This paper addresses the role of quality age-appropriate television programming in preschoolers' lives. The paper describes a developmental investigation of preschoolers' knowledge of polite behavior routines and their modeling of host-quest behaviors from a special episode to the television program "Mr. Rogers' Neighborhood." The research reported in the paper took an ecological approach to the study of children's learning from television by using Soviet activity theory to frame the research project. The paper provides background on the activity theory and the activity system approach, describes the five phases of the research, details the findings, and discusses the findings through analysis of activity systems. The paper concludes that the bulk of learning about how to behave in contexts requiring polite interactions stems from experiences in real life situations in the community life of children—from home, school, and the wider society—and not television programs such as "Mr. Rogers' Neighborhood." The paper suggests that future studies of television and children could benefit by building on the framework pursued in the paper. Contains 13 references and figures illustrating the activity system, the television as activity system, the child viewer as activity system, and the child practitioner of polite behaviors as activity system. (Author/RS)
Television as Activity System:
A Vygotskian Analysis of Preschoolers' Enculturation
and "Mr. Rogers' Neighborhood"

Amy Aidman
397 Education Building
1310 South Sixth Street
University of Illinois
Champaign, IL 61820
(217) 244-3904
(217) 337-6211

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ABSTRACT

Television as Activity System: A Vygotskian Analysis of Preschoolers' Enculturation and "Mr. Rogers' Neighborhood"

This paper addresses the role of quality age-appropriate television programming in preschoolers' lives. It describes a developmental investigation of preschoolers' knowledge of polite behavior routines and their modelling of host-guest behaviors from a special episode of "Mr. Rogers' Neighborhood". The research took an ecological approach to the study of children's learning from television by using Soviet activity theory to frame the research project. This paper provides background on activity theory and the activity system approach, describes the phases of research, details the findings and discusses the findings through analysis of activity systems. Based on its effectiveness in this project, the utility of the activity theory approach to the study of children and television is evaluated.
INTRODUCTION

It has been suggested by Watkins (1985) that Soviet activity theory (Vygotsky, 1978) may provide useful frameworks for studying television and its role in children's lives. This paper describes a research project, involving examination of an episode of "Mr. Rogers' Neighborhood" and its role in preschoolers' learning of host-guest behaviors, which has taken Watkins' challenge by building on Engestrom's (1987) model of activity systems. Initially historical background on research of prosocial television is provided. Following that is a section explicating Soviet activity theory and Engestrom's activity systems approach. The phases of research are briefly described and the results of the project are discussed with respect to the utility of the activity system approach. Activity system models were created to integrate and analyze research results.

Although the activity system approach has not been previously applied to the area of prosocial television's effects on children, it is a logical progression from previous trends in research in the area.

HISTORICAL BACKGROUND

In 1982, the National Institute of Mental Health published a report on television and behavior (Pearl et al., 1982) as a ten-year update to the 1972 Surgeon General's Report. Regarding children's prosocial behavior and television, it was suggested that what children learn depends on what they watch--television programming, if properly designed, is a potential force for good. The report, while noting that research on television's prosocial effects had
grown considerably (p.48), called for additional research to determine the conditions under which prosocial behavior is most likely to be learned.

A broadening in the focus of studies directed toward television and children's prosocial behavior came about in the late 1970's and early 1980's. Evidence supported the view that television could indeed be used for increasing children's prosocial behavior. Furthermore a new view of the child as an active processor of television programming (Anderson and Lorch, 1983; Salomon, 1979), was emerging. More attention was turning toward cognitive processes and affective development. According to Wartella and Reeves (1985) attention to cognitive development had emerged as a defining feature of research on television and children in the United States in the preceding ten years.

Wartella (1986) speaking to the issue of how children come to understand and interpret television points out that the process is not due only to general cognitive development. "It's not just that children's cognitive maturing outside of television, in school, and in other interactions affects how they interpret television. Instead, the interpersonal context of television watching and the talk that occurs there creates the context within which siblings, parents, and perhaps peers as well facilitate children's developing understanding of the medium. Children then can use the medium for acquiring knowledge about the nontelevision world." (p.549)

More recently researchers have suggested that we need more broader models for studying television's roles in children's lives. Wright, St. Peters, and Huston (1990) offer an ecological model of
influences on children's media use (p.228, in Bryant, J. 1990) with macro and micro levels of analysis including sociocultural, social institutions, families, and individuals. Influences on children's media use in their model include parent demographics, available media outlets, family structure and media use, cognitive development and other individual causes.

This research project also took an ecological approach. The objective was to further examine television's positive potential, while taking into consideration children's general cognitive development, and other environmental factors which may influence children's learning from prosocial, age-appropriate television programming. Soviet activity theory, the theoretical framework employed in this research, can accommodate multiple levels of inquiry and allows one to examine the flow of ideas, concepts, values, and even emotions at work among the elements of the activity system. A brief discussion of activity theory follows.

SOVIET ACTIVITY THEORY

Soviet activity theory, the Soviet cultural-historical research tradition, has received considerable attention over the past two decades in academic circles in the United States. Activity theory has its roots in the work of the Soviet psychologist and methodologist, L.S. Vygotsky (1978). Central to Vygotsky's project was the reformulation of Soviet psychology along Marxist lines in order to develop a Marxist theory of human intellectual functioning—that is an historical-materialist theory of mind. This new conceptualization allowed mind and behavior to be understood as
aspects of human activity. In activity theory psychological constructs are characterized as of the "individual in action". Activity theory links the individual psychological being, human activity, and the external world of objects and phenomena. The mind and the external world are mutually defining. Psychological development can be traced from the interpersonal to the intrapersonal plane. (Wertsch, 1985)

Vygotsky used Engels' concept of human labor and tool use and extended it to sign use. "Like tool systems, sign systems (language, writing, number systems) are created by societies over the course of human history and change with the form of society and the level of its cultural development. Thus for Vygotsky, in the tradition of Marx and Engels, the mechanism of individual developmental change is rooted in society and culture." (Vygotsky, 1978, p.7)

Activity theory asks one to look at what is uniquely human in behavior and to trace its emergence over the course of human history and in the course of ontogenesis. The higher intellectual processes are of central concern. These can be spotlighted by focusing on activity--since the development of higher mental functions takes place on the external plane before they become internalized. The developmental method or "experimental-genetic" method used in activity theory allows researchers to see the development of psychological processes that are usually not observable in the course of normal every day behavior. An experiment that is carefully designed should allow one to witness the development of a specific function. This is what is known as the developmental
method, because it allows one to see, describe, and explain the emergence of a psychological function.

In summary, the central underlying themes of activity theory are: the developmental or genetic method, that allows one to witness the appearance of psychological functions; the idea that higher mental processes in individuals are originally found in social or external processes; and the idea that mental processes can be understood only by understanding the tools and signs that mediate them.

Engestrom's research on Finnish health care services (1987) presented a model of activity systems, based on Vygotskian principles, which organizes the various components that make up the structure of activity.

"For the theory of activity, contexts are neither containers nor situationally created experiential spaces. Contexts are activity systems. An activity system integrates the subject, the object and the instruments (material tools as well as signs and symbols) into a unified whole. An activity system incorporates into itself both the object-oriented productive aspect and the person-oriented communicative aspect of the human conduct. It is a complex system of multiple mediations....in addition to the subject, the object and the instruments, an activity system as the basic unit of analysis always contains the components and interactions of the community, the division of labor, and the rules" (Engestrom 1987, p. 4,5).

The components of an activity system are always building on each other, but the changes are not necessarily continuous. There are crises as well as linear growth. Figure 1 builds on Engestrom's basic model of activity to account for elements that might come into
play in children's learning of polite behaviors and the role that television might have in that learning. This model served as a tool for thinking about how to design the study discussed in this paper.

In a recent study applying activity theory to questions concerning children and learning from computers, Salomon (1990) has referred to learning in the "zone of proximal development", another Vygotskian concept (discussed below). In his article Salomon asks, "...whether the combination of particular kinds of programs that entail particular qualities under specific conditions of activity, goal, and cognitive involvement can have (or can be designed to have) some lasting cognitive effects on children." (Salomon, 1990, p.27) Salomon claims that when a child is "mindfully engaged" with a computer program that the system of child and computer program is more intelligent than the child alone. (p.33) As when working with a more highly developed peer or adult, the child is able to stretch his or her ability, and with that help the child accomplishes more than would be possible alone. In other words, learning can take place in the zone of proximal development, under certain conditions when children work with appropriately designed computer software.

The zone of proximal development:

"...is the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers....The zone of proximal development defines those functions that have not yet matured but are in the process of maturation, functions that will mature tomorrow but are currently in embryonic state. These functions could be termed the 'buds' or 'flowers' of development rather than the 'fruits' of development. The actual developmental level characterizes mental
development retrospectively, while the zone of proximal development characterizes mental development prospectively." (Vygotsky, 1978, p. 86)

The idea of learning in the zone of proximal development has relevance for examining learning from television and is taken into consideration in the analysis of results for this study.

The historical and theoretical framework presented in the preceding sections set the foundation for a study design in multiple phases using qualitative and quantitative methods.

A RESEARCH DESIGN IN FIVE PHASES

This study was designed to address the following question: when one considers the various levels and interplay of forces in the activity system, where does a thoughtfully produced, age-appropriate, quality television program fit into children's learning of host-guest behaviors?

Five phases of research were planned and conducted based on the activity system model. Although an experimental study of preschoolers' learning from an episode of "Mr. Rogers' Neighborhood" was at the heart of the research, in order to produce a more rounded picture of what is involved in this realm of activity, other sites of inquiry complemented the study. The early phases of data collection rendered information relevant to the design of instruments for the experimental study.

The first phase of research involved an observation period in a preschool classroom of the Montessori school to be used in the experimental study. Observations were conducted during the first
weeks of the 1990 summer session. They were geared toward understanding what goes on in the process of absorbing new children as members of the classroom group, toward determining any routines in polite behaviors the school may have been encouraging, and ultimately toward clarifying how children learn these behaviors at school.

Two phases of research concentrated on the series "Mr. Rogers' Neighborhood" and in particular on the episode used in the experimental study. As noted earlier, this was a special episode of the program. In it Mr. Rogers had as a visitor the host of a popular Russian children's television program, Tatiana Vedeneeva. The visit was part of an exchange which Fred Rogers initiated at a time in the late 1980's when the Cold War was just beginning to thaw, and was an event which generated public interest. Interviews with key personnel were conducted to examine in general the series' philosophy, the creative process at work as a program goes from the initial stages of idea to finished product, and the structural or economic and organizational framework of production, as well as to provide background information on the host exchange. A content/textual analysis of the specific episode of "Mr. Rogers' Neighborhood" used in the study constitutes the third phase of research.

The fourth phase of research was an experimental study in which Montessori preschoolers viewed the episode of "Mr. Rogers' Neighborhood" with or without discussion. The study addresses these questions: Do preschool children understand the program's messages? What do they know about host-guest behaviors? Do they model the
program behaviors in a role-playing situation? Is there a significant difference in children's learning that can be attributed to age? Can a television program alone create a zone of proximal development or is an "in person" adult discussing the program with the child necessary to create the zone of proximal development?

The fifth research phase includes a survey of parents of the children in the experimental study, and small group interviews with parents to determine the influence of the home environment on children's polite behaviors.

The following section summarizes the principle results of this research. Due to the length restrictions of this paper and its nature as a theory building enterprise detailed statistical results are not included here. Detailed tables and figures are found in Aidman (1993).

SUMMARY OF STUDY RESULTS

Major themes of episode #1589 "Talks About Nighttime" include community, friendship, and tolerance of cultural difference. Fear of night and of people, objects, and situations that are strange are also themes of the program. Meta-linguistic awareness and meta-cultural awareness figure as well. Host and guest behaviors are modelled during a visit of Tatiana Vedeneeva, the host of a Russian children's television program, to Mr. Rogers' television neighborhood, as well as when a Star Visitor appears in the make-believe segment of the program.

The in-school observations and the parent survey and interviews lead to the conclusions that the rules of polite interpersonal
behaviors, (such as using customary greetings and goodbyes, and saying "please" and "thank you") are issues of importance at home and at school and that both sites provide opportunities for interaction in which those behaviors are expected. In addition some common methods for teaching these behaviors are employed at school and with parents, including verbal reminders, explanations, adult modelling, and positive reinforcement. Negative reinforcement and ignoring inappropriate behavior are less popular methods for teaching these behaviors, but were found at school and among parents. An important difference which became apparent between school and home environments has to do with the central goal of socializing children to perform polite interpersonal behaviors. In school the teaching of appropriate behaviors while new students are joining the class, has to do with balancing the emotionally charged environment, so that all children can work in a non-stressful atmosphere. At home, parents have a more personal stake in their children's polite behavior partially due to the feeling in this culture that the child and the parents will be judged according to the appropriateness of the children's interpersonal interactions.

Although the subject population is a group which spends relatively low amounts of time watching television, familiarity with "Mr. Rogers' Neighborhood" is high, and parents overwhelmingly consider it appropriate viewing for their children.

The experimental study of children's learning from the program, with and without discussion, provides evidence that comprehension of the program improved with age. Discussion of the program appears to help with comprehension of some of the more subtle ideas, such as
meta-linguistic awareness and perspective taking. In addition, performance on host-guest measures also improved with age. Older children exhibited more positive feelings about the hosting situation and more appropriate behaviors. Younger children were more likely to produce responses such as shyness and fear that pointed to discomfort. Although some children modelled behaviors from the program in the post-treatment role-playing game, direct modelling was not statistically significant. The modelling and overall quality of interaction scores improved significantly with age, yet were not affected by treatment condition. Interestingly, even a three-month age gain between conducting the role-playing game in post-treatment and follow-up, coincided with significant improvement per child in the quality of the interactions.

The following section analyzes the results of this research by separating out television, the child as television viewer, and the child as practitioner of host and guest behaviors into systems of activity.

**AN ACTIVITY SYSTEM ANALYSIS OF STUDY RESULTS**

Scribner (1968) said that "...social processes function as mediating mechanisms in psychological change and development..." Television viewing is a social process or practice that involves mental skills. Learning polite behavior, an element of enculturation, also involves mental skills. This analysis aims to begin to sort out how current day middle-class preschoolers bring their varying cognitive abilities and affective states to interact
with television programming, with and without adult mediation, and to discuss these issues in light of the interacting elements which comprise the contexts of these activities.

Television as Activity System

The system drawn out in Figure 2 represents the forces relevant to the production and reception of the television program used in this study. "Production" and "consumption" are intertwined in that at the heart of Fred Rogers' creativity and mission are the viewers. He is motivated by his feelings for and knowledge of children. His philosophy, his creativity, the production company he heads, Family Communications, Inc., are what make production of the series "Mr. Rogers' Neighborhood" possible. He develops ideas for programs, writes the programs and the songs, provides the personalities and voices of many of the puppets, and is the central figure in the series.

As elaborated in the interviews with the producers, the program could be described as part of a mission to help preschoolers feel self-esteem, to feel worthy of love. This type of program philosophy could not be realized easily through the commercial television system in this country, and therefore its natural place is in the Public Broadcasting System, a non-profit system. Family Communications, Inc. is a small, low budget company which is fueled by Fred Rogers' philosophy.

In this activity system the "rules" refer to three specific sets of rules: the rules of television production within the U.S. system, Fred Rogers' philosophy of television production for
children, and the rules of polite interpersonal behaviors, in general, and more specifically host and guest behavior routines.

Within the U.S. broadcasting system, "Mr. Rogers' Neighborhood", is a unique phenomenon. Over a quarter of a century, while television programs come and go, attesting to the system's propensity for eating up talent, "Mr. Rogers' Neighborhood" has maintained a hallowed spot on public television and within middle-class society. A breakdown of the factors that explain this phenomenon highlight Fred Rogers as the perpetual and inspirational force behind it. Although the broadcasting system has changed dramatically over twenty-five years, he has maintained the program's position within the system, and become more and more a part of Americana. He is a symbol of middle-class aspirations for children's healthy emotional development. Although his philosophy is exceptional within the mainstream of U.S. children's television programming, the program is produced within the rules of standard television production, and its content exemplifies the rules of Judeo-Christian values for interpersonal behavior.

While maintaining the program on the air, Fred Rogers continues his own development, as a producer of materials to support his philosophy of emotionally healthy childhood and therefore, as an advocate for children's emotional well-being. The grand idea of building a peace bridge to the Soviet Union, could only be pulled off by a producer with stature and vision enough to feel secure about entering the international arena of war and peace, and coding it in a way that would be of significance to very young children. What are the dynamics that account for this unlikely outcome?
The key is Fred Rogers: his continuing responsiveness to child issues based on a knowledge of child development, his creative response to reflections on his own childhood, his way of finding a place for his philosophy in a broadcasting system in which that philosophy is outside of the norm, and his production company all interact to produce a series that is evolving in an evolving society. This approach to television production can be thought of in the Vygotskian view of development in terms of interactivity with the external environment, internalization of problems, creating solutions, and then acting on the environment by actualizing those solutions through television production. Fred Rogers reflects on issues of emotional significance in children's lives, then sets his own creativity to work within the confines of the U.S. television system, to reach out to children through television. The program, with the stamp of approval from parents, the school, and the wider society, then goes on to become an external stimulus for children. In its capacity as external stimulus the program is discussed with regard to the activity system of the child viewer in the next section.

The Child Viewer as Activity System

This activity system (see Figure 3) represents the context of the child as television viewer. "Instruments" in this case is television programming. The elements of "production" and "consumption" represent the central dynamics of the external and internal mental processes at work in learning from television. Between "production" and "consumption" are intervening factors
that come into play in determining what each child takes away from the program. These factors can include, but are not limited to: age, time, emotions, temperament, setting, and identification with characters. "Production" represents the child's meeting with the program on the external plane. "Consumption" involves the on-going interaction of the child with that external stimulus, and any internalization which may take place.

The "object" refers to the learning from the program and is tied to the "outcomes" or the feelings, behaviors, and knowledge that emerge from the interaction of the children with the television program. The results of the study of Montessori children's learning from the episode of "Mr. Rogers' Neighborhood" indicate that recall and comprehension of the program material improves with age from three to five years. Older children were better at correctly answering questions involving inference making. Discussion of the program contributed to improved meta-linguistic awareness and perspective taking. In addition, older children appeared to have a better grasp of the idea of using a different language.

Viewing the television program did not make a significant contribution to children's performance on the host-guest measures in the study, except perhaps to offer a wider range of affective possibilities. Although there was some evidence of direct modelling from the program, viewing the program did not contribute either to use of more appropriate behaviors in the host-guest role-playing measure or improvement in the subjective evaluation of the quality of the interactions. In part, this is probably due to the program's similarity to real-life scripts modelled by parents and
teachers for how one treats a guest.

"Exchange" represents the idea of how the program fits in with other sources of learning about polite behaviors and "distribution" addresses the question of broadcasters' responsibilities to the child audience. As common sense and this study show there are multiple sources from which children can learn about appropriate behaviors, and there are various levels of responsibility within society for children's enculturation. In this society, broadcasters' responsibility to the child audience is given a great deal of lip service, but the history shows that prosocial use of television for children has been a minor goal in the overall scheme of U.S. broadcasting. This fact makes it easier to understand why television is not a leading source of children's learning of prosocial behaviors, even if it could be under different circumstances.

"Rules" concerns the idea of the rules of television viewing and revolves around such issues as what children are allowed to watch, when, where, how much, how, and with whom. Watching television is in itself a developmental activity. Not only does children's understanding of a variety of aspects of television content and formal features change over time, but television viewing is an activity children learn to do within the context of the "community", their home environments, schools, and society.

Another aspect of the child's viewing experience concerns the "division of labor". This includes the variety of ways television experiences can be mediated, either through discussion of program content, as was done in the experimental study, through parental
interventions, or through critical viewing courses, to name a few. In this study, discussion of the program content helped children to understand some of the more complex concepts presented in the program, such as meta-linguistic awareness and perspective taking. It is important to remember that whatever mediations or interventions occur with viewing are produced within the same cultural context, and are to a certain extent determined by that context.

More than anything, this activity system, when discussed in terms of the study results, points to television viewing as an activity that is developmental in nature. It is developmental in a global, historical sense, and ontogenetically. The study provides evidence that growth in understanding of television content can be detected among preschoolers from three to six years old. In addition, it emphasizes the contextual nature of television viewing, pointing out that variables in the system are interconnected with children's learning from television.

The Child Practitioner of Polite Behaviors as Activity System

This activity system examines the context of the child as practitioner of polite behaviors. Therefore, "instruments" in this context represents the tools of polite behavior. In a host-guest situation, in this middle-class culture, the tools include such common activities as standard greeting and parting phrases and behaviors, gift giving, and sharing food.

The "subject" is the developing social being, and the "object" is enculturation. "Outcomes" are behaviors which demonstrate
progression toward becoming a fully enculturated member of society, one who has passive and active knowledge of appropriate ways of interacting in social situations. Between the "subject" and the "object" is the process of enculturation, represented by the elements "production" and "consumption".

"Production" involves observation of social behaviors, as well as practice in producing those behaviors. The role-playing game in the study gave children such practice. Children are routinely engaged by adults in interactive scripts, before they are ready to fully participate. Adults will often provide the child's part in such scenarios, and then have the child repeat her/his part. Along with observation of adult interactions, these rehearsals are among the ways children are introduced to the idea that there are expectations for appropriate behaviors. These interactions stretch the child's ability. This is a good example of learning in the zone of proximal development.

"Consumption" involves the gradual process of the child's internalization of these routines, along with the increasing ability to produce the appropriate behaviors. As with learning how to be a television viewer, this process is developmental. However, it appears to be more dependent on interaction with real people than is becoming a mature television viewer.

Study results pointed to age as a major factor in the measures concerning knowledge of appropriate host and guest behaviors, and there appears to be an affective component in the development of these behaviors. Older children were more positive about the host-guest situation, whereas younger children's responses seemed to
indicate feelings of shyness or fear. Children's performance on a follow-up measure adds weight to the idea that ability to perform appropriately in a host-guest situation improves with age, even over a very short (three-months) period of time, among preschoolers. In fact, it seems likely that the role-playing game with the experimenter may have acted as a rehearsal contributing to this improvement in quality over time.

Although one of the original questions of this project concerned whether television might promote learning in the zone of proximal development, the results of the research seem to indicate that television is not interactive enough to do that. It may be that the role-playing game tapped into a zone of proximal development in children's learning of host-guest behaviors in a way that the television program, either with or without discussion did not. Although children do learn from observing adults, this particular realm of behaviors seems to be taught in an interactive fashion, by parents and by teachers, and that may contribute to an explanation of the effectiveness of the role-playing game as an intervention in teaching children host-guest behaviors. This matter calls for further investigation since it relates to the idea that children are particularly receptive to different forms of training in different domains. This is of interest both as a theoretical question, and as one that has important practical implications.

In this activity system, "exchange" and "distribution" can be related to several notions: that several levels of "community" are involved in teaching children; that the rules flow out of and into families, schools, and society; and that a
television program, as a product of culture may also express those same rules. "Exchange" also concerns consistency of information between various sources or carriers of rules of polite behavior and the reinforcement children may receive for their behavior in this area. The idea of "exchange" ties together what children know and learn about the rules of host-guest behavior, and the sources of that knowledge. "Distribution" involves the various channels through which children receive information about appropriate behaviors.

Several phases of the research address the "rules" of host-guest behaviors and the "division of labor", or how the various levels of "community" share responsibility for children's learning of these behaviors. In the classroom observations, the parent surveys and interviews, the close reading of the episode of "Mr. Rogers' Neighborhood", and in the study of Montessori children's learning from the program, conclusions are drawn with respect to rules. Frameworks of greeting and parting interactions, giving and taking of objects, working, playing, and eating together are shared by the television program and the classroom environment. However, by observing in the classroom it is possible to witness the complex process by which children learn about what is considered appropriate. When the rules are not yet clear to them, or some other emotion or need is more important and the rules break down, the results involve communicative misfires, conflict among the children, and sanctions by the teacher.

Regarding the "division of labor" for enculturation into polite behaviors in this society, with our emphasis on nuclear families and parental responsibility for children, the individual family
unit is held accountable for its young ones' actions, moreso than the school system or society at large. Although the declaration of social responsibility for children recurs in public discourse, ultimately parents are blamed for their children's failings and praised for their successes. A recurring theme in the public controversy over our failings as a society to properly socialize children involves an indictment of television. Yet, in the end, families are charged with the bulk of responsibility, reflecting the middle-class value system of a type of ownership of one's children.

CONCLUSIONS

Having presented the three activity systems, the relationships among them, or the "intercontextuality" becomes more accessible. The three systems, that of television, the child viewer, and the child as practitioner of polite behaviors, live under the same roof. They are connected by the simple fact that they exist within the same economic, political, and cultural superstructure during the same historical era. This superstructure in turn affects the "instruments" of television production, the television program, and the tools and practices of polite interaction.

A goal of this project has been to examine children's knowledge of host-guest behaviors and to investigate that area of behavior as it may be influenced by the school, the parents, and the viewing of a relevant episode of "Mr. Rogers' Neighborhood". It has been demonstrated that the "rules", specifically rules of polite interpersonal behaviors flow into and out of the various levels of
"community", that is school, home, society, and can also be found in television programs, such as the one used in this research. The rules of behavior which teachers and parents encourage in their children are complementary to the rules of host-guest interactions Fred Rogers uses in his visit with Tatiana Vedeneeva. His rules are a product of the same Judeo-Christian value system and culture into which the children are being enculturated at home and in school.

Interestingly, age, rather than viewing condition was the factor contributing to children's modeling of appropriate behaviors and to the quality of their host-guest interactions. Therefore, it is fair to conclude that children's knowledge of host-guest behaviors comes primarily from other sources, home and school, and that age is an important factor in learning those behaviors. Although they comprehend many aspects of the program and learn from the program, one television program is a minor factor in their knowledge of these types of behaviors. What is clear is that by three years old, children know quite a bit about how to behave appropriately and by five years of age children performed significantly better on tasks involving host-guest behaviors.

Compared to real life contexts the television program does not provide as active a form of teaching. On its own, it does not tap into a zone of proximal development. Even with discussion of the program's themes, the opportunity for interaction inherent in a real-life situation is lacking. This does not undercut the role of prosocial television as an important tool for relating information and for teaching about behaviors and feelings, however it is clear that the bulk of learning about how to behave in contexts requiring
polite interactions stems from experience in real life situations in the community life of children, that is from home, school, and the wider society.

It is of course important to point out that due to the research design only one episode of the program was used. Future research could provide children with more concentrated doses of programming to further examine modelling of behavior and possible affective influences. The fact that the children understood many aspects of the program and modelled from it at all attests to the power of age-appropriate programming for teaching children about such behaviors.

Another point that emerged in the classroom observations and in the host-guest measures is that it is not unusual for younger children to be more shy, fearful, or uncertain in a situation involving new people. This could be useful information for adults who may be frustrated by the way some younger children may deal with new situations. A possible solution would be to accept and deal with the child's fear, deemphasizing performance of socially desirable behaviors in strange situations until a later age, when the child may feel more comfortable. Although children's individual temperaments have not been discussed in this project, certainly some children are likely to simply be friendlier and less cautious about strange situations than are other children. These issues call for further research.

It is clear from the analysis of the episode of "Mr. Rogers' Neighborhood", that children's fears of nighttime and of strange situations and people were taken into account in program creation. The make-believe segment of the episode, in particular, was
formulated to deal with fear. The results of this study confirm the idea that fear is indeed an issue for some children in host-guest situations. This provides a concrete example of how "Mr. Rogers' Neighborhood" is sensitive to emotional issues for very young children.

The activity system approach used in developing this research has enabled the investigation of many layers of activity simultaneously. In so doing insights have been gained that would not have become clear otherwise. This approach leads the researcher toward a study design that takes many perspectives into account. It encourages one to think about connections and contradictions among interacting elements. Future studies of television and children could benefit by building on the framework pursued in this research.
THE ACTIVITY SYSTEM*

INSTRUMENTS
(Polite behaviors, Television technology)

PRODUCTION
(of the program, of behaviors)

SUBJECT
(Child audience)

OBJECT
(the program)

OUTCOME(s)
(feelings, behaviors, knowledge)

CONSUMPTION
(viewings, observation of models)

EXCHANGE

DISTRIBUTION

RULES
(Host-guest behaviors)

COMMUNITY
(Family, School, Society, TV Industry)

DIVISION OF LABOR
(in program creation, in viewing)

*(Adapted from Engestrom's model (1987)
Figure 2

TELEVISION AS ACTIVITY SYSTEM*

INSTRUMENTS
(television technology and systems)

PRODUCTION
(Fred Rogers, generation of ideas, process of program creation)

SUBJECT
(focus of production)

OBJECT
(the program)

OUTCOME(s)
(airing of "Mr. Rogers' Neighborhood")

CONSUMPTION
(audience involvement, viewings)

EXCHANGE
(audience feedback)

DISTRIBUTION
(lines of reception)

RULES
(of television production, Fred Rogers' philosophy, rules of social interaction)

COMMUNITY
(professional community, program's place in society)

DIVISION OF LABOR
(within television industry, within Family Comm., Inc.)

*(Adapted from Engestrom's model (1987)*
Figure 3

THE CHILD VIEWER AS ACTIVITY SYSTEM*

INSTRUMENTS
(the program)

PRODUCTION
(channeling of external stimuli)
(developmental factors: age, time, emotions, temperament, setting, identification with characters, etc.)

SUBJECT
(child audience)

OBJECT
(learning from the program/feelings, behaviors, knowledge)

OUTCOME(S)

CONSUMPTION
(viewing, learning on the external plane, internalization of stimuli)

EXCHANGE
(role of television in learning)

DISTRIBUTION
(responsibility of broadcasters to child audience)

RULES
(family, school, society)

COMMUNITY

DIVISION OF LABOR
(parental mediation, discussion, other interventions)

*(Adapted from Engestrom's model (1987)
CHILD PRACTITIONER OF POLITE BEHAVIORS AS ACTIVITY SYSTEM*

**INSTRUMENTS**
(polite behaviors, communicative acts, e.g., hugs, greetings)

**PRODUCTION**
(observation and practice of appropriate behaviors)

**SUBJECT**
(developing social being)

**OBJECT**
(encyculturation, mature social being)

**CONSUMPTION**
(internalization of behaviors)

**EXCHANGE**
(consistency, external reinforcement)

**RULES**
(polite behaviors)

**COMMUNITY**
(family, school, society, television)

**DISTRIBUTION**
(channels of enculturation)

**DIVISION OF LABOR**
(sharing of responsibility for children's development of appropriate social behavior)

*(Adapted from Engestrom's model (1987)*
REFERENCES


