears, wishes, in convincing ways--convincing because they are adequately complex and open to varied interpretations and applications. Each person can make the story his/her own, fitting it to specific need or occasion.

Even though most good works of the imagination deal with fundamental feelings one way or another, some lend themselves more obviously to feelings surrounding the nuclear threat--works that deal with catastrophe, escape from danger, utopian landscapes, dramatic change, etc. The following account of one teacher's imaginative use of literature provides a case in point.

After the nationwide TV airing, in November 1983, of "The Day After"--a determinedly realistic portrayal, set in Kansas, of a fictitious nuclear war--the children in an urban kindergarten class seemed, to their teacher, concerned about the nuclear threat.* She sensed a general restlessness in the group and noted, in their play, frequent references to bombs, war, even to dying. Several of the children, it turned out, had seen the film, two without any adults present. Most of the others were aware of its existence through TV advertisements, accounts from other children, pictures on the covers of magazines, or overheard remarks by adults.

Two weeks after the TV showing, Mary Esher (as I will call her), the teacher, had set out, on a small round table in one corner of the room, an assortment of primary school materials: Unifix cubes, Cuisenaire rods, small play animals and people, etc. The following are her observational notes:

Kansas City: after "Day After"

On one side of the table the city (identified by the children as "Kansas City") is set with people and a village scene. Beside this is a tall skyscraper scene. On the other side of the table is the missile warfare set with men lying on top of planes equipped with missiles. They are spread across the table in a sweeping form. When the siren is sounded, the missiles move and the villages are swept off into a box off the edge of the table--there are no traces left.

*The 14 children in the class, ranging in age from just under five to six-and-a-half and equally divided between girls and boys, were a racially and ethnically mixed group. Because of the nature of the educational setting--a combination day care and kindergarten attached to an urban university--the children were an atypical although not unique group, all from single-parent homes, the single parent being a full-time student; also, by happenstance, none of the children had a sibling at home near the same age; thus they were virtually "only" children.

Mary had recently attended a workshop on children's fears of nuclear war at which suggestions were made for useful ways of dealing with children's fears. Taking up an idea discussed at the workshop, Mary, during the class' weekly visit to the public library, took out *The Wizard of Oz* and, later on at story time, began reading it aloud to the class.

The Wizard of Oz begins with a traumatic event which, as it happens, also takes place in Kansas; in this case it's a cyclone. As the cyclone is approaching, Dorothy and her Aunt Em run for the cyclone cellar. Dorothy's little dog Toto, her sole playmate,

> *jumped out of Dorothy's arms and hid under the bed, and the girl started to get him. Aunt Em, badly frightened, threw open the trapdoor in the floor and climbed down the ladder into the small, dark hole. Dorothy caught Toto at last, and started to follow her aunt. When she was half way across the room there came a great shriek from the wind, and the house shook so hard that she lost her footing and sat down suddenly upon the floor.*

The house is carried off, taking Dorothy and Toto with it "miles and miles away."*

Dorothy, alone, separated from family and everything familiar--except Toto--is at first frightened; then, as the hours pass, she gets over her fright even though she still feels "quite lonely." Dorothy, a remarkably confident and determined child, finds herself in the magic land of Oz, on her own but soon more curious than worried.

Between the time of her arrival in Oz and her safe return to Kansas at the end of the book, Dorothy, accompanied by Toto and three friends she makes along the way --the Scarecrow, Tin Woodman, and Cowardly Lion--undergo a series of adventures the elements of which are formulaic, common to myth, and fairy and folk tale: benign and evil power (witches of the North and South, East and West), magic protective clothing (silver shoes, cap), dark and scary forests, three wishes, unmaskings (Oz himself), talking animals; also a journey (represented by the yellow brick road) fraught with hazards to be met and overcome, the temptation to fatal sleep (field of poppies), lands occupied by hostile people to be traversed, bargains to be adhered to, thralldoms to be shattered, and, finally, the Protean presence of Oz himself. These are basic elements of tales which have held meaning for children and adults through the ages.

Mary Esher's class of 14 became immediately involved. Although the book might be considered by some too advanced for kindergarten children, the fact that some of the children were already familiar with the story from the old Judy Garland film frequently shown on TV probably

*A strikingly similar event occurs in one of the opening scenes in Rene Clement's 1952 film, *Forbidden Games*. The camera shows a stream of French people, in 1941, fleeing before the Nazis. A low-flying plane approaches, strafing the refugees as they cross a bridge; a little girl suddenly breaks away from her parents in order to retrieve her small dog which has, like Toto, jumped out of her arms. In the film, both parents are killed by the strafers and the child is, in an instant, alone in the world.

helped. (Differences between the film and book, however, caused some confusion as well.) Dorothy's adventures in the Wonderful Land of Oz constituted the central theme for the class from the day in November when the book was taken from the library until some time in February. It provided material for writing, reading, artwork, dramatic play, and math as well as for many class discussions.

Mary Esher's account of the project:

> *We talked about the Wizard of Oz, what was real, what was scary; what was a real thing that was scary and what was a scary thing that wasn't real--maybe in dreams of fantasy. We also talked about thunder and lightning storms, rainbows in the morning, what we look like when we're sleeping, what goes on in our minds when we're dreaming. Lots of dramatic play went on to do with Oz. We decided to also put on a play, discussed what character we wanted in the play. The children painted and drew a lot of pictures of the road, of the house going up in the cyclone; they made their own* Wizard of Oz *book, in blank books. They wrote their own types of words, "read"* The Wizard of Oz *to themselves; I timed one child from 25 to 45 minutes every day, the same book from beginning to end. It was important for her to get to the end, to the resolution...*The Wizard of Oz *really took over.*
>
> *We worked on a production. I asked them what were their favorite themes, how did they want to tell the story...they made life-sized dolls, costumes, acted, directed. The Tin Woodman was the first doll, made of milk cartons with tin foil all over him, painted gray. The Scarecrow was filled with computer paper. They used to put him in places around the classroom and he would "do things" at night and then in the morning they would look for things he "had done;" also they would borrow his hat for dramatic play and give him another hat to wear, meanwhile. The Lion was smaller, made of cardboard. Dorothy looked like Raggedy Ann--big shoes on and they would borrow her shoes. I put out props so they could act out in dramatic play...the whole play from beginning to end was their idea.*

How does this kind of intense, long-lasting interest on the part of a group of kindergartners shed light on the subject of this book, children's reactions to the nuclear threat?

> *It wasn't until after the play that I realized how important it had been for a lot of reasons--that by acting out the play and* being *the Wizard of Oz with voice magnified by the PA system and the power behind that scary person, and* being *the Wicked Witch of the West,* being *Dorothy, who was so scared--that was very*

important for them to do; got out a lot of fears, power issues.

Certain images from the book seemed to hold particular meaning for the children, appearing over and over again in their pictures and stories. According to Mary, several members of the class spent an entire week making giant poppies out of paper coffee filters and painting them red, in preparation for the play. "The Deadly Poppy Field"--the title of a chapter in the book--is vividly described by L. Frank Baum:

> *There were big yellow and white and blue and purple blossoms, besides great clusters of scarlet poppies, which were so brilliant in color they almost dazzled Dorothy's eyes.... They now came upon more and more of the big scarlet poppies, and fewer and fewer of the other flowers; and soon they found themselves in the midst of a great meadow of poppies. Now it is well known that when there are many of these flowers together, their odor is so powerful that anyone who breathes it falls asleep, and if the sleeper is not carried away from the scent of the flower, he sleeps on and on forever.*

The image here is particularly vivid and dramatic: the color, beauty, and wonderful profusion of the flowers contrast with their sinister significance. Even these children, young as they were, were taken up by the image and must have understood somehow, some way, what it was all about. It would be simplistic, of course, to make any claims for the benefits of a single experience. I offer the example simply as one instance of the conscious introduction of metaphor in the classroom.

Creation of Metaphor

In the preceding section I have discussed recognition and use of metaphor. In this final section, I will suggest some issues to do with the creation of metaphor by children.

David Holbrook, an English school teacher and writer, describes the "creative work one may do in school to aid the imagination to develop...the latter work needs to be in touch with the secret places of the soul; it is there that order may be found, and by what flourishes there potentialities may be released."* Holbrook's "secret places," Winnicott's "intermediate area of experiencing" and Hawthorne's "neutral territory" are the same place--where feelings meet facts, a breeding ground for ideas and actions. Children who have an innate impulse towards art and play move into this realm with ease, as we have seen, in spite of frequent discouragement from adults.

*Holbrook, David. *The Secret Places*. University of Alabama Press, 1962, p. xiv.

We commonly allow art and play in kindergarten or pre-kindergarten but don't reserve significant time for them in the elementary grades. There is a general belief among educators that the imagination has little place in the curriculum; that school is for developing basic skills, for absorbing facts about the world and learning scientific and mathematical verities. When it is included, art usually consists of teacher-directed exercises and writing, of assigned topics. Acceptable solutions to problems tend to converge rather than diverge.

Because educators look for set answers--right answers--opportunities for individual inventiveness and imaginative expression are limited. Even out of school there's not much time for creative play; time has been usurped, to a large extent, by commercial interests--advertisers and professional image makers (TV, film, tape, etc.)--and, for many children, by after-school organized programs.

Facts alone--bare facts--rarely lead to revelation or transforming ideas; vision, imagination, inspiration are needed to give shape and meaning to facts. Since the tendency to dichotomize knowledge into fact and fiction leaves little validation for the realm of the imagination, schools often actually deprive children of ways of dealing, intellectually and emotionally, with the world around them.

Part of the burden of this monograph is a case for the imagination, for its practical educational value. Recognizing this value means allowing time and giving support, at home and at school, to: play and play-acting; writing journals, stories, and poetry; building three-dimensional constructions; drawing cartoons, painting pictures, making collages, designing posters; telling stories. It is through such activities that children can begin to make some kind of order and meaning out of the chaos and conflict they experience in the world around them as they become more knowing.

A group of tempera paintings done by fifth-grade children in a school art class illustrates how the conjunction of feeling and fact can create new images and sense of possibility. The paintings resulted from a class discussion about where people lived and where and how they might like to live given unlimited options. The paintings represented a variety of ideas, all of them fanciful: an underground living chamber furnished with all the necessities for everyday living and connected to other similar chambers by a series of tunnels; a group of islands in a blue sea, each island occupied by a single house and each with a boat tied up at a nearby landing; houses built in trees, the trees standing in water, again with boats available for transportation; houses on clouds, the spaces between bridged by horizontal ladders. The paintings are detailed, careful blueprints for fully imagined schemes.

The dual nature of the solutions to living in most of these paintings is noteworthy: each child pictured his/her own self-enclosed, safe immediate environment--a cave, island, tree, cloud; at the same time, the suggestion of some kind of communications or transportation network assures access to other persons. More generally, although each child developed his/her own preference for living, the common theme of individuality-and-community gives the whole series a kind of unity. The paintings together constitute a set clustering around a common understanding of social need, the need to be both apart and together.

Taking off from the idea of living communities, the same group subsequently made a collaborative mural: each child painted in elevation his or her own custom-designed living space. All included sleeping quarters, cooking and bathing facilities; beyond these, the spaces seen as desirable varied: TV, pool room, reading area--whatever seemed necessary to make the environment complete according to preferences of the individual designer. The units were cut out and pasted onto a single large piece of mural paper, arranged next to or above each other according to both friendship patterns and design requirements. The children then planned and painted common spaces and connections: outdoor staircases, ladders, bridges, swings (to swing across spaces); also roof gardens, platforms, and patios with benches and tables. The mural was a plan for a community and, at the same time, a wonderful piece of art, colorful and vivid, fun to create and fun to admire hanging on the artroom wall.

Although the subject matter here is not directly the nuclear threat, it is not unrelated. House and dwelling can represent many things among which is almost certainly the sense of being safe and protected. (We saw a similar impulse in the play acting of the three boys building a fort (p. 77): "We have everything we need inside our wall...") The paintings depict relationships, people's need for people, the importance of both the individual and society.

Given materials, time, and permission by adults, children naturally express their feelings and wishes in metaphorical terms--houses, forts, space colonies; also explosions, battles between good guys and bad guys, invulnerable weapons--all the images in the preceding pages. If children's imaginations are validated, if their expressive work is taken seriously and respected as a product of the mind, there is usually no need to prescribe subject matter; it will come naturally out of the children's concerns and interests.

It takes close observation and effort over a period of time to recognize and appreciate the meaning of themes in children's expressive work. But even without the recognition of adults, the work itself serves the child's purpose: to make some kind of personal sense out of perceptions about the world.

5

Conclusion

This book has been primarily concerned with children's reactions to the threat of nuclear war. Also it has considered how we as adults can support children who are fearful and how we can create opportunities for them to think and behave in new ways. As a way of summarizing both these subjects, I want to conclude by taking up peace education in the broad sense--that is, peace education seen as a way of life rather than a program. Although peace education can encompass many activities--curriculum development, informational workshops, awareness exercises, political action, lectures, etc.--in itself it has to be defined more generally as the teaching of a set of pervasive attitudes and values.

Peace education, by this definition, must extend into the three realms described in this book which constitute the experience of every individual: the inner world of feelings, the outer world of events and facts, and the created world of art and play. This last realm becomes particularly important at a time when the disjunction between the first two, the inner and outer, is as extreme as it is today, when human need for security, community, and continuity stand in dramatic contrast to the apparent drift of world events.

The outer realm--history, statistics, technical information, current events--often seems the one most easily available to discussion and education, the least threatening place to begin. Information at the appropriate moment is useful and, for some children at some times, comforting. Facts are relatively easy to come by and to pass on and we can make an attempt at least to treat them logically and dispassionately. Educational programs, in addition to providing information of this kind, can include strategies for conflict resolution, an emphasis on cooperation and collaboration, and discussion of peaceful values.

Even though facts and events in the world seem to stand on their own, appear autonomous, we know that all facts are interpreted in the telling, colored by the bearer's beliefs and feelings whether the bearer appears in person, on television, or in print. The same facts are then reinterpreted by the hearer or reader in the light of his/her own beliefs and feelings. We must thus one way or another take feelings into account along with information.

The inner realm of feelings, as we've seen, is sensitive, fugitive, risky to approach directly. One can sometimes hazard speculations about inner weather with very young children--"Does the picture of the bomb scare you?"--but questions and assumptions about feelings can be mistaken and/or damaging with children of elementary or junior high age. Sam's mother worried quite reasonably that Sam's "fragilely expressed concern" might go "underground again." In some cases when probes into the inner world of feelings appear necessary, they may best be left to professional psychologists.

The third realm, the created world of art and play, perhaps holds the most possibility for working through anxious feelings, and the best hope for progress. It can provide both energy and ideas for a change of direction in public events. There are caveats here, however, to do with the appropriateness of traditional imagery and ideals of behavior in a changing world. The radically altered nature of modern warfare has made relevant certain ideals of behavior, particularly those associated with how males have traditionally proved themselves in battle.

Even if notions of valor, strength, and willingness to sacrifice self for the common good continue to be accepted as virtues in everyday life, they can no longer be logically applied to international relations. As hand-to-hand battle has given way to remote-controlled war, valor has to give way to restraint and strength to respect; the conception of common good similarly must be broadened to include all populations.

Certain kinds of public missions and exhortations like "making the world safe for democracy" are also distinctly outdated. After a full-scale nuclear war, there would be no beneficiaries, no one "left to tell the tale."

In all realms--the inner, outer, and created--it is important for educators, including parents, to see nuclear war for what it would be--mass suicide--and to try to modify both ideology and rhetoric accordingly. Because of the persistence of culturally embedded mythologies and their meaning to our inner landscape, as well as outward circumstances, the task is not simple. The process is gradual and may always remain incomplete. Children, for example, still play school with the rules and accountrements of the 19th century: teacher with ruler in hand ready to rap the knuckles of naughty pupils who refuse to learn the alphabet. Children also continue to play cowboys and Indians, and Americans and "Japs," at a time when the "enemy" has long since changed its identity.

Culturally transmitted ideals of self-worth and virtue as embodied in the "cool," righteous, quick-on-the-draw American hero, already deeply embedded, are reinforced daily through films, art, textbooks, television, etc. Thus the worthwhile aims of much peace

education--playing down competition, emphasizing cooperation and consensus--run headlong into culturally engrained values like competition, rugged individualism, and personal heroics.

Paradoxically, it seems that we have to recognize the persistence of traditional values even as we try to educate children at home and in school to look to peaceful solutions. It's crucial, as we go about changing our ways of thinking, to try, at least, to detach some traditional notions of virtue from the conduct of nations. The notion of courage itself in this context needs to be redefined: the "valley of death" into which Kipling's "400" rode so courageously could now, by analogy, be the whole world.

One responsibility of peace education, then, is to see and describe war realistically as a failure of human intelligence, vision, and imagination. Public heroics can more reasonably be associated with internationalism: work on global problems, world communications, cross cultural education. We have plenty of exemplary events and heroes and heroines to hold up in these fields of endeavor--Martin Luther King, Alva Myrdal, Mahatma Ghandi.

There is no dearth, either, of material for the imagination. Communications across space, for instance, have strong dramatic and romantic appeal, as the overcoming of literal and psychological distance. Children still make telephones with paper cups and string and send messages to each other by walkie-talkie. Adult ham radio operators talk to other hams in South Africa or Australia, more for the experience of reaching out across space than for the inherent interest of the conversation. The human response at the other end is what gives these occasions significance.

The attraction of travel and the appeal of the esoteric have something to do with making connections and appreciating difference from and commonality with other people, cultures, and landscapes. The literature of travel, for children and adults, is extensive, has always been popular, and is as varied as the *Travels of Marco Polo* and *Around the World in 80 Days*.

Finally, however, we have to recognize the limits of any education, peace education included. Basic features of existence like fear, pain, and death are going to be with us even in the happy event that nations learn to get along together in some reasonable fashion. Even as we try to influence events, and emphasize cooperation, respect, and sensitivity to alternative values--to peaceful solutions--we have to recognize that life is a struggle and the imagination responds to what *is*, along with what *might be*.

Within the individual there will always be a conflict between self-assertion and community living. We have to be careful not to invariably and automatically interpret children's detailed drawings of battles in space and interest in powerful weapons, or war play with

explosive sound effects, as expressions of concern about nuclear war or love of violence. They are just as often metaphors for a child's concern with loss or impulse towards personal assertiveness, fear of death, or personal failure. That nuclear bombs and missiles provide so much of the imagery and vocabulary reflects the unfortunate facts of the world in which we and they live.

With all the kinds of stress ordinary life entails, fear of nuclear war does often, however, seem an add-on, an overload, debilitating for everyone. Its negative force is pervasive, sapping creative energy, and reducing our carefree pleasure in good things. The nuclear shadow makes it hard to believe in the possibility of change or the efficacy of personal effort. Any evidence of progress in one's immediate situation tends to feel temporary, contingent on circumstances beyond our control. The threat of global catastrophe makes us less energetically imaginative about solving some of the other problems in the world. This kind of loss of energy, as we've seen, is experienced by children and young people as well as by adults:

> To grow up in this day and age is hard enough, just going to school, you worry about doing well, getting along well with people, that's hard enough. So then when you go home and you see a headline or something in the newspaper that's talking about more money that's gone to bombs that are destroying the peace, what I'm saying is that that makes it even harder to live and do well and feel comfortable, when you have these other worries to deal with.*

**Growing Up Scared? The Psychological Effect of the Nuclear Threat on Children.* Benina Berger Gould, Susan Moon, Judith Van Hoorn, Eds. Berkeley, CA: Open Books, 1986, p. 99.

The fact that many young people have "these other worries" is in itself a cause for worry. Even if the holocaust never occurs, its shadow will have done considerable damage. It seems incontrovertible that children of all ages are affected by the climate in which they live. The present political and social climate in the United States suffers from loss of energy; there is a conspicuous lack of imagination in public life, a lack of new ways of thinking, of bracing ideas in our ways of dealing with national and international problems. In that context, the argument about the extent of children's fears, the degree of their awareness, becomes moot. We may never know the actual toll the arms race and nuclear threat have taken from us all.

But given any encouraging sign about events in the world--for instance, a significant cut in nuclear arms--the situation could change abruptly. When the distance between feeling and fact begins once more to seem bridgeable, we might see a different kind of energy explosion--imaginative energy going into planning for the future: for world agencies, international communications, global collaboration. When this happens, we will perhaps be

making a modest start towards Einstein's "new ways of thinking." Maybe, in the words of several children quoted in the previous pages, "everyone will decide not to use [nuclear weapons]." "The Earth may still be given another chance to improve its people." "We all know nothing is impossible."

References

Baum, Frank, *The Wonderful Wizard of Oz*. Chicago: George M. Hill Co., 1900; reprinted, Signet Classic, 1984.

Biber, Barbara, L. Murphy, L. Woodcock, I. Black, *Child's Life in School: A Study of a Seven-Year-Old Group*. New York: E. P. Dutton & Co.

Clement, Renê, *Forbidden Games*, film, 1952.

Cobb, Edith, *The Ecology of Imagination in Childhood*. New York: Columbia University Press, 1972.

Coerr, Eleanore, *Sadako and the Thousand Paper Cranes*. New York: Dell Publishing, 1977.

Coles, Robert, *The Moral Life of Children*. Boston: Atlantic Monthly Press, 1986.

Conroy, Frank, "America in a Trance," *Esquire*, June 1983.

Escalona, Sybille, "Children and the Threat of Nuclear War." New York: Child Study Association of America, 1962.

Fitzhugh, Louise and Sandra Scoppettone, *Bang, Bang, You're Dead*. New York: Harper & Row, 1969.

Fraiberg, Selma, *The Magic Years*. New York: Scribner & Sons, 1959.

Freud, Anna and Dorothy T. Burlingham, "War and Children" (report, 1943); Westport, CT: Greenwood Press, 1973.

Freud, Sigmund, "Essay on War and Death," in *Character and Culture*. New York: Crowell-Collier, 1963.

Froebel, Friedrich, *The Education of Man*. New York: Appleton Press, 1900.

Fussell, Paul, *The Great War and Modern Memory*. London: Oxford University Press, 1975.

Gould, Benina Berger, Susan Moon, Judith Van Hoorn, eds., *Growing Up Scared?* Berkeley, CA: Open Books, 1986.

Holbrook, David, *The Secret Places*. University of Alabama Press, 1965.

Huizinga, Johan, *Homo Ludens: A Study of the Play Element in Culture*. Boston: Beacon Press, 1955.

Kubrick, Stanley, director, *Dr. Strangelove*, film, 1963.

Lee, Stan, *Origins of Marvel Comics*. New York: Simon and Schuster, 1974.

Lewis, Richard, *Miracles*. New York: Simon and Schuster, 1966.

Mack, John, "Resistances to Knowing in the Nuclear Age," *Harvard Education Review*, August 1984.

Marx, Leo, *The Machine in the Garden*. London: Oxford Unviersity Press, 1964.

Mojtabai, A. G., *Blessed Assurance, at Home with the Bomb in Amarillo*. Boston: Houghton Mifflin, 1985.

Rousseau, Jean Jacques, *Emile*. London: J. M. Dent & Co., 1911.

Rowland, Stephen, "Classroom Enquiry: An Approach to Understanding Children," *Outlook*, #53, Autumn 1984.

Salinger, J. D., *Nine Stories*. New York: New American Library, 1954.

Schell, Jonathan, *Fate of the Earth*. New York: Knopf, 1982.

Sloan, Douglas, Vol. 84, #1, Fall 1982, *Teachers College Record*.

Taking Part, Boston Area Educators for Social Responsibility, 1984.

Verdon-Roe, Vivienne, "Growing Up in the Nuclear Age," *East West Journal*, January 1983.

Winnicott, D. W., *Playing and Reality*. London: Penguin Books, 1982.

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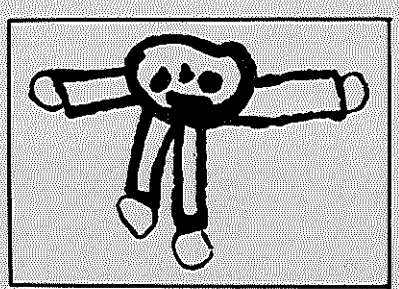

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