

**From the Hill to the Street:
The Connections between CRITC at KU
And the Sesame Workshop**

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Presented to
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for HNRS 492
May 15, 2009**

Introduction:

It has long been understood that children in the United States watch television for a longer period of time than any activity of the day, other than sleeping—yet for some time, it was unknown whether the effects of this activity could ever be positive.

Television's growing reputation for ill effects on children pushed forward the need for scientific research on the effects of television. In the 1960's, as the cost of television ownership fell and the available audience expanded rapidly, it became apparent that an achievement gap was growing between the middle and lower income families of the nation (Fisch, 2004). Educational television was envisioned as a possible equalizer to remedy this early educational disparity. Although this was commonly accepted, the issue of how the newly available medium could help expose children to basic pre-academic skills was a far more nebulous dilemma (Davis, 2008).

The Center for Research on the Influence of Television on Children (CRITC) was founded in 1978 at the University of Kansas (KU) to address just this issue. Born out of the inspiration of John Wright and Aletha Huston, the Center brought many diverse research interests and thus projects to the table. The influences of this program came to be profound and far-reaching, affecting everything from federal public policy to the curriculum decisions of what was then known as the Children's Television Workshop. Former CRITC students have branched out to other fields of study in academia and have assumed prominent positions in the public sector, thus furthering the impact of this research in areas of children's television. One such example is the career of Rosemarie Truglio, the current Vice President of Research at the Sesame Workshop, whose work will be discussed in this article. To better understand the connection between KU and the educational programming on television today, the background of CRITC at KU will be examined and the influences it had on educational television, directly and indirectly, will be discussed.

PART I

1. The University Context

In the 1970s, the departments that dealt with the social sciences at The University of Kansas (KU) had some distinct characteristics of its organization. Developmental research was a collaborative venture principally between the Bureau for Child Research (BCR) and the Department of Human Development and Family Life (HDFL). The partnership between the HDFL, started by Frances Degen Horowitz, a renowned scholar in developmental psychology and giftedness, and the BCR would become increasingly important, especially during the merging of departments in 1990, with the formation of the Schiefelbusch Institute for Life Span Studies (Schiefelbusch & Schroeder, 2006). Eleven years later, the HDFL would change its name and research focus, becoming the Department of Applied Behavioral Science.

The Schiefelbusch Institute for Life Span Studies was created in 1990 through the merger of the Bureau of Child Research with the Gerontology Center and other research centers, such as the KU Work Group for Community Health and Development and the Merrill Advanced Studies Center. That year also marked the retirement of Richard Schiefelbusch from his 35-year long position as the director of the BCR, and the ushering

in of a new director, Stephen Schroeder (Schiefelbusch & Schroeder, 2006). The new Institute and director also received a new workspace at the recently-finished Robert J. Dole Human Development Center, which also housed the Human Development and Family Life department.

Among its distinctive features, the Department of Human Development and Family Life employed the “Junior Colleague” model of training. This model was especially useful in laboratory sciences and social sciences, noted Horowitz, because it ensured that a new graduate student would not flounder while searching for a mentor; this system required that students apply to work in a specific lab with a specific person (personal communication, 4/24/09). The application process included a section wherein applicants ranked which faculty members with whom they wished to work, according to their interests, which led the potential students to consider a mentor before even being admitted. While the mentor-student bond was important in shaping the junior colleague’s career, the collaborations among newer and more established junior colleagues was an indispensable part of the education that doctoral and master’s students in this area of research would receive at KU (R. Truglio, personal communication, 5/4/09).

2. A Brief Account of the Origins and Operation of CRITC

CRITC started as the brainchild of John C. Wright and Aletha C. Huston, a husband and wife team of developmental psychologists at the University of Kansas. Their interests in the influence of media on children were already gathering steam, but Wright believed that having a research center would give their work more visibility and attract others to join them. Wright and Huston revived the Kansas Center for Research on Early Childhood (KCRC), a previously existing center of research which had fallen into inactivity. By the end of 1978, they had gathered many graduate students at new building location and under a new name and had several projects under way.

At first, the center found some space in Green Hall, but this was only temporary. Wright and Huston made a more permanent home for CRITC in a building eventually and affectionately called “Wagon Wheel West,” a house at 515 West 14th Street, in Lawrence. This space, which shared the block with The Wheel, a local bar frequented by KU students, had enough room for graduate student desks and room for meetings. The center stayed in this house until 1990, when it moved into the new Dole building, where CRITC stayed until its 1996 move with its founders to the University of Texas at Austin.

The University of Kansas did not directly fund the research projects at CRITC and therefore all of the space and research funding were paid for by grants from National Institutes of Health, The National Science Foundation, The Markle Foundation, and The Spencer Foundation. Mabel Rice recalls this contact with various foundations as a formative experience for her as a researcher while she was involved in post-doctorate work with CRITC from its beginning until 1984. She valued the experience of making presentations to review panels when they visited. Each of the researchers was accountable for managing the pace of their research and its presentation, which demanded that all of them develop resilience in the face of feedback (Mabel Rice, personal communication, 3/26/09).

Because administrative approval was needed to rename the pre-existing center for media research, the new name went through a rigorous selection process. Wright wanted

a pronounceable acronym, and held a contest among those involved with the new center to formulate a name (A. Huston, personal communication, 4/17/09). The winning name was produced by Barbara Jones, Huston and Wright's secretary, who suggested the Center for Research on the Influence of Television on Children, or CRITC. Frances D. Horowitz recalls that she thought that the inclusion of television specifically in the name would limit the type of research that was expected from the center, which would hinder its productivity (Horowitz, personal communication, 4/24/09). She reflected that her concern anticipated eventual changes in popular media, although she could not have known about the coming of the internet or that computer/video games would play an increasingly significant role in the lives of young children. She noted that even so, CRITC did not seem to lack inspiration, even while limited to the study of television.

Each year, CRITC would issue a list of the previous year's journal articles, presentations, book chapters, and other publications to document its contributions to the field of media research. Even today, there exists a long list, online, of the selected publications of CRITC's history (Huston, 2009). KU professor Jeanne Klein, who had had a close connection with CRITC, had saved an account of the publications from 1978 until 1984. The list covered everything from sex role cues in commercials to the presence of narration in cartoons, from the effect of advertisements on nutritional misinformation to cognitive processing during viewing. The breadth of topics covered by such a small number of researchers suggests, at the very least, a highly productive research team with far-reaching interests.

The center's researchers were gathered together by meetings held each Wednesday afternoon. This was the time for everyone involved with the center to come together and talk about ideas for new projects, discuss their own projects, and hear about others' work (J. Klein, personal communication, 4/8/09). This opportunity for communication often led to collaboration, and was especially important because the junior colleague model tended to build great depth of knowledge in a specialty but less breadth. These meetings were also a time for media researchers from around the country and around the world to join the conversations that went on at CRITC. Wright and Huston had met many researchers while travelling to make presentations in various countries and who would contact the pair when they were travelling to the United States. Thus, the meetings acquired an international flavor, with guests from many nations, including Singapore, Israel, Japan, and Australia.

The meetings elicit strong memories for those who were involved with CRITC. Mabel Rice recalled that Wright's personality was such that he could get into a heated debate with a person and "go out for a beer afterwards" (Rice, M., personal communication, 3/26/09). The phrase "intellectual sparring" seems apt to describe many of the experiences reported by former "CRITCs". This sparring was all for the sake of making good thinking even better, of course, even when the gloves were on and the match set between husband and wife. Huston recalls a graduate student who had been trained as a religiously affiliated marriage counselor who once tried to mediate her discussion with Wright. It was humorous her, she said, because their debates during the weekly meetings indicated marital strife to no one else, let alone to the couple themselves (Huston, A., personal communication, 4/6/09).

The connection made through CRITC by graduate and postdoctoral students was by all accounts "like a family." This was perhaps due to the constant meetings, the close

quarters, or the intense mentorship provided by Huston and Wright. According to Klein, the CRITC connection was something many graduate students treasured, and even became a part of some people's identities after the program (Klein, personal communication, 4/8/09). As with other "families," the center had effects that reached beyond the intended scope of giving students and faculty intellectual space and guidance. A salient example of this can be seen in the experience of Jeanne Klein.

Klein was a KU doctoral student in theater when she became involved with the program, in 1984. Her interest in how children understand theater attracted her to a cognate area in developmental psychology, which in turn led her to experience two independent studies under the direction of Wright and Huston. Her experience was so valuable that she continued to attend weekly meetings after she had achieved a faculty position at KU in 1987. Since then, she has explored some of Wright's concepts about electronic media in the context of theater research. This led to her being asked to teach the "Children and Media" course after Wright and Huston moved CRITC to the University of Texas at Austin. Currently, she also teaches "Children and Drama" and "Theater for Young Audiences." Klein mentioned that she wishes that there were a Children's Theater Workshop devoted to research in and production of high-quality theatre for young people in the same vein as the Children's Television Workshop (Klein, personal communication, 4/8/09).

PART II:

3. CRITC's Impact on Educational Television, especially Sesame Street

As intended, CRITC made its greatest intellectual contributions examining the impact of television in the lives of children. It is also important to note the specific effects of the program on practices in educational television. Although the research at CRITC made great strides in understanding children and television in terms of gender, sexuality, violence, use of fiction versus reality, and advertising, it can be argued that its most significant contribution was the center's promotion of changes in educational television. Some of the center's most widely recognized studies will be highlighted in this section, along with their implications for educational television.

The direct and immediate influences that CRITC had on television during its life are difficult to discover because the written records of meetings, consultations, collaborations, presentations, etc., were not often archived, and when these records were kept, they are held privately and so rarely open to others.. Thanks to the memories of some of the people associated with the center, it is known, however, that Huston and Wright consulted with the Public Broadcasting Corporation's Ready to Learn Initiative, which launched in 1995. The initiative continues to focus on teaching literacy skills to children aged 2 to 12 to better prepare them for school, and supports the use of only scientifically based reading research in its programming. Wright and Huston were involved in content analysis of a few of the shows, which may have informed the initiative's decisions (Huston, A. personal communication, 5/4/09).

Earlier, The Children's Television Act of 1990 indicated public interest in providing more educational broadcasting for children during prime time, but it was unclear in its definition of "educational" and it was not enforced by the Federal

Communications Commission. Wright and Huston's research paved the way for the revision of the Act in August of 1996, which added more helpful qualifications for educational shows and appropriate advertisements. Their work was cited on multiple occasions in testimony and in written statements for Congress and the FCC (Huston, A., personal communication, 5/4/09). The same can be said about their involvement in the Federal Trade Commission's effort to regulate television advertising.

The influence of CRITC was also clear whenever a former student obtained a position serving children's television. Two ready examples are Valeria Lovelace, who spent some of her post-doctorate years working with CRITC, and Rosmarie Truglio, who earned her doctorate in child media studies in 1990. Each of these women went on to hold the primary research position at the Children's Television Workshop, now called the Sesame Workshop, which is most famous for producing the series Sesame Street. In turn, Sesame Street was extensively studied by CRITC, among its examinations of many educational programs for young children.

The following is a sampling of information published by researchers at CRITC as cited in multiple sources on the reform of children's television and the learning gained by children from watching carefully-crafted educational television.

Formal features

For the first years of CRITC's operation, research was especially concerned with the formal features of television viewing (A. Huston, personal communication, 4/6/09). Formal features are loosely defined as the visual and auditory features, as well as the pace, action and variability of scenes (Huston & Wright, 1994). When judiciously used, the formal features of a program can draw a child's attention to the message and salient information in a segment, and encourage intellectual processing. They can be classified as the non-content-dependent features of media, although they also can be useful in transmitting information to young viewers about the type of content the show contains. For example, child voices can indicate that a program is intended for children, and therefore garner attention from child viewers (Huston & Wright, 1994). Shows like Sesame Street have been shown to not only attract children's attention but also to keep it by showing interesting content.

In a 1981 study of formal features, the formal features of children's programming were coded by CRITC investigators into perceptually salient features (such as rapid action, music, noise, sound effects, visual tricks, scene changes and cuts) and features that could promote reflection on material (such as long zooms, narration, dialogue, moderate action, and singing). The results showed that even children as young as 3 and 4 years of age were using features that gave information about the program content rather than only the features that were perceptually salient (Huston & Wright, 1994). This means that children learned at early ages what features signaled programming that could be interesting, funny, or comprehensible, and attended to such features. This argues against the validity of the "zombie viewing" that some critics of Sesame Street and other educational programs have suggested, which implies that children are unwittingly sucked into programming because of its impressive and attention-grabbing features and "held captive" (Huston & Wright, 1994; Morrow, 2006).

Mental Representations and Vocabulary Acquisition

Children may also use the formal features of television to form mental representations through visual cues and repetition. Because visual cues are more readily encoded by children than verbal abstract messages, the depiction of physical actions aids in their comprehension (Huston & Wright, 1994). The repetition of verbal representations present in educational television, such as Mister Rogers' Neighborhood and Sesame Street, also aid children in the formation of mental representations by presenting verbal concepts in different contexts so that the child can generalize beyond any one specific encounter with the information (Fisch, 2004).

In the mid-1980s Mabel Rice studied repetition and redundancy in order to examine how educational television might be used to teach vocabulary and language skills, such as rhyming. The use of single words, repetition, literal meanings and apparent referents for discussions were all ways Rice found that educational television enhanced comprehension (Huston and Wright, 1994). The talking picture book of television not only encouraged the child to ruminate over repetition, but also to talk about the events on the screen with nearby adults, much as they would while being read to, as Rice and colleagues found in 1986. By 1990, Rice found that repeat viewing of the shows themselves (over an 11-week period) led to benefits for children in printed word identification, letter and number recognition, and expressive vocabulary gains (Fisch, 2004).

The Early Learning Model

Daniel Anderson, a graduate student working with Huston and Wright, defined the "Early Learning Model" as three pathways leading to long term positive effects of educational television viewing. The pathways consisted of acquisition of preacademic skills, development of motivation and interest, and learning prosocial, nonaggressive behavior (Fisch, 2004). These were examined in longitudinal studies revolving around school-readiness and long term effects of watching Sesame Street and other educational programming.

The first of these was the Early Window Project (1990-1993), which found basically that the viewing of educational television by younger children (ages 2 to 3) had positive effects on school readiness compared with the readiness of children who viewed of other types of programs and with the experience of older viewers. These effects are said to initiate an early trajectory towards success, as more prepared children will be viewed by teachers as competent and are more likely to be placed in more advanced groups in school (Wright, Huston, & Kotler, 2001). As children mature, they take a larger and larger role in their own educational development, and those who view themselves as intelligent and view schooling as enjoyable may be more apt to engage in educational activities, such as reading for pleasure, and to do so more often (Huston, Anderson, Wright, Linebarger & Schmitt, 2001).

In the recontact study of the Early Learning Model performed in 1994, the effects of this early learning seem especially strong for high school boys who had viewed educational television while in preschool. It is hypothesized that boys show a greater response because they are a group at higher risk for behavioral problems and lower academic achievement (Huston et al., 2001). This study supported the validity of many of the projected long term effects found in the Early Window Project.

4. An Account of Rosmarie Truglio and Sesame Street

Rosmarie Truglio, as mentioned in the last section, completed her master's and doctoral degrees with CRITC between 1983 and 1990. Before coming to the University of Kansas from Douglass College, Rutgers University (Camden New Jersey), she had not been familiar with media studies. To her, KU offered a unique program that she now calls her most formative experience as a researcher. This experience was crucial for a career change she made in 1997, when she left Columbia Teachers College in New York for the position of Vice President of Research at the Sesame Workshop.

Whereas her early research interests and master's level work had been focused on television and reading skills of preschool-aged children, her dissertation was concerned with teenagers' perceptions of sexual socialization. Her research was based in part on surveys of students in the Lawrence schools about their sexual behavior and perceptions of such behavior. She found that children are especially vulnerable to sexual portrayals in the media, which could be considered a "window into the bedroom" in some respects. While holding a tenure-track position teaching at Columbia University, Truglio's interests returned to issues related to early childhood with a focus on media literacy in children.

By 1997, Truglio was looking for a change of careers. She shared a CRITC connection with Valeria Lovelace, who had previously filled the position of Vice President of Research at the Sesame Workshop. Although the women did not work together during their time at CRITC, their experiences in CRITC were similar. Lovelace had actively elevated the position of research at the Children's Television Network during her tenure, and had striven to strike a balance among the creative team, production, and the fruits of research (Davis, 2008). When Truglio applied for the research position, it had lain vacant for several months. After a barrage of interviews, Truglio was chosen to be the new Vice President of Research.

Truglio's new career would have her doing something that had not marked her CRITC and university careers: formative research. The former vice president for research at CTW clarified the role of research: "The major criterion by which in-house formative research is to be judged...is the actual utility in reaching informed decisions in the design and production of television materials" (Fisch & Bernstein, 2001). One of the main differences between Truglio's previous experiences and formative research is that formative research in the field often has a turnaround time of one or two weeks, as opposed to the typical academic approach of several months of rigorous study and the preparation of a manuscript for publication. Also, because in-house formative research is done to inform the decisions of policy makers, the findings must have concrete applications to production, and the presentation of these ideas must be persuasive. Collaboration, a skill that Truglio says was sharpened by her experiences at CRITC, is as important to formative research. An atmosphere of mutual respect must be maintained between production and research, as both parties have experiences and perspectives on children that are very valuable to the overall show (Fisch & Bernstein, 2001).

Due to the necessity for quick turnaround and development of concrete suggestions for changes, the research teams at the Sesame Workshop must make careful decisions about how to invest their time on topics. Topics for research must tackle characters, segments, formats, or messages that will be prominent within the series, fulfill

a primary education goal, and are possible and practical to change (Fisch & Bernstein, 2001). Such topics selected for study during Truglio's tenure included the scientific goals of understanding the names and functions of body parts, senses, light and shadow, and the idea of what is alive and what is not (Truglio, Lovelace, Segui, & Scheiner, 2001). Additionally, when Elmo's World was slated for expanded air time of 15 minutes per show, research confirmed that children found the segment appealing and comprehensible for its entire duration (Fisch & Bernstein, 2001).

Despite the differences in the general goals of formative and summative research, Truglio's strong background in academia has been instrumental in how she conducts her current research position (personal communication, 5/4/09). For example, Truglio made the decision to have a longitudinal study, although atypical, as part of the formative research for an 18-week story arc called "Slimey to the Moon," featuring Oscar the Grouch's pet worm, Slimey. This type of study served the show effectively because it allowed the researchers to assess whether a long-running story would be age-appropriate (Truglio, et al. 2001). As can be true for summative research, formative research can establish a baseline of a subject's previous knowledge, in this case a child's knowledge, in order to determine how exposure to a stimulus affects the information that children have in a certain subject area. For example, preschoolers from a low-income day-care center showed the greatest gains in astronautic knowledge, but middle-class day-care preschoolers also made significant gains.

Sesame Street is constantly changing to meet the educational needs of children, whether this means adding new characters, expanding the roles of older characters, or altering the format of the show. For example, season 30 saw a change in the format that modified the hour-long show into a 45-minute magazine format with a 15-minute anchor in Elmo's World. In season 33, the Street Scenes, which had traditionally been interspersed throughout the show, were consolidated into a 12-minute, uninterrupted, segment so that children could process them all at once.

Characters have been more difficult to change. The well-established Cookie Monster joined the Healthy Habits for Life Initiative in 2006 and was featured on many adult television programs to introduce this concept, such as the Colbert Report and Martha Stewart Living. The monster's announcement that cookies were a "sometimes food" sparked what has been called the "Veggie Monster scare" during which numerous online petitions cropped up on the Internet sporting the signatures of web users who believed that the integrity of their favorite character was somehow threatened (Cookie Monster, 2009). Even if it means changing a traditional character's ways, Sesame Street will change itself to better serve its child viewers.

CONCLUSION

CRITC played a major role in the formation and development of children's educational programming, especially for Sesame Street. With limited financial support from the University, it earned great prestige for the University of Kansas. For the people involved, CRITC often served as a springboard for career success in the post-University world. Truglio's place of prominence is based significantly on the groundwork she did at CRITC, while Rice went on to become a distinguished professor at KU and to hold several administrative positions in the Department of Speech-Hearing: Sciences and

Disorders. Huston and Wright were very important mentors to many people in the field, highly regarded teachers, and active citizens in the life at the University. Their work lives on in many ways, not least through the educational programming seen on television today.

References

- Aletha, A.C., Anderson, D.R., Wright, J.C., Linebarger, D.L., & Schmitt, K.L. (2001). Sesame Street Viewers as Adolescents: The Recontact Study. In Fisch, S.M., & Truglio, R. T. (Eds.), *“G” is for Growing: Thirty Years of Research on Children and Sesame Street*. (pp. 131-147). New Jersey: Lawrence Erlbaum Associates.
- Wright, J.C., Huston, A. C., Scantlin, R., & Kotler, J. (2001). The Early Window Project: Sesame Street Prepares Children for School. In Fisch, S.M., & Truglio, R. T. (Eds.), *“G” is for Growing: Thirty Years of Research on Children and Sesame Street*. (pp. 97-115). New Jersey: Lawrence Erlbaum Associates.
- Fisch, S. M., & Bernstein, L. (2001). Formative Research Revealed: Methodological and Process Issues in Formative Research. In Fisch, S.M., & Truglio, R. T. (Eds.), *“G” is for Growing: Thirty Years of Research on Children and Sesame Street*. (pp. 39-61). New Jersey: Lawrence Erlbaum Associates.
- Truglio, R.T., Lovelace, V.O., Segui, I., & Scheiner, S. (2001). The Varied Role of Formative Research: Case Studies from 30 Years. In Fisch, S.M., & Truglio, R. T. (Eds.), *“G” is for Growing: Thirty Years of Research on Children and Sesame Street*. (pp. 61-79). New Jersey: Lawrence Erlbaum Associates.
- Fisch, S.M. (2004). *Children’s Learning from Educational Television: Sesame Street and Beyond*. New Jersey: Lawrence Erlbaum Associates.
- Huston, A.C. & Wright, J.C. (1994). Educating Children with Television: The Forms of the Medium. In Zillmann, D., Bryant, J., & Huston, A.C. (Eds.), *Media, Children and The Family: Social Scientific, Psychodynamic, and Clinical Perspectives*. (pp. 73-85). New Jersey: Lawrence Erlbaum Associates.
- Morrow, R. W. (2006). *Sesame Street and the Reform of Children’s Television*. Baltimore: The Johns Hopkins University Press.
- Davis, M. (2008). *Street Gang: The Complete History of Sesame Street*. New York: Penguin Group.
- Schiefelbusch, R.L., & Schroeder, S.R.(2006). *Doing Science and Doing Good: A History of the Bureau of Child Research and the Schiefelbusch Institute for Life Span Studies at the University of Kansas*. Baltimore: Paul H. Brookes.
- Huston, A.C. (2008). Publications and Papers: Center for Research on the Influences of Television on Children (CRITC). From: <http://www.he.utexas.edu/web/CRITC/publications.html>.
- Cookie Monster. (May 9, 2009). Wikipedia-The Free Encyclopedia. Retrieved May 10, 2009 from: http://en.wikipedia.org/wiki/Cookie_Monster.