Sacred Heart University Review

Volume 16
Issue 1 *Sacred Heart University Review, Volume XVI, Numbers 1 & 2, Fall 1995/ Spring 1996*

Article 3

2-22-2010

Children, Imagination, Play, and Television

Dorothy Singer

Jerome Singer

Follow this and additional works at: http://digitalcommons.sacredheart.edu/shureview

Recommended Citation

Singer, Dorothy and Singer, Jerome (1996) "Children, Imagination, Play, and Television," *Sacred Heart University Review*: Vol. 16: Iss. 1, Article 3.
Available at: http://digitalcommons.sacredheart.edu/shureview/vol16/iss1/3

This Article is brought to you for free and open access by the Sacred Heart University Press Publications at DigitalCommons@SHU. It has been accepted for inclusion in Sacred Heart University Review by an authorized administrator of DigitalCommons@SHU. For more information, please contact ferribyp@sacredheart.edu.

DOROTHY AND JEROME SINGER

Children, Imagination, Play, and Television

Dorothy Singer: Let me just give you a brief statement about why we're interested in children and television, how we got involved, and why we're going to talk about imagination and play. Basically that's where we started. We'd been doing research on children's play for a number of years, and in one of the nursery schools where we were working, we found that the children were making a lot of references to a television program called *Peter Pan* that they'd seen on Sunday night. And Monday morning in the nursery school they were all playing Peter and Wendy and the boys and the pirates, and we kind of looked at each other and said ``Well, gee! These kids watch TV, and maybe this is a variable that we ought to consider in our research on play. Is television enhancing a child's imagination or is it detracting from a child's imagination?" So with that question, we began our work.

How does one really get in touch with play if you were going to work with children and try to get them to be imaginative? We have found through our own research that there are things that you really need to do. It may help to recall past experiences, for example. I'd like to ask you now to close your eyes and think of one time in you life when you did something very pleasant: a game or something that made you feel very happy way back in your childhood. . . . Now what I noticed is that some of your lips curled up into a smile, because if it was a game or an activity that you did, generally the affect or the emotion accompanying it was one of joy and well-being.

———————

Dorothy Singer is Research Scientist at Yale University and Jerome Singer is Professor and Director of Graduate Studies in Psychology at Yale University. Together they are co-directors of the Yale University Family Television Research and Consultation Center. This is an edited transcription of a day-long series of talks and workshops they gave at Sacred Heart University on July 8, 1996 as part of a Media Studies Department Summer Institute on Teaching Media Literacy.

Keeping a dream-log is another way to keep in touch with your fantasies and your imagination. As soon as you wake up in the

morning, don't stir; don't do anything, but write down on a little card what you've dreamed. If you don't do that, you forget it. As soon as you get into the business of the day you've lost it. We all dream, every one of us dreams. It's just that some of us don't remember our dreams as well. But everybody dreams. And if you keep a dream-log, you begin to see the unfinished business in your life, the things that you really are concerned about, the fantasies that you have, and by writing those down you begin to get much more in touch with the inner you. That's helpful when you play with children.

Daydreaming, we all do that. And I know during the course of this long day and the heat, some of you are going to drift. I can tell by your eyes: when your eyes go out of focus, I know that you're daydreaming, because it's impossible to look at me and daydream. You have to shift your eyes away from a stimulus. Don't worry, it's OK if you do that. You may be daydreaming about what you're going to have for dinner tonight, or what's going to happen tomorrow, or what's going to happen the rest of the day. But daydreaming, too, about your future, about fantasies, about things you like, is another way of getting in touch with that child-like part of you, things that you wish you could do that you can't do, but are still up here, stored in part of your brain.

Watching children play. Some of you, of course, are in the classroom and you work with children, and one of the things that we find so enjoyable is doing research with three-, four-, and five-year olds, because really that's the peak season of play. The four and five-year-olds are at the height of their make-believe play. They'll never again play quite like that.

But we also believe that play continues through adulthood: it just takes different forms. It may be theatricals that you engage in, it may be the books that you read which cause playful memories, it may be even puppet theater that you get involved in, it could be stories that you write, poetry, but play never disappears. And we hope that that continues.

Participating in stimulating play. One of the things that we hope that parents do is to begin to stimulate the play in their children. Sometimes a child says, ``I'm bored! I have nothing to do.'' And the parent can just start a game with the child, either read or play-act a story, start a poem, and then back away. We know from research in South Africa by Diana Shmukler that when the parent engages a child

and stays through the play, the child begins to withdraw and won't be as play active. But if the parent starts the game and then withdraws, it allows the child to keep on going in his or her world.

I thought I'd talk a little about the stages of play. The very young child uses reflexes when he or she is born: sneezing, coughing, grasping, the startle, and the Morrow reflex. There are also all of the reflexes in terms of sucking. The baby roots for the mother's nipple, or the bottle, and that's a reflex. You could even see, if you could photograph the fetus in utero, the baby sucking. Some babies suck their thumbs even before they are born. The sucking reflex is a tremendously important one.

And then the wonderful repetition of sounds and movements, all of this from zero to age two. You can listen to a baby. Some interesting work was done by Ruth Weir, who actually recorded the sounds of her baby in the crib. And as the child got older, there were wonderful sounds: not only the ``goo, gaat gaa,'' but attempting to say words. If you ever listen in the morning to a baby when the baby wakes up, you can hear wonderful noises, the babbling and cooing. We believe that's one of the ways the child begins to learn speech: hearing his own sounds, and then repeating them again and again.

At about eighteen months we know that infants begin what we call ``symbolic imitation.'' It's very rudimentary. If you've watched an eighteen-month old, if it's got a little cup, and a little stick, it might try to feed the teddy-bear. So as young as that a baby is already attempting to do something: pretending that the animal can eat, and the animal is a person, and attempting to feed it.

Then we move into the area of sensory play, still in this early period: that's the tasting, smelling, making sounds, the ritualistic play where a baby repeats something over and over, and the simple make-believe that I described, all of this within the first two years of life.

Finally, at about age two, we move into the stage called ``symbolic play.'' What I'm describing now mainly comes from Jean Piaget's research theory. He's been followed by many others who may change the names of these stages, but basically it's what every one of us seems to pass through. Symbolic play is play that distorts reality. Piaget called it ``pure assimilation.'' You can see that sometimes, for instance, a child takes a bowl, puts the bowl on his head, and makes believe it's a

hat. That's a distortion of reality, and that's pure play because he's not using the bowl for eating his cereal, but he's using the bowl in a symbolic way to be a hat. It's funny, it makes us laugh, but that's what we call a distortion of reality.

Symbolic play also involves representation of an absent object. If I don't have the object that I want to play with, I can substitute another object. If I don't have a pussycat and I want to pretend that my cat is walking along the floor, I can take a little block and go ``meow, meow, meow,'' and move it along the floor. That's a substitution. We can watch children do this all the time, substituting articles that are there for articles that are not present.

Now in order to do that, you have to have a picture in your mind of the object that isn't there. When we talk about television in a little while, it's going to be so important for us to see whether this influx of pictures that we see on the tube is interfering with our capacity to make that image ourselves. To give you an example, I'd heard a tune on the radio called ``Dancing,'' a very pretty song that played a few years ago. I thought, ``Gee, that's nice,'' and I allowed my imagination to go, and I had all kinds of pictures. Then about a week or so later I put on MTV, and there it was: ``Dancing.'' But it wasn't my picture! They were doing something else with it. The director had made all his scenes to the words of ``Dancing,'' and it canceled out my image. It was very hard after that to get my image back. What I found was that the television was so intrusive, the picture was so dramatic, that really it was very hard for me to interfere with the television picture. After that I keep getting the TV image rather than my own.

Now ``parallel play'' is something that we see with three- and four-year-olds. It's where they sit next to another child and they play their own games, but there's very little interaction. You can see near a sandbox that one child may be moving his cars and another child may be dumping his dirt into the sandbox, but they're not playing with each other. But if you removed one of the children, the other one would be devastated. He wants his friend there, but he may not actually interact: they play next to each other.

``Compensatory play.'' The only time that Piaget really talked about emotions and play was in his book *Play, Imitation, and Dreams*. And he used compensatory play as a way of self-healing. He describes his little girl, who, when her younger brother was born, kept playing as

if he was moving away. She would take the little doll and move it, actually move it out of the room or under the couch. In other words, her play was saying ``I don't want this baby boy.'' She couldn't verbalize that, so in her play she simply took the doll that represented her brother and got rid of it. Sometimes we see children do this, for example, if their mommy may have given them a little pat on the back; they come to nursery school and they take their doll and they hit it and say ``Bad, bad girl! You didn't eat your breakfast!'' We know that what they're doing is not only displacing that behavior: they're compensating for the fact that someone gave them a slap and now they're going to do that to someone else. So compensatory play helps, and in my work as a therapist I find children do this all the time. It's the heart of play therapy to see children use my dollhouse, or the clay, or the checkers, or whatever they're doing, to work out their dilemmas and their crises. It helps them to feel better.

Finally we move on to stage three, ``games with rules.'' Here, now, the children play games that involve competition; there are institutionalized codes or rules that are consistent all over the country, and even if you move from one city to another and you play the same game, everybody's going to play it the same way. Sometimes with the seven-year-olds we see temporary agreements. I've watched this so many times, when kids are playing with a ball and there are set rules, but the boy who owns the ball suddenly finds that he's losing, and he'll say to the gang, ``I've just made up a new rule. From now on, you can't get it over the line.'' And if you don't like it, he's going to take the ball and go! There's a switching of rules. I've seen this in Monopoly, where kids who are playing will say, ``There's a new rule now, and we're not going to do it this way.'' But by the time they're eight, nine, or ten, the rules get really set and the kids respect those rules.

Why play? Why should children play? Are they wasting their time in school? I wish they did play more in school, even older children: not just sports, but other activities that would provide more of a chance for fantasy. Here are some of the benefits that we and others have researched.

First of all, motor skills develop. When children are playing, whether they practice games or drawing, they develop fine motor skills and large motor skills. We know that. Their senses are sharpened. When you're playing make-believe games, you really have to be aware

of odors, you have to be aware of tastes, you have to be aware of touch. Some teachers even keep a bag of things that children can't see but have to reach in and tell you what it is. Some teachers keep a ``smelling shelf'' and change the materials each day or each week so the children sharpen their sense of smell. I worry about this, because in terms of TV, we're losing some of those sense modalities. We certainly have the visual and the auditory, which are our two strongest senses, but taste and touch and smell don't come through the TV set. So children who are very heavily into TV and are not playing are losing some of that capacity to develop the other senses. Through play, though, all of your senses are working. And children are very sensitive to smells. If you see them out in the playground and there are flowers or there's a bad odor, they'll tell you right away. How many times have you heard a child say ``poo, poo''! And you don't get that from the TV set. We don't have smellovision yet! Right now TV relies basically on our auditory and visual sense. Play gives us a whole variety of sensations.

Another consideration is the expression of emotions that come through play. One of the things that we've found in our research is that when children are playing there's a lot more smiling, laughter and good will. Yes, there will be arguments and fights, but generally when the play game is going well, the children are enjoying it and can sustain it for a very long period of time. There has to be sharing, turn-taking, which leads to harmony. When children play with each other, they share the materials, they take turns, and you can hear them, the five- and six-year-olds, say ``It's my turn. Your turn.'' They begin to learn that. Sharing for twos and threes is much harder, and that's because they don't know who they are yet.

There's ordering and sequencing, because children can't have their tea party until first, they make the clay cookies, second, boil the water, then set the table, and so on. They're beginning to learn that there's a kind of order, of sequencing, which, by the way, television distorts for children. A program is interrupted by a commercial, and then the next segment of it may have taken place before the first segment. Children have to figure this out, and when we talk about media literacy, we're going see how important that is. Segments don't follow in a linear pattern on television. Part of a director's challenge is to try to bring back the past, and he uses certain conventions to do that. He may use

wavy lines on the TV so that you know that this is a flashback or this is a dream sequence. But for young children, how do they process what they see on TV? Is it really what happened in real life? Did it happen second? What happened before? It's very complex for a child.

Television offers this challenge, so directors of children's programs have to be very tuned in and aware of the fact that if they're going to do something dramatic and want to put their story out of order, they need to be able to make sure that the children watching know that it is out of time sequential order. It's important for the TV director to know his audience, and that's one of the things that we find in doing television research: many of the programs that are designed for children violate that and the child doesn't really have a good sense of the sequence of order because the director wasn't aware that the child is having difficulty processing one picture after another.

Delayed gratification is tied in with this. I can't have my tea-party until I have everything ready, so I delay my impulses. Children who are playing learn how to delay impulses. I think that's very important for all of us to realize: you can't have something immediately, but you have to wait. And good players know that, because they know that they have to get dressed up in the costume, and if they're building a pirate boat they can't get the treasure until they sail to the island.

Vocabulary. Children learn a tremendous number of words. Here again, people say ``If you watch TV, think of all the words that you learn. The words are coming at you at a rapid pace. If you put your child in front of a TV, he is going to be so smart!" But it just isn't true. You need to repeat words again and again, which is why commercial ads, repeated again and again, get through to you. Or you can make an association. You have to make a connection from your short-term memory and put it in your long-term memory. But what happens on TV is that you're hearing the words but they're piled up so rapidly that you never have time to reflect, create an association, or repeat. TV doesn't give you instant replay in a drama. It does in sports, but imagine in *Hill Street Blues* having a character say a big word, then stop and say it again and again, and repeat it in slow motion. Everyone would turn off the set! So in dramatic shows we don't interrupt to give you the clues, and that doesn't really help you learn vocabulary.

One exception, though, is if mom was with the kid watching TV and jotted down some words being heard, then when the program was

over said ``You know, we heard some big words on TV. Let's look them up in a dictionary. Let's use them in a sentence.'' In other words, you have to internalize the word so that you'll have it for good. If you don't do that, TV is just noise coming at you, but you're not processing it. And I think that's important for your students to know: if they want to learn from TV, they have to take a more active stance.

Concentration is increased in play. We got very annoyed with *Sesame Street,* which was built on the notion that children can only learn short segments. One minute is very long for a child, and because children memorize commercials that are very short, the founder of *Sesame Street* decided to make a program filled with short segments and thought that children were going to learn an awful lot. But if you've ever watched children at play, you'll see they can sit for hours if they're truly motivated, and it's hard to call them in for dinner. If they really like the game they can sit at it for more than a minute, even a two- or a three-year-old. So on *Sesame Street,* the only things that the children remembered were the numbers and the letters, because they're repeated again and again on the show or during the week. They do know that repetition will lead to learning. But the pro-social messages get lost if they're not repeated or not in a slower format.

Flexibility. Take the example of the girl who used a bowl for a hat. When children play it's amazing how inventive they are, how they take all the materials around them and use them. Parents, or someone in the family, can really help the child with flexibility by using materials that are just in the house for play. Children can do an awful lot in the sandbox with just mud and water! They can become quite flexible. They don't need a lot of toys, but the average American household is loaded with toys. I think one has to travel a bit to see how awful it is to give our children so many toys. So many toys are discarded or unused, when all children really need are a few toys and a lot of home-made materials. And television is the culprit. When we talk about advertising later, we'll begin to see how powerful are those messages to ``buy, buy, buy'' a lot of things that you don't need.

Role taking. Children carry out what we call the socio-dramatic roles. They can play fire-person, police-person, teacher, doctor; I've never seen a child play politician, though, and I can't figure that out. But that's OK. The children learn how to take this great big world and bring it down to size when they play act and put on their costumes.

And all they need is a hat, sometimes. A hat is wonderful. A hat can make you anyone you want to be.

Finally, of course, is the expansion of imagination and creativity. I want to show you a cartoon that has two children building a sandcastle, one of whom says: ``We're a great team, Sash! You with small and large motor skills, and me with my spatial awareness and hand-eye coordination!" It really says everything that we're talking about.

Let me just briefly talk about language. In some of the experiments that have been carried out, it's been shown that children who use make-believe play actually use more language. It would be interesting if some of you art teachers or librarians did little impromptu studies and got the television viewing patterns of the children you work with to see just how many hours they watch a day during the weekdays and weekends, and then give them a little vocabulary quiz. I bet you'd find a positive correlation between the kids who watch very little TV and a good grasp of vocabulary compared with the kids who are watching a lot of TV, because I think the kids who are watching less television are reading more. And you do get vocabulary from reading. You can't go on with a sentence until you've made sense of that word. Reading is a wonderful way of getting vocabulary.

So you can begin to see that some of the research that's been done shows the effects of television. We found that kids who are light viewers use more adjectives, use more future-tense verbs, show increases in onomatopoeia, increases in compound words (like bookkeeper), qualification sentences, analogies, and metaphors. This is compared to kids who are heavily into TV viewing. In other words, because these kids were not sitting passively in front of the set but were playing, they had to use more language.

Jerome Singer: Let's go back to the origins of imaginative play in some of the first experiences of the child. The child, remember, has emerged from the womb, and now is surrounded by something complex — what William James called ``a booming, buzzing confusion of the world." How do you make sense of it, how do you organize it, how do you put it in context? One of the first experiences a child often has is being held on the shoulder of an adult. Often parents, to prevent children from burping or throwing up on their clothes, will put a blanket or a clean diaper or something like that over

their shoulders. So the child often has the experience of being held on the shoulder of an adult, or of being bottle-fed or breast-fed. Sometimes you would notice the child grasps a soft object that is being held by the mother, or part of the mother's dress, or something of that sort, and you begin to see the enjoyment of the touching and the feeling of the soft object. Then the child has, after all, not to be kept in that position in direct immediate contact with the mother or with whatever the caregiver is, but the child is put down alone. What you find is that the child wants to continue some of the sense of experiencing the adult, but at the same time be separate.

Gradually you see children developing what child psychiatrist D.W. Winnicott called ``transitional objects,'' an attachment to soft objects or soft cloths. In Charles Shultz's cartoons — I don't know if Linus appears in the same way now, although kids never grow up in that cartoon — there's Linus who's always walking around clutching a little blanket behind him. That's one of the origins of, you might say, the child's sense of individuality. It is now separate from the mother and it sort of senses that, but it holds a little piece of her. At the same time it begins to develop a sense of separateness and possession. So try to take away the child's soft cloth! Even mothers despair when such things get pretty dirty: they have to wait until the middle of the night or steal them away to try to wash them. The kids are very covetous. And of course they take them to bed with them. I think it's the origin of capitalism; it becomes the first possession of the child. It becomes something really special, the concept of private property, and a sense of continuity about this of course is very important for a very young child.

But gradually the attraction wears off and the object doesn't become yearned for once it's given up; at least that's what Winnicott says. But he's wrong: the truth is, a vast industry, the toy industry, emerged from what is called the ``plush toy'' or the ``plush product.'' If you go to toy conventions they don't say ``teddy bears'' or ``barneys,'' or anything like that: they say ``plush product'' and are concerned with how much space it can take up in a store, and how one can get advantages in the amount of shelf space from one shop to another. It's a very important and successful industry.

The point is that this object can be palpable, in contrast to the imaginary playmate which I'll talk about in just a moment. It emerges

when a child's capacity for recall memory, in the absence of the real object, is not yet fully developed. You have to work at recall memory: you have to be able to organize things and store them in your brain. You have to form what are called ``schemes." Recognition memory is very primitive and basic. Think, for example, of a group of Guatemalan Indians from the interior being shown something equivalent to a Sears catalogue with all kinds of objects they had never seen before. They didn't know what they were called, but they were just shown them. Later they were shown them again, and a very high percentage of them can identify the objects they were shown before and separate those out from a whole bunch of other objects they had never seen before.

So recognition memory is a fundamental process. None of these people knew the names of these objects, hadn't classified them in any way, didn't know their functions, and couldn't retrieve them on demand, but they could recognize them. Well, the same situation exists for the child. It takes a while for the child to develop what we call ``schematic memory," and be able to retrieve objects at will. That's why the transitional object plays this important role: it's something that's palpable, that you can look at in front of you. As the child gets a little older it can move on.

Partly because the person who first called attention to transitional objects and imaginary playmates was a psychiatrist like Winnicott, who did a lot of play therapy with children, disturbed children, it was thought that these kinds of things were signs of neurosis or signs of difficulty in the child; that is, the child is at some risk. But a whole series of studies carried out by Carol Litt showed individual differences in different cultures in the use of transitional objects. There's a professor at Yale who comes from a very small culture in India called Parsi culture, a group of worshipers of Zoroaster from Persia who fled to India about a thousand years ago and established a very successful culture in India. They look exactly like Indians and of course talk Indian, but they have a different culture in many important respects because their religion is different. These people, for one reason or another, have developed the tendency to save their transitional objects into adult life. They have them nearby. Even if the cloth has become very soft, they'll use them for wiping their glasses, but they'll always be near at hand.

So what you can find is that there actually seem to be some advantages to being able to hold on to these objects. And what you find is that people are increasingly not giving up their transitional objects because the transitional object often changes into a teddy bear or a soft cloth toy that the child can take to bed, or a doll-like object. It's often a soft one and, as I've said, the toy industry has benefitted greatly from this.

We have most recently carried out ten separate studies on the *Barney and Friends* series on television. *Barney and Friends* came on TV in 1993 for pre-school children and it just took off. They had enough sense to prepare licenses for people to make various objects based on Barney, like towels and cloths and little Barney soft toys. And this character moved within one year to being one of the most successful entertainers: after Oprah Winfrey and Michael Jackson, Barney was third on the list in *Forbes* or some such magazine.

Now another option for a child — and they're not mutually exclusive — is during the period between two-and-a-half to five years of age to develop an imaginary playmate or an imaginary companion. What you find in general is that for a certain percentage of children it often begins with a transitional object that they take to bed with them, and then if they're in their bedroom and you're outside you can hear the child conducting a conversation with the soft toy. Some children will insist that if there's a family dinner the toy has a seat near them or insist on their own place. It turns out to be somewhere between 30 and 55% of all children who will develop an invisible imaginary playmate, one they want to sit at the table. Parents will often indulge this and allow a space to be set at the table if the family has room for it. Sometimes they'll insist on a little plate being set, although not necessarily with food, and you'll hear them conversing with them. Some parents get very nervous about this and think their child has gone crazy, but we have spent many many years reassuring parents that this is a normal human phenomenon and it's part of the development of the imaginative capacity of the child.

What I most want to stress is the essential normality of the phenomenon, and there is research that shows that some kids who are more creative are more likely to have imaginary playmates. In one study we carried out some years ago, we questioned parents, and 55% of the parents reported that the child had an imaginary friend, and

65% of the children reported having an imaginary friend. So sometimes the parents didn't know! There were some sex differences, and this is rather important because it comes up in the literature again and again. Girls will move across their gender roles, play with boy toys, and have boy imaginary playmates. Boys, though, will stick. I don't know if it's an inherent homophobia in our society, but a boy who begins playing with a doll or mentions playing with a little imaginary girl is suspect. Parents become nervous, and as I said there's a certain homophobia: ``Is my child a homosexual?'' But the worry is about boys. For girls it's OK. They can play with steam shovels or things of that nature and parents don't worry about it. So it's part of an overall pattern in our society.

Based on actual research findings, children with imaginary friends show more imagination in spontaneous play, more positive emotionality. That is, when they're playing spontaneously, they're laughing more, they're smiling more, they're more cooperative with adults, they show more extended language use, and they turn out to have watched less TV.

Now part of that may have to do with the fact that the TV kids generally watch has very little to do with their own lives or their own needs. Most TV that's available to kids is stuff that has a great deal of violence, mostly adult-oriented shows, or the cartoons which are full of violent material. We also found that only children are more likely to have imaginary friends, and children who are separated from siblings by five years or more tend to have imaginary friends. You can understand that the older kids tend not to be around very often, so they're almost like an only child.

The imaginary playmate phenomenon is also related, to some extent, to greater creativity. One of the uses children have for imaginary friends is as a scapegoat: if they knocked over a lamp they can say their friend did it. Sometimes they have two imaginary friends, related to a psychoanalytic event called ``splitting,'' and one is the good one and one is the bad one. There's even a movie now that's related to this primitive idea, *Multiples*, starring Michael Keaton. This is a movie that comes out of many early fantasies we have about this kind of power.

Steven Spielberg has reported that his family moved a great deal. He had imaginary playmates and he kept them well into the age of

twelve, which is way beyond what you ordinarily expect. People didn't know that he had them, but he kept them. Think about the popularity and success of the movie *E.T.*, which is basically about an imaginary playmate. The story is told basically from the perspective of children. E.T. is created by them — unless you really believe in space aliens — and a lot of the time the adults never see him. In fact, one of the clever things about the film is that you can never see the adults above the waist. You can only see them from a child's perspective.

There's a very funny scene where the children's mother comes home loaded with bags from shopping and she has to put them in the refrigerator. E.T. is standing next to the refrigerator. Of course she doesn't see E.T. and so when she opens the refrigerator, she knocks E.T. flat. It's that kind of an experience that I think Steven Spielberg captured very wonderfully in the movie. I just saw a couple of interviews with him in which he repeated the same point about his early experience. So the imaginary playmate becomes an important feature of the growing up process and it becomes a feature which can be in some ways positively and in other ways negatively related to television.

I think the people who originated Barney in some way or another either intuitively knew the importance of imaginary playmates or, I suspect, read some offshoot of our own work on this subject. They made it a central feature. Barney is actually a stuffed toy. Then the children wish for him and there's a ``biiiinnnng'' and some special effect and suddenly Barney is this seven-foot dinosaur. They emphasize pretending and make-believe a great deal in the show. That's one of the reasons we were attracted to studying the show and finding out more about it, how effective it was. And clearly it has been, if you take ratings as one sign of effectiveness: it has the highest rating of a children's show for the pre-school years, ages two to five. And then if you look at the purchase of objects, it's made all the people very rich who had any connection with Barney.

You can see that Barney has become a kind of crystallized imaginary playmate, and it says something about children's needs: they want that utterly loving, secure, perfect person who will be there for them and play this kind of sweet role. That was one of the things we found. One of the studies we did involved children in five inner cities or Indian reservations around the country, kids from lower

socio-economic status, and we went all around the country: we were in twenty-five or thirty different day-care centers, watching the children watch Barney, and then we also did some studies before and after. We were struck by the universality of the response. All the kids behaved the same way: they really watch the show with tremendous concentration. They didn't even get up and walk out of the room or anything like that. They stayed with it. The story is paced at a moderate level; it's not very fast-paced, and it also has the advantage of a single theme focus: if it's going to be focusing on autumn, that's the theme of the whole show, or on some aspect of physical health, that will be the theme, more or less, of the whole show. And the kids watch that.

Recently Channel 3 came down to do a study to show on TV and they got me involved commenting on it. They did something I couldn't get away with as a professor in a university — the ethics committee wouldn't let me do this: one day they showed a group of pre-schoolers *Barney* and then the next day they showed them *Power Rangers*, which is a very violent show. During the *Barney* episode, the kids concentrated and watched the whole show. Then they let the kids out into the studio and the kids began playing very nicely. The *Barney* episode had a lot of earth-moving toys and construction materials and stuff like that, so that's what the kids played outside, and they worked together to build things and so on. It was very nice. As for the kids who watched *Power Rangers*, as soon as it came on they got into fights with each other, and then at the end of the show, they went out into the play yard and got into fights with each other. Real fights: I'm not talking about playing, make-believe fights. They really got into actual physical fights with each other. It was rather remarkable.

At any rate, I just want to sort of wind this up. Sometimes you get something that's called a ``paracosm.'' This is relatively newly reported but it's a phenomenon in children known about for centuries. It's where you set up a whole imaginary society: you make up a society and you carry out various things in your mind. Some people have shown that the Brontës, sisters and brother, had an elaborate one they developed, and then they all went on to become writers — except for the brother, who became an alcoholic. Here's another example of how some of these imaginary playmates get started: Tolstoi and his brother had been telling stories about a group of people called the Moravian Brothers. There was a sect in Central Europe that was called the

Moravian Brothers. There were some adventures they had. Anyway, they were exotic to Russians: they seemed strange. As a little boy, Tolstoi didn't understand what Moravian means. Moravia is a country, but he didn't know that: he heard the word ``Murvey'' and that word meant ``ant.'' So he thought these were ant-people, and he made up an elaborate paracosm about ant-people.

Now that's how a lot of the imaginary playmates get started. Kids often have names for their imaginary playmates. In the case of a woman we know, her father was sick a lot and she heard certain words and she made them into imaginary playmates who appeared on the radio — this goes back some years. One of them was Fena and another was Barbara Tall — phenobarbital — and others were Ultra, Violet, and Ray, and she put them all together and had them as bright quiz kids who appeared on a radio show in which kids were all very smart. So that's one way that these develop.

Dorothy Singer: What we thought we would do now is conclude with a television quiz. Just take a piece of paper and write either ``true'' or ``false'' as I ask you the questions, and then I'll give you the answers later. Teachers always have to give tests! But this will be fun.

1) There are more commercials in daytime programs for children than in evening programs for adults. True or false?

2) By the time a child has finished high-school, he has spent 11,000 hours in classrooms. How many hours were spent watching television during those same years of high-school: 2,000? 10,000? 15,000?

3) What percentage of Saturday morning children's programs have at least one example of human violence: 15%? 38%? 71%? 92%?

4) Is there any relationship between televised violence and aggressive behavior in children: definitely yes? definitely no? probably yes? probably no?

5)Here's an easy one: What network runs children's programs with no commercials: ABC? CBS? NBC? PBS?

6)The two most commonly advertised products on programs designed for children are: toothpaste? fish? milk? apples? candy? cookies? toys? snack foods? cheese? cereals? vitamin pills? soap? peanut butter? carrots? juice?

7)About what percentage of Saturday network commercial TV programs for children are cartoons: 75%? 50%? 25%? 10%?

8)The hosts of programs and cartoon characters in children's TV shows are forbidden to introduce or present any commercials: true or false?

9)The government has set regulations for all advertising that children might see: true or false?

Let's go over the answers.

There are more commercials in daytime programs for children than in evening programs for adults. How many said true? You're right.

By the time a child has finished high-school, how many hours has he spent: 2,000? 10,000? 15,000? 15,000 is right.

What percentage of Saturday morning children's programs have at least one example of human violence? 92%.

Is there any relationship between televised violence and aggressive behavior in children? The answer is definitely yes. Years ago we probably would have said ``probably yes," but since the two reports that came out, the National Institute of Mental Health report in 1972 and the one in 1980, the evidence is overwhelming now that if children are exposed to violent programs on television, they tend to be more aggressive.

What network runs children's programs without commercial interruption? PBS. I'm sure you all got that right.

The two most commonly advertised products on programs designed for children are what? Candy would be right, if you're thinking about the quarter before Christmas; that's when candy and toys get advertised quite a lot. But if you had checked any of those — candy, toys, snack foods, and cereals — you would be correct. If you checked carrots and milk, you were just wishful thinking.

About what percentage of Saturday network commercial TV programs for children are cartoons? The answer is 75%.

The hosts of programs and cartoon characters in children's TV shows are forbidden to introduce or present any commercials: true or false? Forbidden, but by what? It's actually not an FCC or a government requirement. They are forbidden by the Children's Review unit of the Better Business Bureau. There is no law that says a host can't come out and advertise, but the industry self-monitors and tries not to have a host of a show come out. But there's no written law that says a host cannot do that. Now if you are in a local TV area and you see a local TV program and a host comes out, if you write to the station manager, generally he'll try to rectify that, and the Children's Review Unit does try to monitor commercials around the country to prevent that. In other words, if Bill Cosby is on his show and then comes out and advertises Jell-O right after his show, that would not be a violation by law, but it would be a violation of the Children's Review Unit of the Better Business Bureau. Most celebrities try not to violate that, but occasionally we did see it on *The Flintstones* years ago, where the Flintstones were advertising their vitamins, and quickly the Children's Review Unit pulled that off, because what it tells the child is ``Here's this character that I'm very involved with, and now I *have* to buy it, because I really like this character.''

The government has set regulations for all advertising that children might see: true or false? Yes, it's true now, and that was mainly due to Action for Children's Television lobbying effort, so that the advertising time for children has been reduced daily. It used to be more than an adult television program, and now the advertising time per show has been reduced by law.