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Reinventing Television and Family Life, 1960-1990

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ABSTRACT

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In the 1960s, 1970s, and 1980s, the field of television changed. A series of new electronic devices that interfaced directly with TV technology—video cameras, home recorders, cable boxes, video calling systems—were introduced to the American public. These devices promised to radically transform the medium. They worked to turn what had long been conceived as a one-way system of mass communication into an interactive and useful instrument in the management and relations of domestic life. My dissertation examines this televisual transformation.

Combining archival research, discourse analysis, and close readings, it analyzes how television's convergence with new media from 1960 to 1990 strove to redefine the medium, allowing for novel ways of engaging with the TV set that restructured and reimagined family communication and household operations. In particular, it contends that during this period both television and the idea of television transformed. In addition to being an object designed to be *watched*, television became a complex assemblage to be *used*. Once linked to these new technologies, television ceased to be the uniquely one-way receiver of broadcast signals, but became a flexible and interactive tool—a potent force in the management of the household, protection of the home, and the cultivation of the family.

My dissertation explores this history of television convergence by focusing on four case studies: home videomaking, video telephony, interactive cable, and home surveillance and security. It analyzes the discourses that surrounded each of these technologies and practices,

unpacking the hopes they inspired and the fears they engendered as they interacted with the TV set and intervened in domestic life. In particular, my dissertation argues that these moments of technological linkage were imbricated with the structures of American domestic life. They emerged in response to changing configurations of home, gendered expectations, and the limitations and apparent decline of the nuclear family. In so doing, home videomaking, video telephony, interactive cable, and home surveillance and security functioned to offer visions of the future often rooted in nostalgic idealizations of the past. Although many of the technologies explored in this dissertation have been almost entirely eclipsed by or subsumed within computational media, television's tenure as the communications center of the home must not be ignored. The modes of interaction, systems of surveillance, visions of domestic efficiency, and gendered assumptions they articulated did not disappear with the end of the 1980s. Far from merely a prehistory of the digital, the history of television convergence from 1960 to 1990 offers a vibrant and significant reimagining of the function of technology in the home, essential to understanding many of the practices that have come to define domestic life in the digital age.

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DEDICATION

This dissertation is for my grandparents, Tom Spaulding who made television before I ever thought to write about it, and Alice Berry, the toughest woman I know.

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INTRODUCTION

Historicizing Television Convergence in the Home

“Ten years ago, it was simple. If you wanted to watch TV, you’d get a TV set. That was that. But now, a TV set isn’t the half of it. You’re faced with choices of videocassette recorders, videodiscs, ‘component’ TV systems, projection TV, cable, not to mention computers and videogames that can be played through the TV screen.”

—David L. Chandler, “Sizing Up the Available Equipment, *Boston Globe*, 1983

In an October 1983 issue of the *Boston Globe*, electronics reporter David L. Chandler described what he believed to be a fundamental change in the nature of television. “Video systems,” he argued, “are taking the place of television sets. The TV screen is not just for TV anymore. It is now the ‘output device’ (or ‘monitor’) for a host of possible ‘inputs.’”¹ According to Chandler, a series of new technologies developed and popularized through the late 1970s and early 1980s were transforming the TV console. These devices, which included VCRs, cable boxes, videodisc players, videogame consoles, and computer terminals, interfaced directly with the TV set. They replaced television with the more elaborate ‘video system’ that promised to expand the medium’s possible functions and imbue it with new social meanings. For Chandler, these new technologies could make the TV set so much more than simply a tool for receiving one-way broadcast transmissions. Hooked into a complex technological assemblage, television could be used to display home movies, time-shift programs, exhibit Hollywood films, access local and informational cable programs, play games, and process data. Indeed, Chandler contends that through these linkages, television became more than just ‘TV.’ It became an increasingly flexible and malleable system—a revolutionary, multifaceted tool designed to be used rather than simply watched.

¹ David L. Chandler, “Sizing up Available Equipment,” *Boston Globe*, October 14, 1983, 23.

Though representing one of the more extensive discussions of television's transformation in the early 1980s, Chandler was far from alone in his observation that new technologies were changing the medium through their connection to the TV set. A few years prior to Chandler's *Boston Globe* article, Christine Winter of the *Chicago Tribune* claimed: "It used to be that a TV set could be considered a marvelous invention, but nonetheless just a TV set... Now it is the window into the soul of more than one electronic marvel, ranging from video cassette recorders (VCRs) to video discs, video games, and home computers."² And as early as 1976, in a column in the *Washington Post*, TV critic Tom Shales remarked that, "Many people do use television sets for purposes other than the one for which the confounded things were presumably intended—watching television."³ These reports, which offered commentaries on the wide variety of technologies and practices (e.g. home recording, computer processing, video art, etc.) being channeled through the TV console, all united around the same idea: television, aided largely through its collision with new media, could be so much more than just 'TV.'

Throughout the 1960s, 1970s, and 1980s, a series of technologies were developed or at least popularized in the United States that worked to redefine television as a medium. These devices encouraged new uses of TV technologies and changing how people engaged with their home consoles. Alongside the video recorders and cable hook-ups mentioned by Chandler and Winter, video cameras, Picturephones, cable, teletext, videotex, and closed-circuit television appeared with increasing prominence in American social and cultural life. The subject of advertising, corporate memos, speculations about the future, promotional pamphlets, and cultural commentaries, these technologies were pictured within the home and ascribed unique familial

² Christine Winter, "Tempo: Video Discs, Games, and Computers Keep Changing Television's Station," *Chicago Tribune*, February 25, 1980, sec. A, 2.

³ Tom Shales, "Watching the Tube Not the TV," *Washington Post*, December 5, 1976, 109.

duties. They intersected with the TV set or mobilized television technology. They took over televisual operations, solicited different types of content, managed viewers' attention, and gave the domestic screen new increasingly interactive and practical functions. Together these new technologies transformed television, turning the medium from the exclusive domain of commercial entertainment into an instrument of home management, interpersonal contact, tactile interaction, and domestic protection.

My dissertation explores how television's convergence with new technologies from 1960 to 1990 redefined the medium from a seemingly passive tool of the commercial broadcast industry into an active instrument in the management of home and mediation of the family. In particular, it examines how television's function in the American home was reimaged as the medium interfaced with the video camera, the telephone, closed-circuit television, and cable. I contend that these technological linkages were often constructed as a means of improving television. They represented a way of rescuing the medium from its long established reputation as a passive medium and a "vast wasteland"⁴ by redirecting its powers towards the production of new televisual arrangements and interactions that restructured family communication and household operations. As such, my dissertation seeks to demonstrate how television changed from a medium to be watched into a tool to be *used*.⁵ No longer uniquely the receiver of one-way

⁴ Newton N. Minow, *Equal Time: The Private Broadcaster and the Public Interest* (New York, NY: Atheneum, 1964), 52.

⁵ I am not suggesting that this transformation was total. In the 1960s, 1970s, and 1980s, people obviously still watched TV—indeed watching television remained the medium's primary mode of use. However, the release of a series of new technologies during this era brought a host of new functions to the TV set. With these new enhanced TV systems, television technology could be rendered practical and interactive. These devices often required heightened levels of engagement, be it through creative practice, tactile response, active monitoring, or personal disclosure. As such, I deploy the concept of 'utility' in order to signify these multiple dimensions of television's transformation. However, I want to distinguish my engagement with this concept from the important scholarship on 'useful' media. In their 2011 publication *Useful Cinema*, Charles Acland and Haidee Wasson inaugurated the concept of 'useful cinema' to explore the many and often overlooked deployments of cinematic technologies outside the traditional realm of entertainment. For them, 'useful cinema' includes all manner of cinematic forms, from educational films to corporate media productions to amateur cinema. However, central to their notion is the

broadcast transmissions, television became flexible and interactive—a powerful agent in the cultivation, management, and protection of domestic life.

I explore this history by focusing on four case studies—home videomaking, video telephony, two-way cable, and televisual surveillance and security—and trace the debates which surrounded each of these practices as they intersected with and acted upon the TV set. In particular, I examine the popularity of the video camera, the development of AT&T's Picturephone, the launch of Warner Communication's QUBE system, and the growth of closed-circuit television and cable-based home protection services. I work to unpack the relationship between these (often though not exclusively) new technological systems and the oft-debated medium of television—with its established meanings, limitations, and possibilities. Mapping the discourses (promotional, journalistic, scholarly, and popular cultural) that surrounded each of these technologies and practices, I examine how they sought to understand the role of such television assemblages in American life. I reflect on their interventions not only in definitions and understandings of television, but also in the spaces and relations of the media-infused home. I analyze how such technological conjunctions worked within the structures and systems of family life, responding to and reacting against changing domestic environments and gendered expectations in ways which still haunt many of the practices and technologies that have come to define the contemporary digital environment.

deployment of cinematic media by institutions (businesses, schools, governments, museums, and so forth). For Acland and Wasson: “The concept of useful cinema does not so much name a mode of production, a genre, or an exhibition venue as it identifies a disposition, an outlook, and an approach towards the medium on the part of institutions and institutional agents” (4). Although some of my case studies, particularly my examination of close-circuit television, could fall into this moniker of ‘useful cinema’—or in my case ‘useful television’—generally, my work takes a different approach to utility than much of this scholarship; specifically in my focus on technologies (rather than texts), concern with domestic spaces, and discussion of entertainment. As such, while I invoke the concept of ‘utility,’ I will rarely deploy the term ‘useful.’ For more on useful media, see: Charles R. Acland and Haidee Wasson, eds., *Useful Cinema* (Durham, NC: Duke University Press, 2011).

Thus, my dissertation aims to trace a history of television convergence as it worked to remake the medium as an interactive and practical instrument in domestic life. It looks at video, cable, video telephony, and closed-circuit television not as isolated examples of televisual technologies, but as a series of interrelated devices which worked together to articulate new relationships between television and the spaces and relations of the home. In examining the discourses that surrounded the introduction and popularity of these technologies, I explore the ways in which they operated simultaneously as nostalgic and forward-looking visions of America's domestic future. I explore how they anticipated many discourses and practices that have become increasingly dominant in the current digitally infused domestic environment. In particular, I argue that such visions of television's newfound interactive functions arose in dialogue with the anxieties that surrounded the nuclear family, its seeming decline, and the changes shaping American domesticity throughout the 1960s, 1970s, and 1980s. As this idealized social institution appeared increasingly threatened, visions of technologically enhanced television emerged—sometimes constructed as its salvation, other times reviled as its destruction, but all the while imbricated with its hopes, fears, and attempted hegemonic security.

Market Saturation, Home Electronics, and Determination in the First Instance

Although my dissertation is not about the political economy of the television and home electronics industry, it is important to acknowledge that this reimagining of the television did not happen in a vacuum. By 1960, nearly ninety-percent of American households owned a TV set.⁶ With the television market so saturated, it was not enough to simply sell TV consoles. New products were necessary to keep the industry afloat; especially important were products that

⁶ Lynn Spigel, *Make Room for TV: Television and the Family Ideal in Postwar America* (Chicago, IL: University of Chicago Press, 1992), 1.

would interface directly with the TV set and build off of consumers' established home setups.

In addition, the 1960s, 1970s, and 1980s were also marked by the rise of new telecommunications companies that sought to challenge the networks' dominance of television distribution. It was not enough for the emerging cable industry to provide the same service as broadcasters.⁷ To establish themselves and become profitable, cable companies needed to distinguish their products from those of traditional broadcast TV. As such, the technologies examined in this dissertation and the radical televisual transformation they seemed to embody must be understood within the context of capitalism. Their design, promotion, and popular discussion are products of electronics manufacturers and telecommunications companies' efforts at selling new technologies and modes of TV distribution to the American public.

However, this does not mean that these discourses should be dismissed as the mere reflections of corporate agendas. Rather, the meanings and histories I trace are complex and multifaceted. In addition to corporate memos, advertisements, and trade journals, these technologies emerge in news reports, hobbyist magazines, films, and television programs. Sometimes they are embraced; sometimes they are dismissed, but their discursive construction always draws from a broad range of different social, cultural, and political conditions that shape their meaning and significance. The discourses and technologies examined in this dissertation are all overdetermined and it is the nuances of these determinations that I explore—even if they are ultimately defined in the last instance, or rather to quote Stuart Hall, in “the first instance” by the economic conditions of their production.⁸

⁷ For more see: Jennifer Holt, *Empires of Entertainment: Media Industries and the Politics of Deregulation, 1980-1996* (New Brunswick, NJ: Rutgers University Press, 2011); Megan Mullen, *The Rise of Cable Programming in the United States: Revolution or Evolution?* (Austin, TX: University of Texas Press, 2003); Patrick Parsons, *Blue Skies: A History of Cable Television* (Philadelphia, PA: Temple University Press, 2008).

⁸ In his analysis of the marxist problem of determination, Stuart Hall revises Althusser's assertion that the relationship between the base (the mode of production) and the superstructure (state institutions, school, the church,

Television: Domestic Object, Social Subject

Although each chapter of my dissertation focuses on a specific instance of television's intersection with a different adjacent technology (video cameras, cable, telephones, and so forth), television endures as the through-line, a fixed point against which these other technological connections emerge. However, just because television operates as an anchor in my dissertation, it does not mean that television itself has a fixed or unified identity. Indeed, many scholars have examined the complexities of television, elucidating its history as a communications medium, technology, spatially arranged object, and cultural formation. They have done in-depth studies of specific programs and genres,⁹ analyzed the cultural and representational politics embodied by the medium,¹⁰ conducted in-depth studies of television reception,¹¹ traced the history and crises

the family, the media, etc.) though relatively autonomous, is always determined in the *last instance* by the economy. Hall pushes for an even more open understanding of interdeterminancy and contingency, what he terms "marxism without guarantees." For Hall: "The paradigm of perfectly closed, perfectly predictable, systems of thought is religion or astrology, not science. It would be preferable, from this perspective, to think of the 'materialism' of marxist theory in terms of 'determination by the economic in the *first* instance,' since marxism is surely correct, against all idealism, to insist that no social practice or set of relations floats free of the determinate effects of the concrete relations in which they are located. However, 'determination in the last instance' has long been the repository of the lost dream or illusion of theoretical *certainty*" (43). It is important therefore to turn Althusser's maxim on its head and thereby stress the uncertainty of results, while asserting the persistent determination of conditions. Stuart Hall, "The Problem of Ideology-Marxism without Guarantees," *Journal of Communication Inquiry* 10, no. 2 (June 1, 1986): 28–44, <https://doi.org/10.1177/019685998601000203>.

⁹ E.g. John Thornton Caldwell, *Televisuality: Style, Crisis, and Authority in American Television*, Communications, Media, and Culture (New Brunswick, NJ: Rutgers University Press, 1995); Jane Feuer, *Seeing through the Eighties: Television and Reaganism*, Console-Ing Passions (Durham, NC: Duke University Press, 1995); Elana Levine, *Wallowing in Sex: The New Sexual Culture of 1970s American Television*, Console-Ing Passions (Durham, NC: Duke University Press, 2007); Susan Murray and Laurie Ouellette, *Reality TV: Remaking Television Culture* (New York, NY: New York University Press, 2004).

¹⁰ Mary Beth Haralovich and Lauren Rabinovitz, *Television, History, and American Culture: Feminist Critical Essays*, Console-Ing Passions (Durham, NC: Duke University Press, 1999); Lynn Spigel and Michael Curtin, *The Revolution Wasn't Televised: Sixties Television and Social Conflict* (New York, NY: Routledge, 1997); Christine Acham, *Revolution Televised: Prime Time and the Struggle for Black Power* (Minneapolis, MN: University of Minnesota Press, 2004); Devorah Heitner, *Black Power TV* (Durham, NC: Duke University Press, 2013); Herman Gray, *Watching Race: Television and the Struggle for "Blackness"* (Minneapolis, MN: University of Minnesota Press, 1995).

¹¹ E.g. David Morley, *The Nationwide Television Studies*, Routledge Research in Cultural and Media Studies ; 6 (New York, NY: Routledge, 1999); Henry Jenkins, *Textual Poachers: Television Fans and Participatory Culture*, (New York, NY: Routledge, 2013); Gray, *Watching Race*.

of the TV industry,¹² and examined its social and spatial locations.¹³ Although each of these studies offers important contributions to understandings of television, my own project is especially indebted to work that aims at interrogating television's social and cultural meanings. I draw from scholarship that unpacks television's role in domestic life and elucidates the debates that shaped its history, operations, and perpetual stasis as a 'bad object.'

One of the earliest attempts to understand the nature of television comes from Marshall McLuhan in his 1964 publication, *Understanding Media: The Extensions of Man*. For McLuhan, media are far from incidental products of human invention; through their technological operations, they embody certain ways of thinking, feeling, and experiencing that help structure social and cultural life.¹⁴ Television is no exception. In McLuhan's view, as one of the most influential communications media of the age, television counteracts long established tendencies towards linearity, single-sensory experiences, and high-definition communication. Instead he contends that the medium privileges wholistic connection, in-depth participation, and multi-sensory engagement. Television—along with other electronic media—embodies a cyclical return to oral culture.¹⁵ For McLuhan, the 'coolness' of television (its low-definition qualities that produce in-depth participation from its viewers) comes in direct conflict with the fragmentation and specialization instituted by literate culture. As such, television becomes inconceivable and mystifying to those using the categories, modes of thinking, and systems of values established by

¹² E.g. William Boddy, *Fifties Television: The Industry and Its Critics*, Illinois Studies in Communications (Urbana, IL: University of Illinois Press, 1990); Amanda D. Lotz, *The Television Will Be Revolutionized*, Second edition. (New York, NY: New York University Press, 2014); Lynn Spigel and Jan Olsson, *Television after TV: Essays on a Medium in Transition*, Console-Ing Passions (Durham, NC: Duke University Press, 2004).

¹³ E.g. Lynn Spigel, *Make Room for TV*; Victoria E. Johnson, *Heartland TV: Prime Time Television and the Struggle for U.S. Identity* (New York, NY: New York University Press, 2008); Anna McCarthy, *Ambient Television: Visual Culture and Public Space*, Console-Ing Passions (Durham, NC: Duke University Press, 2001).

¹⁴ Marshall McLuhan, *Understanding Media: The Extensions of Man*, REV edition (Cambridge, MA: The MIT Press, 1994), 3-6.

¹⁵ *Ibid*, 308-337.

the ‘hot media’ (the high-definition, linear, low participation media like film and radio) that dominated previous decades of social and political life. Television emerges as a generational wedge. It forms a sticking point between the old who are still beholden to the domains of literate culture, and the young who, saturated as they are with electronic media, embrace the return of tribalistic and ‘Eastern’ ideas of communication, harmony, and wholeness.¹⁶ Although hesitant to assert whether television’s ultimate effects will be positive or negative, McLuhan conceives television as a potent social and cultural force, capable of changing individuals’ perception and rearranging the world according to a nostalgic, Orientalist vision of human communication and global connection.¹⁷

Published ten years after *Understanding Media*, Raymond Williams’ *Television: Technology and Cultural Form* represents a different, and in my view more compelling, attempt to make sense of the relationship between television and society.¹⁸ Striving explicitly against the technological determinism he sees in projects like McLuhan’s, Williams argues that the history of television’s emergence and the form it embodied cannot be disarticulated from the social conditions that surrounded its development. According to Williams, television broadcasting—and indeed broadcasting in general—emerged as the dominant televisual form from two seemingly contradictory but actually inter-related tendencies that defined life in twentieth-century capitalist society: the desire for mobility and for a “self-sufficient family home.”¹⁹ The rise of industrial capitalism in the nineteenth century led to a reconfiguration of the spaces and relations of labor and leisure. As socio-economic life shifted from the agricultural to the

¹⁶ McLuhan, *Understanding Media*, 4.

¹⁷ By bringing in McLuhan, I do not wish to fully endorse his approach. Indeed, though his work contains many compelling observations, I find it too disconnected from social context, politics, and history. Rather, I look to McLuhan’s writing as a part of the discourse that forms television history, something to be understood and analyzed alongside news reports, advertisements, trade publications, and TV programs.

¹⁸ Raymond Williams, *Television: Technology and Cultural Form* (New York, NY: Schocken Books, 1975).

¹⁹ *Ibid*, 19.

industrial, family members left their rural homes, which had often been occupied by multiple generations who lived and worked on the same property, and moved to the small dwellings of the city. In response, new forms of transportation and configurations of home emerged. They facilitated the production of capital while accommodating workers' dispersal across these new urban and industrial spaces. Moreover, the class conflict inherent to the political economic exploitation of capitalism resulted not in social revolution but in some gains for workers—most notably a shorter working day and higher wages—which in turn led to a heightened importance placed on the improvement of the private family home and the centrality of domestic leisure. According to Williams, “This privatisation, which was at once an effective achievement and a defensive response [to the alienations and exploitations of capitalism], carried, as a consequence, an imperative need for new kinds of contact.”²⁰ Williams argues that it was specifically in response to this need that broadcasting must be understood. A medium of mobile privatization par excellence, television brought the outside world inside. As public entertainment, it provided a mode of virtual mobility and a simulation of travel that could be accessed, received, and experienced individually within the private and privileged domain of the family home.

Extending Williams' historical approach to broadcasting and his concept of mobile privatization, Lynn Spigel's *Make Room for TV: Television and the Family Ideal in Postwar America* analyzes the introduction of television in the postwar American market.²¹ Focusing on issues of gender and domesticity, Spigel explores the discourses, debates, and design practices that surrounded television's development, promotion, and popularity. She analyzes the complex ways in which television was articulated with fears and fantasies about the family, gender roles, domestic labor, and the private sphere. In women's magazines, news reports, television criticism,

²⁰ Williams, *Television*, 20.

²¹ Spigel, *Make Room for TV*.

and popular media, the medium repeatedly emerged at the center of conflicting desires and overlapping concerns, often rendering it a contradictory and divisive object.

According to Spigel, television was understood as a “great family minstrel that promised to bring Mom, Dad, and the kids together” *and* a potential source of disorder that must “be carefully controlled so that it harmonized with the separate gender roles and social functions of individual family members.”²² It was heralded as a remedy for the drudgery of housework, an electronic device that would fit seamlessly into the routines and patterns of domestic labor. At the same time it became a source of anxiety, an object that threatened to distract housewives, disrupt paternal authority, and destabilize the social and sexual dynamics of the home. In broadcasting theater productions, vaudeville acts, and variety shows, television brought the commercial entertainments of masculine public urban space into the private domain of the interior. Commentators argued that TV could protect families from potentially dangerous (or at least uncomfortable) spaces. At the same time, it also threatened to expose the young and the feminine to seemingly inappropriate and damaging entertainment. Thus, Spigel demonstrates how television was defined by competing and sometimes contradictory discourses and debates since its introduction. Indeed, as an object whose installation in domestic life forced it to confront established routines and relations of home and family, television—and the discourses which surrounded it—worked to blur the boundaries between public and private space, incorporate and challenge Victorian ideals of gender and domesticity, and mobilize the seemingly contradictory discourses of travel and home, mobility and security, and freedom and domesticity.²³

My dissertation seeks to understand the way in which specific technologies—video, cable, closed-circuit TV, and the Picturephone—intersected with domestic television, eliciting a wide

²² Spigel, *Make Room for TV*, 37.

²³ *Ibid.*, 99-135.

range of discourses and debates about their potential to transform the medium and its role in American family life. In drawing on the work of television scholars, my goal is not to claim that the visions of technological possibility embedded in these moments of televisual linkage were absolutely new. Instead, I invoke TV scholarship to help me situate the hopes, fears, and nostalgic longings expressed in the popular rhetoric of the 1960s, 1970s, and 1980s within a broader history of television communication—one which is always already embedded in discourses and politics of gender, race, class, domesticity, technology, and home.

Beyond the Broadcast—Video, Cable, and Reforming Televisual

In tracing the history of television convergence from 1960 to 1990, my work not only draws on television scholarship, but also builds from studies that explore alternative televisual trajectories. I look to scholarship that analyzes non-dominant deployments of the medium and the technologies with which television intersected. In particular, my dissertation is indebted to discussions of two-way television (and its connection to video-telephony), video, and cable. Using similar approaches to those deployed in the study of broadcast TV, scholars of two-way television, video, and cable have conducted examinations of industry and policy, traced social and scientific history, investigated questions of aesthetics and form, and explored alternative and artistic media practices.²⁴ Indeed, just like television, these adjacent technologies are neither fixed nor unified, but embody a wide range of meanings, practices, and histories.

²⁴ E.g. Max Dawson, “Home Video and the ‘TV Problem’: Cultural Critics and Technological Change,” *Technology and Culture* 48, no. 3 (July 30, 2007): 524–49, <https://doi.org/10.1353/tech.2007.0103>; Holt, *Empires of Entertainment*; Kenneth Lipartito, “Picturephone and the Information Age: The Social Meaning of Failure,” *Technology and Culture* 44, no. 1 (2003): 50–81, <https://doi.org/10.1353/tech.2003.0033>; Mullen, *The Rise of Cable Programming in the United States*; Michael Z. Newman, *Video Revolutions: On the History of a Medium* (New York, NY: Columbia University Press, 2014); Patrick Parsons, *Blue Skies: A History of Cable Television* (Philadelphia, PA: Temple University Press, 2008); Michael Shamberg, *Guerilla Television* (New York, NY: Holt, Rinehart and Winston, 1972); Luke Stadel, “Television as a Sound Medium, 1922-1994” (Northwestern University, 2015),

Although many histories of television locate its emergence in the early to mid twentieth century (the moment which it first appeared as a discrete technological object), William Uricchio's "Television, Film and the Struggle for Media Identity" and "Television's First Seventy-Five Years: The Interpretative Flexibility of a Medium in Transition" situate television's introduction in the nineteenth century.²⁵ Uricchio argues that definitions of television should not focus exclusively on the TV set—that electronic box equipped with a cathode ray tube, installed in the home to receive broadcast transmissions. Instead, Uricchio examines the concept undergirding television. Understanding television as 'tele-vision' or "seeing at a distance," Uricchio contends that television first emerged in the popular imagination following the invention of the telephone in 1876.²⁶ In nineteenth century science fiction, comics, and popular discussion, a future was envisioned in which telephones were not just auditory but visual. Novels, magazines, and newspapers described such imaginary devices, printing images of men

<http://search.proquest.com/turing.library.northwestern.edu/pqdtglobal/docview/1690886611/abstract/8758F8AC92534087PQ/1>; Thomas Streeter, "Blue Skies and Strange Bedfellows: The Discourse of Cable Television," in *The Revolution Wasn't Televised: Sixties Television and Social Conflict*, ed. Lynn Spigel and Michael Curtin (New York, NY: Routledge, 1997), 221–42; Marita Sturken, "Paradox in the Evolution of an Art Form: Great Expectations and the Making of a History," in *Illuminating Video: An Essential Guide To Video Art*, ed. Doug Hall and Sally Jo Fifer (New York, NY: Aperture, 2005), 100–121; William Uricchio, "Television, Film and the Struggle for Media Identity," *Film History* 10, no. 2 (June 1998): 118–27; William Uricchio, "Television's First Seventy-Five Years: The Interpretative Flexibility of a Medium in Transition," in *The Oxford Handbook of Film and Media Studies*, ed. Robert Kolker (New York, N.Y: Oxford University Press, 2008), 286–305.

²⁵ Uricchio, "Television, Film and the Struggle for Media Identity," 118–27; Uricchio, "Television's First Seventy-Five Years," 286–305; It should be noted that Uricchio was not the first scholar extend television's history back this far. Indeed, this historiographic move was previously undertaken by both Siegfried Zielinski and Jeffrey Sconce. Zielinski analyzes cinema and television through the long history of 'audiovision'—a concept which works to push media studies beyond the consideration of discrete technological objects and towards the analysis of constellations of practices, technologies, and approaches that emerge as distinct dispositifs at specific moments in history. As such, Zielinski looks to broaden the history of both television and film beyond their official moments of invention by seeing these media within a larger history of the audiovisual which includes a wide variety of nineteenth century ideas and objects. Similarly, Jeffrey Sconce's examination of electronic media and the supernatural—which he traces through the study of the popular discourses that surrounded new media in specific historical moments—likewise extends the history television back to the nineteenth century. Focusing on the concept of 'electronic presence,' Sconce examines the connections between telegraphy, telephony, radio, and television, revealing how qualities often assumed to be essentially 'televisual' were present long before the actual invention of the 'TV set.' For more see: Jeffrey Sconce, *Haunted Media: Electronic Presence from Telegraphy to Television*, Console-Ing Passions (Durham, NC: Duke University Press, 2000); Siegfried Zielinski, *Audiovisions: Cinema and Television as Entr'actes in History* (Amsterdam, NL: Amsterdam University Press, 1999).

²⁶ Uricchio, "Television's First Seventy-Five Years," 288.

and women in front of large screens enjoying views of exotic lands or speaking to their loved ones.²⁷ Although television would not actually emerge as a material object for numerous decades after these initial imaginings, Uricchio argues that such fantasies of television should not be ignored. Even as television eventually crystalized into a predominantly one-way broadcast medium, the desire to render television capable of interpersonal communication and point-to-point transmission endured as an important televisual legacy. This resulted in numerous experiments which not only led to the invention of video calling systems, but also worked to infuse discourses surrounding other media, including the telephone, the phonograph, and cinema. Thus Uricchio not only elucidates an alternative televisual trajectory; he also contests the common tendency among media scholars to conceive television “as deriving from some existing medium, existing as a variation rather than a self-standing medium.”²⁸ Insisting on the primacy of television, or at least the fantasies that anticipated it, Uricchio locates the televisual in the discourses and expectations of all modern media.

Just as Uricchio reveals many of the slippages and complexities of ‘television,’ Michael Z. Newman unpacks the messy and mutable definitions of ‘video.’ In *Video Revolutions: On the History of a Medium*, Newman offers a synthetic cultural history of video, bringing together different iterations of video technology across the medium’s temporal evolution.²⁹ Newman breaks down this history into three distinct phases, each defined by a specific conception of what video is. Although his book includes a discussion of video’s early history in professional television production and its recent convergence with digital technology, he gives video’s so-called second phase the most extended analysis. This phase, which for Newman lasted roughly

²⁷ Ibid, 289; Uricchio, “Television, Film and the Struggle for Media Identity,” 118.

²⁸ Ibid, 122.

²⁹ Newman, *Video Revolutions*.

from the late 1950s to the early 1990s, defined video as an *alternative*, a medium which could improve upon and transform preexisting media. In particular, “Video was figured as the revolutionary solution to many of the perceived problems of television, in particular to the sense of television’s economic and ideological power over its audience and the society it was understood to be shaping.”³⁰ Newman focused on a wide range of analog video devices, offering brief discussions of everything from open reel recorders to video games to videocassettes to camcorders. He notes the discursive similarities between numerous technologies and practices. He argues that regardless of their specific form, video media were repeatedly conceived as a means of saving television. They seemed poised to change a medium defined by its commercialism, passivity, and femininity into an alternative, active, and masculine mode of communication. In tracing this brief history, Newman highlights the importance of heterogeneity, plurality, and the promise of social change to the definition and evolution of video as a medium. For him, “High-tech consumer electronics hype demands revolution talk, but notions of dramatic change also allow for expressions of a society’s dissatisfaction with the status quo and of its fantasies of a better (or worse) life to come.”³¹

Alongside Newman, other scholars have also examined the investment in video’s capacity to solve the problems of television. In “Home Video and the ‘TV Problem’: Cultural Critics and Technological Change,” Max Dawson argues that in the 1960s and early 1970s, critics viewed the home video recorders recently introduced to the American consumer market as essential to helping elevate television out of the vast wasteland.³² Critics, many of whom held “intensely ambivalent feelings toward American network TV,” saw video recorders, which in the years

³⁰ Newman, *Video Revolutions*, 21.

³¹ *Ibid*, 105-106.

³² Dawson, “Home Video and the ‘TV Problem,’” 524–49.

following their public release were very expensive, as a means of intervening in television and cultivating middle class tastes.³³ Initially, critics and electronics manufacturers suggested that the sophisticated TV viewer would use their home recorders to preserve the very best that television had to offer. They saw the medium satisfying an archival desire to collect culturally significant performances or important political moments, rather than exert personal control over the TV schedule through the practices of time shifting.³⁴ Eventually, in a move which further solidified video's rejection of television's popular sensibility, RCA and CBS Inc. developed prerecorded content along with their home video systems. These prerecorded tapes, which often consisted of plays, operas, ballets, and educational programs, were presented as a highbrow alternative to the mass entertainment found on TV or in the movie theater.³⁵ Promoted for their exclusivity and appeals to 'good taste,' critics applauded this new mode television viewing. They saw it as a means of rescuing the medium from its own damaging tendencies and distinguishing the intellectual video audience from the mass of TV viewers. For as Dawson contends: "Whereas broadcasting's economies of scale had hamstrung television's development as a popular art, video was ideally suited to the distribution of the aesthetically adventurous and intellectually challenging programs that lacked a home on the airwaves."³⁶

Similarly, Deirdre Boyle traces the history of the alternative video movement. She analyzes the ways in which artists and activists used portable video recording equipment made available in the 1960s in an effort to transform television. Instead of appealing to 'legitimate' culture or

³³ Ibid, 525.

³⁴ For more on the discourses and industries that supported this vision of video that would rise to prominence following the release of Sony's Betamax player see: Lucas Hilderbrand, *Inherent Vice: Bootleg Histories of Videotape and Copyright* (Durham, NC: Duke University Press, 2009); Frederick Wasser, *Veni, Vidi, Video: The Hollywood Empire and the VCR*, 1st ed., Texas Film and Media Studies Series (Austin, TX: University of Texas Press, 2001).

³⁵ Dawson, "Home Video and the 'TV Problem,'" 537-42.

³⁶ Ibid, 540.

cultivating ‘good taste,’ these video activists intervened in TV by making their own programming—programming designed to be politically astute, participatory, and embody the aesthetics and sensibilities of the counterculture.³⁷ Groups like Videofreex and the Raindance Collective, which had ties to the counterculture and youth movements of the 1960s and 1970s, sought to make programs which counteracted the conservative and hegemonic messaging of the establishment and mainstream mass media. They worked to create television that expressed progressive perspectives and radical aesthetics, bringing on the ground images from the center of protests, the floor of political conventions, or the domestic spaces populated by artists and activists.³⁸

This belief in video’s potential to transform television was rendered especially powerful when combined with cable. By providing an alternative mode of television distribution that bypassed the networks’ command over broadcasting, cable technology allowed for greater diversity of television programming. Although initially the technology was used to enhance broadcast signals for individuals living in remote communities, cable was eventually deployed to give subscribers access to more and more channels. Cable companies transmitted broadcast signals from a wide array of cities and towns and launched their own channels that offered an alternative to network programming.³⁹ On the one hand, this increase in television options gave the rise to new business opportunities. It encouraged the growth of specialty cable channels and subscriptions services dedicated to providing ‘quality’ programming that promised to be more

³⁷ Deirdre Boyle, *Subject to Change: Guerrilla Television Revisited*, 1 edition (New York, NY: Oxford University Press, 1997).

³⁸ *Ibid*, 4-25.

³⁹ For more see: Sarah Banet-Weiser, Cynthia Chris, and Anthony Freitas, *Cable Visions: Television beyond Broadcasting* (New York, NY: New York University Press, 2007); Holt, *Empires of Entertainment*; Mullen, *The Rise of Cable Programming in the United States*; Patrick Parsons, *Blue Skies*.

than just TV, perhaps epitomized by HBO.⁴⁰ On the other hand, cable also enabled an independent and locally oriented mode of television distribution that aimed to empower everyday citizens to become their own media makers. With cable, the possibilities of running one's own TV station, creating shows without having to think about ratings or profit, and participating in television production became a reality.⁴¹ Although the intensive localism of such shows meant that they would never threaten the security and popularity of the networks, they represented a community-centric alternative to mainstream TV—a site through which local groups could express themselves and their needs. Indeed, this belief in cable's capacity to serve as an alternative televisual structure resulted in a wave of utopian discourse that saw the medium as something not only with the power to remake television but also to transform American life as a whole, ushering in a newly democratic era of communication.⁴²

Although commercial broadcast television emerged in the United States as *the* dominant televisual formation, scholars have continued to examine the ways in which such a formation was neither natural, inevitable, nor simply embraced by the American public. Indeed, the decades following its introduction into the American home, television was repeatedly defined as a 'problem,' something that seemed to demand social transformation. Whether through Uricchio's efforts to trace television back to its conceptual root, Newman and Dawson's explorations of video and its modes of distinction, or Boyle's examination of video activism and community cable, scholars have studied the discourses and practices that have surrounded attempts to redefine television throughout its long history. They have analyzed how its intersections with

⁴⁰ Jane Feuer, "HBO and the Concept of Quality TV," in *Quality TV: Contemporary American Television and Beyond*, ed. Janet McCabe and Kim Akass (New York, NY: IBTauris, 2007), 145–47.

⁴¹ Boyle, *Subject to Change*, 40–54; 65–68.

⁴² For more on the history of the utopian convictions that surrounded the cable in the 1960s and 1970s see: Mullen, *The Rise of Cable Programming in the United States*; Parsons, *Blue Skies*; Streeter, "Blue Skies and Strange Bedfellows," 221–42.

adjacent media worked to confront the medium's seeming limitations and improve its social and political possibilities. My own dissertation thus follows in this scholarly tradition. By mapping the histories of video, video-telephony, two-way cable, and closed-circuit television, I explore how these moments of media convergence worked to reimagine the TV set, confronting its limitations and expressing its possibilities.

Media Convergence and Interactive Television

Given that my dissertation examines the history of television's intersection with adjacent and emerging technologies, my project is necessarily in dialogue with scholarship on media convergence and interactive television. This relatively new body of literature has focused largely on the intersections of television with digital media. It looks at new technologies and textual forms, analyzing the ways in which television, its technology, industries, content, and modes of reception have transformed with the increasing proliferation of computer technology.⁴³ In my own research, I hope to elucidate earlier, largely pre-digital instances of media convergence and interactive television. More specifically I hope to demonstrate how the media and practices explored in my dissertation—objects which are occasionally mentioned briefly by scholars as prehistories⁴⁴—are far from failed first attempts or quaint analogue examples. Instead, I believe they represent vibrant efforts at remaking television that introduced an array of emerging

⁴³ E.g. Mark Andrejevic, "The Work of Being Watched: Interactive Media and the Exploitation of Self-Disclosure," *Critical Studies in Media Communication* 19, no. 2 (2002): 230–248, <https://doi.org/10.1080/07393180216561>; William Boddy, *New Media and Popular Imagination: Launching Radio, Television, and Digital Media in the United States*, Oxford Television Studies (New York, NY: Oxford University Press, 2004); David Gurney, "Recombinant Comedy, Transmedial Mobility, and Viral Video," *The Velvet Light Trap* 68 (July 27, 2011): 3–13, <https://doi.org/10.1353/vlt.2011.0018>; Henry Jenkins, *Convergence Culture: Where Old and New Media Collide* (New York, NY: New York University Press, 2006); Michael Kackman, *Flow TV: Television in the Age of Media Convergence* (New York, NY: Routledge, 2011); Lotz, *The Television Will Be Revolutionized*; Sheila C. Murphy, *How Television Invented New Media* (New Brunswick, NJ: Rutgers University Press, 2011); Lynn Spigel and Jan Olsson, *Television after TV*.

⁴⁴ For instance, QUBE is mentioned briefly by Boddy in "Interactive Television and Advertising Form in Contemporary U.S. Television," *Television after TV*, 113–32.

fantasies and protocols, some of which would eventually crystallize into dominance following the proliferation of the digital in everyday life.

In his book *Convergence Culture: Where Old Media and New Media Collide*, Henry Jenkins puts forward the concept of convergence as a means of understanding the complex imbrications and overlapping dynamics of media in the contemporary moment. Jenkins defines convergence as: “The flow of content across multiple media platforms, the cooperation between multiple media industries, and the migratory behavior of media audiences who will go almost anywhere in search of the kinds of entertainment experiences they want.”⁴⁵ For Jenkins, convergence is just as much cultural as it is technological and economic. It describes the flexible and multi-modal ways in which both producers and consumers engage with the media texts which shape their lives. Indeed, Jenkins conceives of ‘convergence’ as a conceptual antidote to the more extreme claims of the ‘digital revolution’ that permeated popular culture in the 1990s. He argues that instead of eroding all older media forms, digital technologies have produced unique interminglings of the old and the new. Television, movies, games, websites, producers, and fans are given new capacities for contact and co-determination as the technologies, industries, sites of production, and spaces of reception converge. Although new technologies and corporate imperatives have a vested interest in media convergence, Jenkins contends that the cultural politics of convergence are not merely determined by producers. Just as the practice has given media companies new spaces in which to exert their influence and generate revenue, it has also allowed media audiences new forms of agency and modes of participating in the media they consume. As both a “top down corporate-driven process and a bottom-up consumer-driven process,” Jenkins contends: “Convergence culture represents a shift in the ways we think about

⁴⁵ Jenkins, *Convergence Culture*, 2.

our relations to media...we are making that shift first through our relations with popular culture, but...the skills we acquire through play may have implications for how we learn, work, participate in the political process, and connect with other people around the world.”⁴⁶

Although Jenkins takes a relatively positive view of convergence, the ways such practices have crystallized in systems of interactive television have been viewed with significantly more skepticism. In the 1990s, computer companies began to merge television with digital media and the internet through the release of interactive TV systems. In two essays analyzing such experiments, William Boddy examines the discourses and promotional techniques that surrounded the launch of Microsoft’s WebTV and Ultimate.⁴⁷ He tracks a shift in visions of the interactive television. He examines its initial promotion as a means of using the TV set to access the internet and its eventual conception as a way of enhancing TV viewing and giving audiences heightened levels of control over their televisual engagements. According to Boddy, this later trajectory became especially pronounced with the release of the digital video recorder in 1999. This technology, like the VCR before it, allowed viewers to record television programs. But due to its digital components, it rendered the process of time shifting increasingly automated and thus encouraged more total and complex uses of the machine. As such, the DVR was promoted as a means of empowering consumers, a tool that would allow audiences to exert their own authority over the TV set and resist the imposed schedules and commercialism of the broadcast industry.⁴⁸

In his own examination of the DVR, Max Dawson contends that such claims of empowerment and individual control embodied neoliberal ideologies. Embedded in much of the discussion surrounding the digital video recorder was a belief that it would actually reduce the

⁴⁶ Jenkins, *Convergence Culture*, 18-23.

⁴⁷ Boddy, “Interactive Television and Advertising Form in Contemporary U.S. Television,” 113–32; Boddy, *New Media and Popular Imagination*, 100-107.

⁴⁸ Boddy, *New Media and Popular Imagination*, 106-107.

amount of time spent watching television.⁴⁹ Like in previous decades, television was again positioned as a ‘problem,’ a bad object whose influence should be managed as much as possible. According to Dawson: “Experts in fields ranging from parenting to ‘personal productivity’ to ‘attention management’ identified how digital video recorders could be used: to avoid ‘aimless’ channel surfing; to collect, collate and closely analyze redeeming programming; to monitor and manage children’s media consumption; or to ‘watch television faster.’”⁵⁰ With the DVR, experts insisted that individuals could improve themselves. Using its many functions, viewers could efficiently manage their leisure time. By watching less TV, viewers would save dozens of hours that could be spent doing more productive pursuits—taking a second job, learning a language, finishing homework, etc. As such, Dawson contends that the discourses of control and freedom essential to the DVR’s promotion were implicated in a broader neoliberal tendency that saw the technology not as a revolutionary rupture but as an instrument of capitalist management, integral to solving the problems of TV viewership and cultivating better, more productive citizens.

In addition to suggesting new ways viewers could manage and improve their experience of watching television, the release of the DVR provoked a crisis in the television industry. As advertisers worried that viewers would no longer be watching TV commercials, networks turned to other avenues for advertising. On the one hand, this response involved an increased integration between programs and advertising through the production of banner ads and the expansion of product placement. Boddy argues that this became especially prominent with the proliferation of reality TV and quiz shows.⁵¹ On the other hand, scholars like Mark Andrejevic have examined another potentially more troubling attempt to monetize digital TV viewing. In addition to

⁴⁹ Max Dawson, “Rationalizing Television in the USA: Neoliberalism, the Attention Economy and the Digital Video Recorder,” *Screen* 55, no. 2 (2014): 221–237, <https://doi.org/10.1093/screen/hju011>.

⁵⁰ *Ibid*, 222.

⁵¹ Boddy, “Interactive Television and Advertising Form in Contemporary U.S. Television,” 121-126.

allowing audiences to record their favorite shows and skip through commercials, the DVR enabled the collection of unprecedented amounts of viewing data.⁵² Through its operations, digital video recorders monitored how individuals watched television. They tracked not only what shows people viewed, but also how they viewed them; whether they saw them live or saved them for a specific day, if they skipped commercials or watched only specific ads, and whether they paused a program or stopped it outright. More than this, many digital video recorders also asked viewers to rate specific programs. By giving something a ‘thumbs up’ or ‘thumbs down,’ audiences actively gave their DVRs a more complete picture of their tastes in exchange for perks like more tailored program recommendations. This data was collected and sold, so that networks and advertisers were provided with detailed sketches of DVR users. As such, Andrejevic contends that these surveillance practices introduced a new kind of consumer labor—not the work of watching, but the work of being watched.⁵³

Although analyses of media convergence and interactive television have focused by and large on television’s imbrication with digital technology, my own project takes these ideas and explores their operations in the decades just before the digital turn. In particular, I work to demonstrate how television’s convergence with video cameras, telephones, closed-circuit TV, and cable technologies worked to produce new visions of televisual possibility and practices of engagement that strove to reimagine the TV set and its relationship to the spaces and routines of domestic life. In particular, I strive to show how many forms of interaction, management, labor, and surveillance, often conceived as products of digital media, can also be found in the discourses and practices that surrounded television’s conjunction with new technologies from 1960 to 1990. In so doing, I aim not to make a case for a teleology of interactive TV. Instead, I

⁵² Andrejevic, “The Work of Being Watched,” 230–248.

⁵³ *Ibid.*, 230–248.

work to show how many of the practices and qualities often ascribed to ‘the digital’ can be found in earlier historical moments and different technological configurations. By unpacking these dynamics, I argue not only for their importance as a part of TV history, but also for their capacity to complicate dominant understandings of convergence culture and digital media.

Media and the American Home

Essential to my study of television’s connections with electronic media in the 1960s, 1970s, and 1980s are the spaces—and the social and cultural dynamics of those spaces—in which these technological linkages occurred (or at least were imagined to occur). As cultural historians of media and technology such as Carolyn Marvin, Patricia Zimmerman, Jason Loviglio, and Spigel have demonstrated in their respective studies of telephony, amateur cinema, radio, and television, when media technologies enter the home, they intersect with, respond to, and are shaped by the discourses and structures of domestic life.⁵⁴ Their meanings, uses, fears, and fantasies do not emerge from nowhere but are constructed (and thus must be understood) in relation to the politics and ideologies of home and family.

As such, my study of television convergence explores the emergence of home videomaking, video telephony, interactive cable, and televisual surveillance and security in conjunction with the changing dynamics and practices of domestic life in 1960s, 1970s, and 1980s America. I look at the history of the suburbs, the ideology of separate spheres, the politics of the family (especially the nuclear family), the practices of domestic labor, and the gender, race, and class politics embodied in these phenomena. I see them not as incidental or

⁵⁴ Jason Loviglio, *Radio’s Intimate Public: Network Broadcasting and Mass-Mediated Democracy* (Minneapolis, MN: University of Minnesota Press, 2005); Carolyn Marvin, *When Old Technologies Were New: Thinking about Electric Communication in the Late Nineteenth Century* (New York, NY: Oxford University Press, 1988); Spigel, *Make Room for TV*; Patricia R. Zimmermann, *Reel Families: A Social History of Amateur Film* (Bloomington, IN: Indiana University Press, 1995).

epiphenomenal, but as structuring forces in meanings and practices that defined television, video, cable, CCTV, and the Picturephone.

Consequently, my dissertation draws not merely on media scholarship, but also on a wide array of other academic literature, from Elaine Tyler May and Douglas Massey's work on the history of the American suburbs to Ruth Swartz Cowan and Arlie Hochschild's interrogations of domestic labor to Lauren Berlant's analysis of the politics of intimacy in the 1980s.⁵⁵ These studies form an essential context through which I trace my analysis of television and its conjunction with home videomaking, video telephony, interactive cable, and home surveillance and security. The complex dynamics and histories of American domestic life shaped the spaces into which these technologies were introduced. The discourses that gave them meaning, the needs to which they were envisioned to respond, the hopes they engendered, and the fears they inspired were imbricated with the fantasies, restrictions, exclusions, and transformations that have defined idealized visions of home and family. Thus, more than simply a history of television convergence, my dissertation also acts as a history of the interaction of media and domestic life. It unpacks the ways in which the spaces and ideologies of home and family have been shifted, remade, and articulated with the media technologies that emerged in their domains.

Feminist Media Studies

My interest in television and its position in domestic life bring my work in dialogue with feminist media studies. Since the 1970s, feminists both inside and outside the academy have

⁵⁵ Lauren Gail Berlant, *The Queen of America Goes to Washington City: Essays on Sex and Citizenship*, Series Q (Durham, NC: Duke University Press, 1997); Ruth Schwartz Cowan, *More Work for Mother: The Ironies of Household Technology from the Open Hearth to the Microwave* (New York, NY: Basic Books, 1983); Arlie Hochschild and Anne Machung, *The Second Shift: Working Families and the Revolution at Home*, Revised ed. edition (New York, N.Y: Penguin Books, 2012); Douglas S Massey and Nancy A Denton, *American Apartheid: Segregation and the Making of the Underclass* (Cambridge, MA: Harvard University Press, 1993); Elaine Tyler May, *Homeward Bound: American Families in the Cold War Era* (New York, NY: Basic Books, 2008).

looked to media industries as important terrains of cultural critique. Working from a variety of different positions and across a range of disciplines, feminists interrogated the relationship between gender and media. They challenged the representation of women in film, television, and magazines.⁵⁶ They mapped the structural absence of female directors, producers, and writers, and recuperated the histories of those women who managed to exercise creative control in media industries.⁵⁷ They turned their attention to the female audience, unpacking the ways in which women engaged with the media texts they consumed.⁵⁸ And they examined the histories and practices of different media technologies, assessing their role in the spaces of the home, relations of the family, and routines of domestic labor.⁵⁹ Throughout all of this work, they examined how media in all its various forms were far from neutral, but important ideological forces deeply imbricated in defining the limitations and expectations of gender the feminist movement strove to confront.

Although all manner of media texts, industries, and technologies came under interrogation, throughout the late 1970s and early 1980s, television emerged as a central object

⁵⁶ E.g. Laura Mulvey, "Visual Pleasure and Narrative Cinema," *Screen* 16, no. 3 (1975): 6–18; Constance Penley, *The Future of an Illusion: Film, Feminism, and Psychoanalysis*, Media & Society (Minneapolis, MN: University of Minnesota Press, 1989); Betty Friedan, *The Feminine Mystique* (New York: Norton, 2001); Molly Haskell, *From Reverence to Rape: The Treatment of Women in the Movies* (Baltimore, MD: Penguin, 1974); Julie D'Acci, *Defining Women: Television and the Case of Cagney & Lacey* (Chapel Hill, NC: University of North Carolina Press, 1994).

⁵⁷ E.g. Annette Kuhn and Susannah Radstone, *Women in Film: An International Guide* (New York: Fawcett Columbine, 1991); Mary Desjardins, "Lucy and Desi: Sexuality, Ethnicity, and TV's First Family," in *Television, History, and American Culture: Feminist Critical Essays*, ed. Mary Beth Haralovich and Lauren Rabinovitz, Console-Ing Passions (Durham, NC: Duke University Press, 1999), 56–74.

⁵⁸ E.g. Ien Ang, *Watching Dallas: Soap Opera and the Melodramatic Imagination* (New York, NY: Methuen, 1985); Janice A. Radway, *Reading the Romance: Women, Patriarchy, and Popular Literature* (Chapel Hill, NC: University of North Carolina Press, 1984); Ellen Seiter, *Sold Separately: Children and Parents in Consumer Culture* (New Brunswick, NJ: Rutgers University Press, 1993); David Morley, *Family Television: Cultural Power and Domestic Leisure* (London, UK: Routledge, 1988), <http://www.mylibrary.com?id=11460>; Dorothy Hobson, *Crossroads: The Drama of a Soap Opera* (London, UK: Methuen, 1982).

⁵⁹ E.g. Marsha Cassidy, "Cyberspace Meets Domestic Space: Personal Computers, Women's Work, and the Gendered Territories of the Family Home," *Critical Studies in Media Communication* 18, no. 1 (2001): 44–65; Ann Gray, *Video Playtime: The Gendering of a Leisure Technology* (New York, NY: Routledge, 2006); Spigel, *Make Room for TV*; Zimmermann, *Reel Families*.

of study for feminist media scholars.⁶⁰ In part, this turn to television was related to a broader move toward the study of women's genres. During this era, feminist academics in a variety of disciplines—literary studies, cinema studies, cultural studies—sought to understand those modes of media and forms of practice marked as feminine. Romance novels, maternal melodramas, women's magazines, and female-oriented television genres, most significantly the soap opera, emerged as a central site of feminist media research. In *The Feminist, the Housewife, and the Soap Opera*, Charlotte Brunsdon sees the rise of feminist media criticism and the study of the soap opera as deeply intertwined.

Indeed, just as it is possible to trace the growing respectability of soap opera as an academic area of study in the period from the mid-1970s on, it is also possible to show that it is in precisely this period that feminist critique moves from the streets to the academy... The feminist, and, more specifically, the feminist intellectual, produces herself in this engagement with this popular television genre, just as she produces a text for media studies.⁶¹

As a genre addressed explicitly to women, often broadcast during the day, and transmitted directly into the home, the soap opera provided multiple points of interrogation. Its narratives and imagery could be analyzed for the ways in which they represented women and feminine desire.⁶² It could be analyzed in relation to patterns and practices of domestic labor, illuminating its role in women's daily lives. Finally, it provided an important site for the study of the female audience—an approach which gained significant traction during this period (perhaps epitomized by Ien Ang's *Watching Dallas* and Jan Radway's *Reading the Romance*).⁶³

⁶⁰ Charlotte Brunsdon, *The Feminist, the Housewife, and the Soap Opera*, Oxford Television Studies (Oxford, UK: Oxford University Press, 2000); Charlotte Brunsdon, Julie D'Acci, and Lynn Spigel, *Feminist Television Criticism: A Reader*, Oxford Television Studies (Oxford, UK: Oxford University Press, 1997).

⁶¹ *Ibid.*, 3-4.

⁶² Scholars like Tania Modleski have demonstrated how soaps simultaneously offered reactionary fantasies and outlets for anger, frustration, and longing. For more see: Tania Modleski, *Loving with a Vengeance: Mass-Produced Fantasies for Women*, 2nd ed. (New York, NY: Routledge, 2008).

⁶³ Ang, *Watching Dallas*; Radway, *Reading the Romance*.

In addition to studying media texts and audiences, feminist scholars have looked to the technologies themselves. They have analyzed the gendered histories of specific technological devices, mapping their moments of emergence, the complexities of their use, their construction in popular discourse, and the politics of their production. There has of course been important feminist research on more public forms of media technology; for instance, the gendered structure of the cinematic apparatus and the history of female spectatorship have been central feminist film studies.⁶⁴ However, the interrogation of domestic media technologies has been particularly significant for feminist researchers as the space of the home and terrain of domestic reception holds an especially potent place in the patriarchal structures and gender dynamics of everyday life. As such, much feminist research has explored the installation of different media technologies in the home, examining everything from the telephone to small-gauge cinema to television sets and VCRs to computers.⁶⁵

To do this, though often deploying a variety of different methods, many scholars have turned to cultural history. They have worked to map the development, popularity, and discursive construction of domestic media technologies through the analysis of sources typically excluded from official media histories, namely articles and advertisements found in women's magazines.

⁶⁴ For more see: Mulvey, "Visual Pleasure and Narrative Cinema," 6–18; Mary Ann Doane, "Film and the Masquerade: Theorising the Female Spectator," *Screen* 23, no. 3–4 (September 1, 1982): 74–88, <https://doi.org/10.1093/screen/23.3-4.74>; Miriam Hansen, *Babel and Babylon: Spectatorship in American Silent Film* (Cambridge, MA: Harvard University Press, 1991); E. Ann Kaplan, *Feminism and Film* (New York, NY: Oxford University Press, 2000).

⁶⁵ E.g. Cassidy, "Cyberspace Meets Domestic Space: Personal Computers, Women's Work, and the Gendered Territories of the Family Home," 44–65; Ann Gray, *Video Playtime: The Gendering of a Leisure Technology* (New York, NY: Routledge, 2006); Marvin, *When Old Technologies Were New*; Lisa Nakamura, "Indigenous Circuits: Navajo Women and the Racialization of Early Electronic Manufacture," *American Quarterly* 66, no. 4 (2014): 919–41; Lana Rakow, *Gender on the Line: Women, the Telephone, and Community Life*, Illinois Studies in Communications (Urbana, IL: University of Illinois Press, 1992); Spigel, *Make Room for TV*; Lynn Spigel, *Welcome to the Dreamhouse: Popular Media and Postwar Suburbs*, Console-Ing Passions (Durham, NC: Duke University Press, 2001); Haidee Wasson, "Electric Homes! Automatic Movies! Efficient Entertainment!: 16mm and Cinema's Domestication in the 1920s," *Cinema Journal* 48, no. 4 (2009): 1–21, <https://doi.org/10.1353/cj.0.0133>; Zimmermann, *Reel Families*.

As Lynn Spigel and Charlotte Brunsdon contend: “This scholarship argues that these ‘feminized’ sources are just as useful as the more ‘masculinized’ and so-called ‘official’ sources such as network files and policy reports that were usually recorded by men in male-dominated institutions.”⁶⁶ As such, this scholarship often plays a recuperative role, exploring the gendered dynamics of media technologies’ introduction in the home through sources geared towards women, highlighting their everyday experiences and addressing their presumed desires.⁶⁷

Alongside this approach, other feminist media historians have sought to examine gendered histories of technologies by turning their attention to more traditionally recognized sources, rereading such texts for their implicit (or explicit) gender politics.⁶⁸ For instance, in her 2014 publication, “Indigenous Circuits: Navajo Women and the Racialization of Early Electronic Media,” Lisa Nakamura analyzes corporate documents from Fairchild Semiconductor that discussed the company’s plant on the Native American reservation of Shiprock, New Mexico.⁶⁹ The plant (which ran from 1965 to 1975) and its Navajo women employees were the subject of numerous corporate memos, press releases, and promotional flyers. Through her analysis of these documents, Nakamura examines how corporate discourse worked to construct Navajo women as ideal workers, naturally suited to semiconductor manufacture through their feminized and racialized aptitude for detail-oriented Native American handicraft, specifically carpet weaving. She argues that this discursive move (which is similarly present in the discourse

⁶⁶ Charlotte Brunsdon and Lynn Spigel, “Introduction to the Second Edition,” in *Feminist Television Criticism*, 9.

⁶⁷ Throughout all these studies, feminist scholars have reflected on their own, often uncomfortable, relationship to the feminine texts they explored and the ordinary women who comprised their viewing audiences. Correspondingly, this work often embodies a tension between validating feminine texts and pleasures so long dismissed as ‘trashy’ and ‘unworthy’ by (masculine) hierarchies of tastes and critiquing conservative ideologies inherent in many of their narratives and representational politics. Whether looking at female viewers, the representation of women, female-oriented texts, or taking feminine, and thereby traditionally disregarded, sources of popular discourse as serious historical documents, feminist media scholars have worked to validate feminine experiences, practices, and histories, while critiquing the persistence of patriarchal norms in media texts, industries, and technologies. These dynamics are chronicled in-depth by Brunsdon in *The Feminist, the Housewife, and the Soap Opera*.

⁶⁸ *Ibid*, 9.

⁶⁹ Nakamura, “Indigenous Circuits,” 919-941.

surrounding the outsourced Asian female labor that would eventually takeover the production of computer technology) conceals the true social, colonial, and economic politics that motivated the construction of the Shiprock plant. Indeed, Fairchild's decision to 'insource' their manufacture to Native American reservations emerged from a desire to avoid federal taxes, minimum wage requirements, and union labor. Thus, rather than look at the site of technological consumption and the popular construction of media audiences, Nakamura's feminist examination of racialized and gendered discourse is deployed in the study of technological production. She argues that for digital media scholarship to truly understand the impact of computational media on contemporary life, we must acknowledge the gendered, racialized, classed, and colonial politics that defined (and continue to define) the material realities of the digital.⁷⁰

My own research builds off this legacy of feminist media scholarship, particularly that focused on television and the history of technology. Indeed, my choice of objects—television sets, video cameras, Picturephones, CCTV systems, and interactive cable—and decision to interrogate their installation in the home is a move in line with feminist media studies. Moreover, throughout my dissertation, I strive to elucidate the ways in which these technologies (and the discourses and practices that surround them) intersect with the politics of gender and domestic life. Whether this is through the video camera's claims to intimacy and position in (nuclear) family life, the Picturephone's threats of exposing female bodies and appeals to the legacy of the female telephone worker, QUBE's location within the family circle, or closed-circuit television's promise to assist in domestic labor, my dissertation argues that the proliferation of televisual technologies carries with it persistent gendered norms and values that shape women's relationship with new media. Although I rarely draw from sources explicitly addressed to

⁷⁰ Ibid.

women, often looking instead at newspapers, corporate documents, trade publications, and even magazines like *Popular Mechanics* and *Playboy* with a predominately male readership, I analyze these sources for the implicit or explicit discourse on gender.⁷¹ Thus, following the example of Marsha Cassidy, Haidee Wasson, Spigel, Nakamura, and others, my dissertation works to explore the gendered history of television's convergence with new media by reading it through *all* the sources of popular, industrial, and corporate discourse I analyze.

Gender and Television's Status as a 'Bad Object'

Television has long been considered a 'bad object.' In the early days of TV studies, television scholars struggled to gain legitimacy as television was regularly dismissed as overly commercial and aesthetically uninteresting, incapable of the kinds of artistic claims as cinema. Many television scholars have since argued that the medium's status as a 'bad object' is gendered. Its position in the home as well as its associations with passivity and consumerism have marked it as feminine. As I previously discussed, television studies has deep roots as a feminist scholarly practice. By taking television seriously, and correspondingly, taking the domestic, the quotidian, and the feminine seriously, television scholarship has worked to challenge the gendered assumptions inherent in hierarchies of media and the arts. Although both television and TV studies have reached new levels of legitimacy over the last thirty years, this cannot be completely disarticulated from gender. Indeed, many scholars have observed that much contemporary quality TV involves the adaptation of traditionally feminine genres and narrative

⁷¹ This methodological choice emerged partly out of necessity. Although I looked at women's magazines, the most sustained discussions (and indeed in some cases the only discussions) of the technologies analyzed in my dissertation were in these non-female-oriented publications.

structures, such as melodrama and serialization, to masculine stories.⁷² Moreover and more significantly for my project, studies on the history of home video and consumer electronics have pointed to their installation in the home and the discourses of high-tech mastery they engender as a means of counteracting the television's longstanding associations with the feminine.⁷³ Scholars have argued that the discourses of technological sophistication and active control that surrounded the release of these products (video gaming consoles, VCRs, high-tech speakers, remote controls, and large screen TVs) articulated a newly masculine vision of TV viewing, capable of resisting and revolutionizing the gendered problems of television spectatorship.

Although the assessments of such masculine influences on spaces and practices of TV viewing provide a compelling analysis of one specific and by no means unimportant mode of reimagining television from 1960 to 1990, my own dissertation explores a different dimension of this history. Rather than focusing on those discourses, technologies, and practices that invoked notions of masculine empowerment and individual control, I look at those which continued to assert television's connection with the domestic. I examine home videomaking embedded as it was in ideas of intimacy; I analyze video telephony with its claims to interpersonal communication and contact; I explore two-way cable that sought to make television more active as a means of fostering new instances of familial connection and domestic efficiencies; and I look to home surveillance and security integral to the protection of the home and labor of the homemaker. While my project is indebted to studies of home video and consumer electronics that examine the attempt to solve TV's problems by rendering it more masculine through the introduction of new technologies, my dissertation is more explicitly connected to that long

⁷² Amanda D. Lotz, *Cable Guys: Television and Masculinities in the Twenty-First Century* (New York, NY: New York University Press, 2014); Linda Williams, *On the Wire* (Durham, NC: Duke University Press, 2014).

⁷³ Murphy, *How Television Invented New Media*; Newman, *Video Revolutions*.

history of feminist TV studies scholarship that sought to reclaim its connection with domestic and the feminine. As such, I strive to write a history of television convergence rooted in the spaces of the home and the relations of domestic life that calls attention to the politics of gender.

Media Historiography and Methodology

My dissertation traces this history of television convergence from 1960 to 1990 using historical and discursive methodologies. Drawing from Williams' concepts of the emergent, the dominant, and the residual, Marvin and Lisa Gitelman's approaches to media history, and theories of discourse articulated by Michel Foucault, my research concentrates on the instabilities and struggles that emerged around the attempt to reconfigure and remake television through its linkages with video, cable, CCTV, and the telephone. According to Williams, "Authentic historical analysis" must "recognize the complex interrelations between movements and tendencies both within and beyond a specific and effective dominance."⁷⁴ History cannot be reduced to a teleological narrative tracing the rise and fall of those social institutions, relations, and formations that dominate a society from one epoch to the next. Social practices, cultural formations, and media technologies do not simply vanish once another practice, formation, or technology gains popularity. At any historical moment the "dominant" operates alongside the "residual" and the "emergent." For Williams, the residual refers to "experiences, meanings, and values" that have been "effectively formed in the past" but are "still active in the cultural process, not only and not often as an element of the past, but as an effective element of the present." In contrast, the "emergent" refers to "new meanings and values, new practices, new

⁷⁴ Raymond Williams, *Marxism and Literature*, Marxist Introductions (Oxford, UK: Oxford University Press, 1977), 121.

relationships and kinds of relationships” which are constantly and “continually being created.”⁷⁵ Thus, culture, far from being a static or unified entity, is always complex and fluctuating. The old, the new, and the popular co-exist, confronting and shaping one another as dynamic and malleable elements of specific historical conjunctures.

Whereas Williams concentrates on cultural practice, Marvin and Gitelman’s new media histories offer an echo of his notion of emergence (although they do not reference his concept explicitly) within the history of media technology. In examining moments of technological development, they analyze the rich and often fraught spaces where new media devices first enter the public consciousness. They unpack the complex terrains in which technologies are ascribed social and cultural meanings.⁷⁶ How technologies are used, promoted, and imagined, the hopes they engender, and the fears they embody do not spring from nowhere. They are tied to and articulated within enduring social structures, political inequalities, economic institutions, and cultural ideologies. The meanings and operations of new media must not merely be understood as the natural and transparent products of industrial design or corporate policy, but as complex social and cultural territories imbricated with the politics, histories, and discourses that shape and circulate through the spaces into which new media are introduced. Indeed, as Gitelman contends: “The introduction of new media...is never entirely revolutionary...new media are less points of epistemic rupture, than they are socially embedded sites for the ongoing negotiation of meaning.”⁷⁷ Media history thus should not be understood as the unidirectional story of technological evolution, where one medium through innovation and invention transforms into

⁷⁵ Williams, *Marxism and Literature*, 122-123.

⁷⁶ Lisa Gitelman, *Always Already New: Media, History and the Data of Culture* (Cambridge, MA: MIT Press, 2006); Lisa Gitelman, *Scripts, Grooves, and Writing Machines: Representing Technology in the Edison Era* (Stanford, CA: Stanford University Press, 1999); Marvin, *When Old Technologies Were New*.

⁷⁷ Gitelman, *Always Already New*, 6.

another, better piece of technology. For, in addition to the production of new technologies, media history also includes “a vast clutter of normative rules and default conditions” that develop around and help define new media practices and technologies.⁷⁸

Rather than write a teleological history of television, my dissertation examines the fraught, overlapping, and complex intersections between TV technology and the media with which it converged. At its most basic level, my project analyzes the intersections between new and old media—between the emergent, the dominant, and the residual. In so doing, I strive to elucidate their interrelations and interactions, revealing how it is not just the emergent that is in flux, but also the dominant and the residual. Following Rick Altman's theory of “crisis historiography,” I believe media history cannot be reduced to a series of discrete technical developments, a succession of stable, fixed media which emerge fully formed, carrying a distinct set of meanings and uses. Instead, I believe that “The definition of a representational technology is *both historically and socially contingent*.”⁷⁹ Rather than begin with a medium’s supposed “birth,” Altman sees the moment of technological transformation as a “crisis of identity,” characterized by “multiple identification, jurisdictional conflict, and overdetermined solutions.”⁸⁰ During these moments of change and rupture, technologies are not fixed; there are contests over a medium’s name, use, and audience. “Crisis historiography considers the new technology as it is socially constructed. This construction is ongoing and multiple. That is, the technology is never socially constructed once and for all,” even when it appears fixed and stable.⁸¹ Thus, my dissertation understands television not as a fixed entity, but as technology and cultural formation in a

⁷⁸ Ibid, 7.

⁷⁹ Rick Altman, *Silent Film Sound*, (New York: Columbia University Press, 2004), 16.

⁸⁰ Ibid, 19.

⁸¹ Altman, *Silent Film Sound*, 21.

constant state of flux, something whose identity and role in social and cultural life is reimagined and redefined by the technologies with which it converges.

In conducting my historical analysis, I do not merely examine television's links with adjacent technologies through descriptions of their technical specifications or industrial formations; instead I look to how they were described, debated, promoted, and imagined in popular and industrial discourse. In so doing, I follow the methodological approaches of media and cultural studies scholars like Spigel, Marvin, Cassidy, Wasson, Lucas Hilderbrand, Jeffrey Sconce, and Jonathan Sterne. As such, I draw from Foucault's theory of discourse and concept of archaeology.⁸² According to Foucault, discourse represents "a particular knowledge about the world"; both rhetorical and material, it consists of a collection of related and interconnected statements, texts, images, and institutional practices that shape how the world is comprehended and acted within.⁸³ For Foucault, power and discourse are inseparable. Power is not something reducible to any one social structure or system. It is not an object, something to be possessed, taken, claimed, fought over, or wielded.⁸⁴ Power is productive, a diffuse, multifaceted, nebulous network, constituting particular discursive regimes and crystallizing into certain forms of knowledge, institutions, and bodies. It is through discourse that power operates, constructing specific forms of knowledge, articulations of truth, and producing individual bodies as subjects.⁸⁵ To analyze operations and relations of power, one must begin by examining the

⁸² Marsha Cassidy, "Cyberspace Meets Domestic Space," 44–65; Cassidy, *What Women Watched: Daytime Television in the 1950s*, Louann Atkins Temple Women & Culture Series (Austin, TX: University of Texas Press, 2005); Hilderbrand, *Inherent Vice*; Marvin, *When Old Technologies Were New*; Sconce, *Haunted Media*; Spigel, *Make Room for TV*; Spigel, *Welcome to the Dreamhouse*; Jonathan Sterne, *The Audible Past: Cultural Origins of Sound Reproduction* (Durham, NC: Duke University Press, 2003); Wasson, "Electric Homes!" 1–21.

⁸³ Gillian Rose, *Visual Methodologies: An Introduction to the Interpretation of Visual Materials* (Thousand Oaks, CA: Sage, 2001), 142.

⁸⁴ Michel Foucault, *Power/Knowledge: Selected Interviews and Other Writings, 1972-1977* (New York, NY: Pantheon Books, 1980), 96-102.

⁸⁵ Foucault, *Power/Knowledge*, 93.

discourses and practices present within any historical moment, tracing the ways in which they work to produce certain kinds of knowledge and subject positions.

For Foucault, discourse is “from beginning to end, historical—a fragment of history, a unity and discontinuity in history itself, posing the problem of its own limits, its divisions, its transformations, the specific modes of its temporality rather than its sudden irruption in the midst of the complicities of time.”⁸⁶ It is not eternal or enduring, but disruptive and mutable. It produces distinct practices, forms of knowledge, and institutional bodies at different historical moments, shaping the very categories through which truth, self, and history are structured and understood. Foucault contends that those traditional historical methodologies are incapable of mapping the disruptive and discontinuous field of discursive relations, for they often rely on notions of truth and causality constituted by specific, historically contingent discursive formations. As such, Foucault offers archaeology as an alternative methodological apparatus. A discursive approach to the study of history, archaeology resists and rejects traditional history’s reliance on teleology, continuity, and origin, while emphasizing “discontinuity, rupture, threshold, limit, series, and transformation.”⁸⁷ It examines the complex and changing field of discourse. It analyzes how discourses are elaborated and constituted through distinct statements, practices, and institutions, and maps the changing relations and operations of power that produce new forms of knowledge and accepted truths. “Its problem is to define discourses in their specificity; to show in what way the set of rules that they put into operation is irreducible to any other; to follow them the whole length of their exterior ridges, in order to underline them the

⁸⁶ Michel Foucault, *The Archaeology of Knowledge & The Discourse on Language* (New York, NY: Pantheon, 1972), 117.

⁸⁷ *Ibid*, 21.

better.”⁸⁸ Thus, archaeology takes discourse as its central concern and disrupts the seeming coherence and naturalism of truth, knowledge, and history. Rather than rely on stable objects and persistent origins, archaeology rejects any assertion of a sure and objective truth and chooses instead to trace how particular truths emerge, change, and materialize.

In my dissertation, I examine television’s intersection with video, telephony, cable, and closed-circuit TV by analyzing the discourses which surrounded these moments of technological convergence. Following methodological approaches of television scholars like Spigel and Anna McCarthy,⁸⁹ my dissertation seeks to examine the “intertextual context” within which individuals “might have made sense” of the meanings and impacts of television’s connection to other media in “everyday” American life.⁹⁰ As such, I focus my attention on popular, critical, and corporate accounts of television, home videomaking, video telephony, interactive cable, and home surveillance and security. The discourses produced at these moments of linkage often projected a vision of the future, offering speculative accounts and creative imaginings of what an emerging technology or moment of media convergence might change in everyday American life. However, such discussions rarely articulate a vision of something radically new. Instead, many of the fantasies, fears, and hopes embodied in these articulations of television’s future carry with them dominant or residual notions of home, family, intimacy, domestic labor, and gendered expectation.

Moreover, the forms of interaction and modes of communication perpetuated by devices like QUBE (Warner Communication’s two-way cable system that operated in Columbus, Ohio from 1977 to 1984) or the Picturephone (AT&T’s 1964 video calling system) also draw from

⁸⁸ Foucault, *The Archaeology of Knowledge*, 139.

⁸⁹ Anna McCarthy, *Ambient Television*.

⁹⁰ Spigel, *Make Room for TV*, 2.

longstanding communicative and technological histories. They often reconfigured older practices instead of inventing new ones. By interrogating the discursive complexities and social, cultural, and communicative practices endemic to television's convergence with other media, my dissertation aims to elucidate the overlapping histories and fraught politics that surrounded television's imbrication with video, cable, CCTV, and video telephony. In so doing, it works not only to understand how these technologies reimagined and acted upon the TV set and the television industry, but also to articulate a specific vision of gender, domesticity, and the American home which cannot be disarticulated from the historical conjuncture of which it was a part.

To conduct this history, my dissertation brings together a variety of different texts aimed at distinct audiences, produced for different purposes, and retrieved from different spaces. I examine newspaper reports (printed in large urban papers, nationally syndicated columns, and local dailies), advertisements, trade publications, electronics magazines, corporate papers, promotional brochures, press releases, memos, archival photographs, television broadcasts, films, and academic scholarship. To gather my materials, I visited several archives where I accessed collections integral to my research. In particular, my research at the AT&T Archives and History Center formed the basis of my second dissertation chapter and the materials gathered at the Cable Center's Barco Library have been integral to the completion of chapters three and four. In addition, my dissertation also cites documents viewed at the UCLA Arts Library Special Collections and the Hagley Museum and Library. Alongside materials housed at these official archives, my dissertation also draws on news reports and articles gathered from other online archives and databases, including Proquest Historical Newspapers, Newspapers.com, the Playboy Archives, and YouTube.

As such, there are significant differences between the texts I examine, the purpose of their creation, the audiences they aimed at reaching, the spaces in which they are housed, and the ways in which they are accessed. For instance, an advertisement found in an electronics magazine will undoubtedly embody a mode of representation distinct from that of an internal corporate memo or a newspaper article by an established TV critic. Advertisements deploy their discourse in an effort to sell a given media technology to discrete audiences. Thus, they exclusively construct positive representations of the devices they promote and studying their rhetorical choices helps reveal what kinds of fantasies, needs, and desires hold traction in the promotion of new media technologies. Corporate memos, designed as they are for internal communication, offer insight as to how electronics manufacturers and telecommunications companies conceived the technologies and services they aimed to sell. News articles and syndicated columns strive not to promote specific technologies, but to report on current events or offer commentaries on contemporary cultural phenomena.⁹¹ As such, they regularly offer a more critical account of new technologies and media practices, sometimes even suggesting they could have almost apocalyptic consequences on everyday life. In contrast, articles that appear in trade journals, though more independent than an advertising flyer, will rarely go so far as to criticize the industry in which they are a part. Although these differences might make the sources examined in my dissertation appear incompatible, I believe that placing them in conversation can help illuminate television's transformation in all its discursive variations. By examining this diverse body of texts, my dissertation works to bring together a wide array of objects,

⁹¹ Although it should be noted that news media are not free from the influence of corporate agendas. Not only are the media themselves businesses with their own limitations, routines, and common sense approach of the construction of newsworthiness, but the public relations industry actively works to get journalists to write about brands and products as part of their news stories. For more see: Simon Cottle, *News, Public Relations and Power, Media in Focus* (London, UK: Sage, 2003).

documents, and media productions to help unpack the complex terrain through which televisual convergence was imagined from 1960 to 1990.

Periodization

My dissertation traces television's convergence with new media throughout the 1960s, 1970s, and 1980s. I focus on these 'middle' decades of TV history, after its establishment as a popular mass medium and prior to its complete imbrication with digital technology. Indeed, this thirty-year stretch represented a period of dramatic televisual transformation. It witnessed the rise of consumer video (and all its associated industries), the expansion of cable television and the corresponding changes in TV distribution, and the release of a series of home televisual technologies—Picturephones, teletext boxes, closed-circuit home security systems—which worked to expand the medium's possible functions and transform its role in everyday life. Although I sometimes stray from this timeline, occasionally looking at televisual fantasies from the 1870s, advertisements from the 1950s, or articles from the 1990s, these examples always work in conjunction with the core discourses, technologies, and practices from my central time period, providing context or elucidating enduring importance. As such, my dissertation works to assert the significance of the 1960s, 1970s, and 1980s in television history. I contend that the forms of technological invention and discourses of televisual transformation visible throughout these decades are more than simply precursors to the digital. They represent important negotiations of domestic media and technological utility that helped redefine television's position in everyday life.

Moreover, these three decades mark an era of fundamental change not only in television but also in American social, cultural, and political life. The broader history of feminism, gay

liberation, the civil rights movement, the counterculture, postindustrialism, Reaganism, and the rise of neoliberalism cannot be disarticulated from the modes of televisual linkage I explore. Throughout my dissertation, changing domestic ideals, the position and seeming decline of the nuclear family, gendered divisions of labor, the regulation and deregulation of the telecommunications industry, the politics of redlining, discourses of urban crisis, and practices of segregation shape the histories explored in each chapter. Thus, although my dissertation is about television, it is also about these broader social and cultural transformations. As scholars like Altman, Spigel, Gitelman, and Marvin have demonstrated, media history cannot be separated from social history.⁹² The understandings, imaginings, uses, promotions, and criticisms that define television's intersection with new media emerge as part of a broader historical conjuncture. The fantasies to which they are articulated and the anxieties they inspire emerge out of this changing socio-cultural landscape. Thus, even as I trace the discourses that surrounded specific televisual technologies and practices, my dissertation strives to show how the ideas and values which they embodied were imbricated with the changes and transformations that shaped American domestic life in the 1960s, 1970s, and 1980s.

Chapter Outline

Chapter one traces the emergence of the home video camera and amateur videomaking as a popular cultural practice. Focusing on the debates which circulated around the introduction of open-reel video recorders in the 1960s and 1970s and the proliferation of home videomaking as a domestic practice in the 1980s, I examine how these technologies and practices intersected with anxieties about television's impact on family life. In particular, I analyze how video's proponents

⁹² Altman, *Silent Film Sound*; Gitelman, *Always Already New*; Gitelman, *Scripts, Grooves, and Writing Machines*; Marvin, *When Old Technologies Were New*; Spigel, *Make Room for TV*; Spigel, *Welcome to the Dreamhouse: Popular Media and Postwar Suburbs*.

promoted video cameras and home videomaking as a means of rendering television more intimate. I look at how they used these new technologies to turn the TV screen into a site of domestic presentation and interpersonal connection. In addition, I explore the corresponding fears articulated by those opposed to or at least skeptical of home videomaking. These individuals (typically scholars, journals, critics, and filmmakers) saw video technologies and practices as simply expanding televisual spectacle, saturating domestic life with new layers of mediation. Ultimately I contend that this 'debate' between videomaking as intimate practice and videomaking as harbinger of spectacle held up a nostalgic reverence for domestic closeness and 'authentic' experience, while condemning commercial broadcast television.

Chapter two examines the conjunction of the television and the telephone in the development of video telephone technologies in the 1960s, 1970s, and 1980s. Building from scholars like Uricchio, who cite two-way TV as an important and enduring televisual fantasy, I analyze the industrial development and popular imaginings of the Picturephone, as well as subsequent video calling systems. In examining AT&T's promotion of the Picturephone, this chapter explores how the device was envisioned as an essential next step in the history of communication. It was conceived as the inevitable future of telecommunications, an electronic tool that could simulate face-to-face interaction and engender forms of virtual travel that would transform everyday life, promote new urban/suburban arrangements, and enable unprecedented long-distance connection. However, the modes of tele-vision encouraged by the Picturephone also represented a threat and an intrusion. The anxiety (especially for women) of failing to be presentable when the Picturephone rang and the corresponding voyeuristic pleasure of catching someone unawares was a repeated subject of discussion in news reports discussing the new device. Thus, in analyzing the convergence of television and telephone technology, this chapter

examines how the prospect of contact promised by video telephony was accompanied by threatening (and potentially thrilling) possibilities of personal exposure and voyeuristic intrusion that perpetuated conservative notions of gender and domestic life.

Chapter three focuses on two-way cable and teletext and videotex experiments that promised to forge new active modes of using the TV set that would encourage familial closeness, enable democratic engagement, and assist in practices of domestic labor and the efficient management of the household. Focusing specifically on Warner Communication's QUBE, I examine how QUBE sought to use interactive cable and push-button consoles to render the experience of watching TV participatory. Through an analysis of QUBE's programming, technology, promotional campaigns, and journalistic discussions, I explore how Warner worked to position the politics and novelty of their cable system. Across all these discursive sites, they strove to construct QUBE as interactive and democratic, something capable of turning television from a passive medium of reception into an active tool of participation—a device not to be watched, but to be used. In addition to QUBE, this chapter also explores the development of cable, teletext, and videotex data-delivery and home shopping services. These technologies sought to render the TV set increasingly practical, turning it into a central site of information retrieval, home management, and consumer purchase. Although many of the discourses examined in this chapter carry almost utopian claims and the devices examined are often relegated to the stasis of 'failure,' my chapter neither enthusiastically embraces promises of utility and democracy, nor does it dismiss these devices as insignificant. Instead, I argue that the forms of push-button participation and modes of personal disclosure essential to these technologies represent a fundamental shift in visions of participatory TV—one whose legacies

might still be found in the functions, engagements, and modes of immaterial labor essential to digital media.

Chapter four turns its attention to televisual modes of surveillance and security that proliferated American domestic life in the 1960s, 1970s, and 1980s. It brings together two distinct technologies that offer competing regimes of surveillance: closed-circuit television and two-way cable. I begin with a discussion of CCTV, tracing its emergence in the 1950s and proliferation in the 1960s, unpacking its connection to housework, domestic security, suburban segregation, and the problem of ‘TV addict housewife.’ In addition, my chapter works to tease out the increasingly commonplace introduction of closed-circuit television in urban apartments. The installation of apartment CCTV operated both as an extension of the publicity and accidental encounters essential to city life and as a means of distinguishing the apartment from the dwellings of the urban poor. This distinctly visual and human-driven mode of surveillance was eventually challenged in the 1970s and 1980s by the proliferation of cable home security systems. These systems, which operated through a series of sensors and alarms hooked up to the home’s cable outlet and connected to a company’s headend computer (a cable company’s central computer), sought to automate the practice of surveillance, replacing human with computer monitoring. Although there is no absolute break between these two approaches, my chapter concludes with the contention that the data-driven mode of surveillance integral to cable security has become an increasingly essential element of domesticity, as digital and computational technologies penetrate further and further into the spaces of the home and practices of everyday life.

CHAPTER 1

Putting the ‘Me’ Back in ‘Media’: Intimacy, Spectacle, and Home Videomaking

“And now we add radio sight to sound. It is with a feeling of humbleness that I come to this moment of announcing the birth in this country of a new art so important in its implications that it is bound to affect all society. It is an art which shines like a torch of hope in a troubled world. It is a creative force which we must learn to utilize for the benefit of all mankind.”

—David Sarnoff, New York World’s Fair, 1939

In 1939 at the New York World’s Fair, television was officially introduced to the American public. The Radio Corporation of America, General Electric, Westinghouse, and General Motors each displayed variations of the technology, asserting television’s future as a fundamental part of ‘The World of Tomorrow.’ RCA in particular was invested in promoting the new device, emphasizing its unique possibilities and positioning it as *the* electronic medium of the future. As Ron Becker contends, “The World’s Fair promoted a vision of a not-so-distant future in which new technology, provided by industry and guided by social ideals, would lead to a better society where consumerism and democracy triumphed.”¹ The various exhibits and presentations dedicated to television’s promotion echoed the fair’s overarching theme. They emphasized the medium’s capacity to usher in this new era and radically transform the experience of telecommunications. They framed the medium as modern, American, and fundamentally democratic, essential to the production of a stable, consumer democracy free from the oppressive economic constraints of the great depression.²

¹ Ron Becker, “‘Hear-and-See Radio’ in the World of Tomorrow: RCA and the Presentation of Television at the World’s Fair, 1939–1940,” *Historical Journal of Film, Radio and Television* 21, no. 4 (October 1, 2001): 361. doi:10.1080/01439680120075491.

² *Ibid.*, 361-378; William L. Bird, *Better Living: Advertising, Media, and the New Vocabulary of Business Leadership, 1935-1955*, 1st edition (Evanston, IL: Northwestern University Press, 1999), 133-134; 184-188; Andreas Fickers, “Presenting the ‘Window on the World’ to the World. Competing Narratives of the Presentation of

RCA, GE, and the other electronics companies needed to get people excited about television. To encourage American consumers to consider investing in their own sets, these companies designed their displays to teach the public about television. They instructed fairgoers on how it was to be used, where it could be installed, and how it might be seamlessly integrated into the future of domestic life. According to William Bird, “The planners of the television system...were well aware of exhibitors’ investment in a showmanship of domestic settings and situations, which were destined to become staples of television entertainment.”³ They looked to the fair as a prime site not only for television’s mass promotion, but also for research. Studying the fairgoers’ reactions could help RCA and other companies perfect their TV systems’ shortcomings and design future marketing campaigns. Though the specific exhibition tactics varied across the different displays, they all relied on showmanship. RCA presented fairgoers with the “Radio Living Room of Tomorrow,” which included a “combination radio, television, record-player and recording set, facsimile receiver, and sound motion picture projector...built into the furnishings.”⁴ GE and Westinghouse each included small television studios in their exhibits. And GM displayed a speculative model of television-telephone. Despite these differences however, almost all of the fair’s television exhibits promoted the new medium by having fairgoers actually appear on TV.

As part of their displays, RCA, GE, and Westinghouse gave certain viewers the opportunity to stand in front of a TV camera and answer questions about their experience at the exhibition and their opinions about television. While they were interviewed, their image was transmitted to the various receivers at the Fair (as well as the couple hundred televisions

Television at the World’s Fairs in Paris (1937) and New York (1939),” *Historical Journal of Film, Radio and Television* 28, no. 3 (August 1, 2008): 291–310, <https://doi.org/10.1080/01439680802230704>.

³ Bird, *Better Living*, 133.

⁴ RCA Press Release as quoted in *Ibid*, 186.

previously purchased by early adopters throughout the United States) and watched by the exhibition's visitors. Several newspaper articles discussing the Fair's television exhibits commented on this particular promotional approach. They noted the "generous sprinkling of 'audience participation' features,"⁵ the beauty of those selected to be interviewed, the oppressive heat of the TV lights, and the lifelike appearance of the broadcast images.⁶ RCA even offered their TV participants souvenirs, giving those chosen special cards signed by RCA Exhibit Director Joe D'Agostino that visitors could take home as proof they had been "televised at the RCA Exhibition Building."⁷

In addition, numerous photographs and home movies taken by fairgoers documented their experiences with television. They recorded both participants being captured and transmitted by the Fair's TV cameras or observers, watching their friends and family appear on the exhibits' electronic monitors.⁸ In *The Middleton Family at the New York World's Fair*, a Westinghouse sponsored film dedicated to promoting the fair and the company's role in its exhibitions and innovations, the Middleton's precocious son Bud (played by James Lydon) is selected for a television demonstration. Taking the opportunity in stride, Bud enters the television booth and begins talking directly to a television camera. Despite the novelty of the technology and the fact that Bud was instructed to "act and talk naturally," he seems to know what television could be.

Occupying the position of TV host and making his voice an energetic imitation of a radio

⁵ John Coburn Turner, "10 Television Sets to Present Programs for N.Y. Fair Visitors," *Washington Post*. May 19, 1940, sec. A.

⁶ "Sightseer at World's Fair Can Pass a Week Covering Only Free Attractions." *New York Herald Tribune*. April 3, 1939, 6; "Television Exhibit At N.Y. World's Fair Draws Large Crowds." *The Wall Street Journal*, May 16, 1939, 3; Wolters, Larry. "Television Sets to Be Sold When N. Y. Fair Opens." *Chicago Daily Tribune*. November 6, 1938, sec. SW, 6; Turner, "10 Television Sets to Present Programs for N.Y. Fair Visitors," 5.

⁷ Radio Corporation of America, "RCA Exhibit Card" (Radio Corporation of America, 1939), http://www.earlytelevision.org/worlds_fair.html; William, *Better Living*, 186.

⁸ E.g. Ibid, 186; Stanley Jay, *Stanley Jay and His Wife at the 1939 World's Fair*, 1939, Photograph, 1939, http://www.earlytelevision.org/jay_worlds_fair_pixs.html; Phillip Medicus, [*Home Movies: Medicus Collection: New York World's Fair, 1939-40*] (Reel 4), 1939, http://archive.org/details/0165_HM_Medicus_collection_New_York_Worlds_Fair_1939-40_Reel_4_06_00_39_00

announcer's, he smiles and launches into an introductory monologue. "Hiya folks," Bud begins, "this is Clark Gable Middleton speaking, as you can see if you've got your television sets turned on." After this opening, which in style and address perfectly matched the broadcast vision for television, Bud answers a series of questions from the exhibitor—where he's from, what he thought of the fair, etc. While Bud completes his interview, repeatedly cracking jokes as if to an imagined public audience, the camera zooms out, revealing his mother and father, crowded around a TV monitor, watching him perform on screen.

The desire to appear on TV, to see one's self or one's loved ones onscreen, was foundational to television. Despite the fact that companies like RCA envisioned the medium as a one-way tool for mass communication, and consequently, something on which ordinary people would seldom appear, they still utilized 'being on TV' as an essential element of television's initial promotion. By including ordinary fairgoers in television demonstrations and having them appear as TV content, RCA, GE, and Westinghouse worked to position television as more than just something to be watched. Indeed, as Bird contends, "In public demonstrations of the new medium at the fair, the small screen achieved a personal focus that transcended advertisement."⁹ By having average individuals appear onscreen, television became an interactive medium. It emerged as a tool both intimate and spectacular that could be used to produce new kinds of self-presentation and familial mediation. Fair visitors could have the pleasure of watching their family members on TV; they could see images of their loved ones and listen to their voices transmitted electronically in real time. Simultaneously, those few fairgoers selected to be televised could experience the excitement (or possibly the discomfort) of having electronic images of themselves transmitted, sent to their loved ones, their fellow citizens, or even perhaps

⁹ Bird, *Better Living*, 186.

the world at large. Thus, even though the capacity of ordinary, everyday individuals to appear on TV would be severely limited in the years that followed its initial release, the desire to use television as a site for personal mediation and intimate presentation formed a foundational dimension of the televisual imaginary. It shaped its identity, its fantasies, and its fears in ‘The World of Tomorrow.’

In this chapter, I explore the moment when the possibility of being on TV transformed from a promotional gimmick, fleeting possibility, or fluke occurrence into an everyday reality: the moment when the video camera and video recorder became available to the American public.¹⁰ In particular, I examine the development, promotion, and debates that surrounded the home video camera and amateur videomaking from their initial emergence in the mid-1960s and 1970s to their widespread popularity throughout the 1980s. Video, by enabling individuals to capture images of themselves, their friends, and their family on videotape, as well as playback their recordings via the home TV set, transformed television. With these new technologies, the television set was rendered increasingly interactive and inclusive. No longer the exclusive domain of the news anchor and the TV star, video-enhanced television was now a place where anyone could gain entry, so long as they had access to a video camera and home recorder. Throughout this chapter, I examine the consequences of these new televisual possibilities. With the development of home video equipment and the growth of amateur videomaking, television ceased to be the inflexible, unidirectional tool of the broadcast industry, and as such, its identity, possibilities, and cultural significance became newly contested. Indeed, as journalists,

¹⁰ Prior to video’s widespread release ordinary people did appear on television. Variety shows and talent contests enticed individuals with the chance to appear onscreen; news reports sometimes featured ordinary people in their stories; and surveillance and security CCTV cameras captured individuals often without their knowledge or consent. However, it was not until video that Americans were given a much greater opportunity to make their own homemade TV productions and appear on television with regularity.

advertisers, engineers, television executives, filmmakers, and TV producers witnessed the imbrication of television and video technologies with the growth of new personal means of using and interacting with the TV set, they reflected on these transformations. As video-enhanced television emerged as a technological possibility, it brought with it a corresponding set of popular practices and cultural anxieties. The video camera, by acting upon and taking over the TV set, promised to radically transform the possibilities and potential of television. As such, it emerged as a linchpin in the utopian hopes, dystopian fears, futuristic possibility, and domestic nostalgia that had long sought to understand, criticize, and redefine television.

Focusing on the promotion, discussion, and presentation of video cameras and videomaking in advertisements, news reports, magazine, television programs, and popular cinema from the 1960s through the 1980s, I argue that this newly personalized vision of television's utility was increasingly defined by two diverging views. On the one hand, proponents of video claimed it as a tool of intimacy. They conceived the medium as a powerful electronic device that would salvage television from its reputation as a 'vast wasteland,' allow viewers to transform their TV sets into personalized tools of private communication, and facilitate new connections, bridging space, time, and emotional distance. On the other hand, this optimistic view of video-enhanced television was met with equally pessimistic readings of home video's effects. Rather than encourage intimacy, save television, and foster relationships, opponents of video denounced it as a dangerous expansion of televisual logics that promised to destroy authentic experience, colonize memory, damage domestic life, and lead the United States further into the "Society of the Spectacle."¹¹

¹¹ Guy Debord, *Society of the Spectacle*, (Detroit: Black & Red, 2000). I am borrowing Debord's title here. It should be noted that Debord himself did not write about video.

By examining this debate, this chapter aims to illuminate an important dimension of television's redefinition: namely amateur videomaking in the home; and unpack how, throughout the 1960s, 1970s, and most acutely the 1980s, ideas of home and family were articulated in relation with this media technology and practice. I analyze discourses that circulated around this amateur, predominantly domestic practice, which worked to reimagine televisual communication as a means of salvaging (or destroying) fragile and threatened family intimacy. As I ultimately contend, this new personal vision of television, created by its conjunction with video and carrying utopian promises and dystopian fears, was embedded within larger anxieties about the failure of the family and dominance of television in Cold War America. Indeed, the discourses that surrounded home videomaking and its role in changing television conceived this practice largely within boundaries, ideologies, and seeming decline of the nuclear family. They saw the video camera as a tool for its preservation, a means of correcting its failings, or a threat to its security.

Broadcast TV / Homemade TV

The connection between television, intimacy, and spectacle did not first emerge with the release of home video recording systems. Broadcast television was long understood in terms of both intimacy and spectacle, and often as the marriage between intimacy and spectacle. Indeed, television's location in the home marked it as an intimate medium. Unlike cinema or live theater, television could be consumed in the private sphere, folded into the routines domestic life and the structures of familial recreation. By bringing entertainment into the home, television's programming was visible not only to self-selecting paying customers, but to anyone (including children) residing in domestic space. Although radio also shared this capacity to bring the outside

world inside the home, thus carrying with it similar claims to intimacy, television distinguished itself from radio by its visuality. By transmitting sight as well as sound, broadcast TV promised to merge intimate reception with visual spectacle, carrying public entertainments into the private domain of the American family.¹²

As Spigel has demonstrated, television's tendency to blur the boundary between public and private was a subject of repeated discussion in the popular discourse that surrounded television's installation in the American home. On the one hand, television's capacity to act as a 'window on the world'—to transmit live performances, art, music, dramas, and comics from the comfort and safety of the living room—worked to reinforce a longstanding bourgeois vision of domesticity in which the home embodied the ideal site of family recreation. By bringing grand public spectacles into the home, television let families experience the joys of public entertainment without having to enter those potentially threatening spaces of the cinema or the vaudeville theatre deemed unsafe or suspect for white, middle-class women and children.¹³ On the other hand, this same capacity also carried with it a threat. By broadcasting public entertainments into the private sphere, the possibility that dangerous and morally suspect programs, those deemed too violent or too sexual, could infiltrate the home emerged as an ever-present possibility. Rather than protect the family from the pernicious influences of public space,

¹² These structural conditions of television were often discussed in the discourse that surrounded early TV and the performances which appeared on its screen. In her work on early television celebrities, Susan Murray has discussed how vaudeville and variety stars were conceived as the ideal television performers in the late 1940s and early 1950s for their unique capacity to take advantage of television's demands for spectacular visual presentation and intimate address. Performers sought to cultivate those properties in their performances, privileging direct, intimate address at the same time as they utilized slapstick humor and visual gags. Susan Murray, *Hitch Your Antenna to the Stars: Early Television and Broadcast Stardom* (New York, NY: Routledge, 2005), 41-63.

¹³ Lynn Spigel, *Make Room for TV: Television and the Family Ideal in Postwar America* (Chicago, IL: University of Chicago Press, 1992), 37-44; 100-115.

television might simply bring these influences into the previously protected terrain of domestic intimacy, damaging men, women, and most significantly children.¹⁴

Thus, from the earliest days of its history, television's location in the home, personal address, audiovisual form, and penchant for broadcasting public performance rendered it a medium defined by both intimacy and spectacle. More significantly, these qualities, far from neutral descriptors of television's mode of reception and presentational form were imbricated in the hopes, fears, and politics of broadcast TV. In the 1960s, when home video cameras first entered the consumer market, television's capacity for intimacy and spectacle was already well established, representing both the medium's good and its bad qualities. As such, the debate between intimacy and spectacle I trace in this chapter is not necessarily something brand new, but a particular inflection and reworking of ideas which had long been essential features of television discourse. For those concerned with video's effects (and its affects), intimacy and spectacle emerged as increasingly polarized televisual dimensions which promised to be enhanced and extended by the video camera—for good or for ill.

While video recording systems had long been used in professional television production,¹⁵ in 1963 a series of *home* video recorders were developed for non-professional use. These early systems, like the Sony Videocorder and the Philips EL3400 VTR, did not secure a wide consumer base, finding their chief utility in businesses, government agencies, educational institutions, and most significantly in artist and activist collectives. They still marked the

¹⁴ Spigel, *Make Room for TV*, 50-72; 119-135.

¹⁵ For more see: Zachary Campbell, "When Video Was New: From Technology to Medium, 1956-1965" (Northwestern University, 2015), <https://search-proquest-com.turing.library.northwestern.edu/docview/1751012308/abstract/AA5C1425CE848E7PQ/2>; Michael Z. Newman, *Video Revolutions: On the History of a Medium* (New York, NY: Columbia University Press, 2014).

beginning of an important televisual transformation.¹⁶ They gave individuals a heretofore unrealized opportunity: the chance to record electronic images of themselves (and their loved ones) on magnetic videotape and play them back immediately on their home TV consoles. In using a video recorder, individuals could take over their television sets, disrupt the flow of a commercial broadcast, and intrude on a domain formerly reserved for the likes of Lucille Ball, Ed Sullivan, and Walter Cronkite. No longer bound to network schedules or programmed episodes, consumers could use these new technological devices to transform television, produce their own content, and interact with their TV set in new and increasingly personalized ways. While today, with the proliferation of amateur media encouraged by the internet, this use of the television console may seem unsurprising, in the 1960s and 1970s, home video's capacity to transform the TV set from a one-way broadcast medium into a site of personal exhibition, intimate interaction, and active control was revolutionary. It marked video's fundamental difference from the technologies and practices that came before and formed an essential part of its promotional and journalistic rhetoric.

¹⁶ Their price made them inaccessible for the average consumer, but they did find a home in schools, governments, and businesses. Kit Hughes, *Corporate Channels: How American Business and Industry Made Television Useful* (ProQuest Dissertations Publishing, 2015), <http://search.proquest.com/docview/1916477454/>. Moreover, they were taken up by artists and activists who worked to make their own television programming. For more see: Deirdre Boyle, *Subject to Change: Guerrilla Television Revisited*, 1 edition (New York, NY: Oxford University Press, 1997).

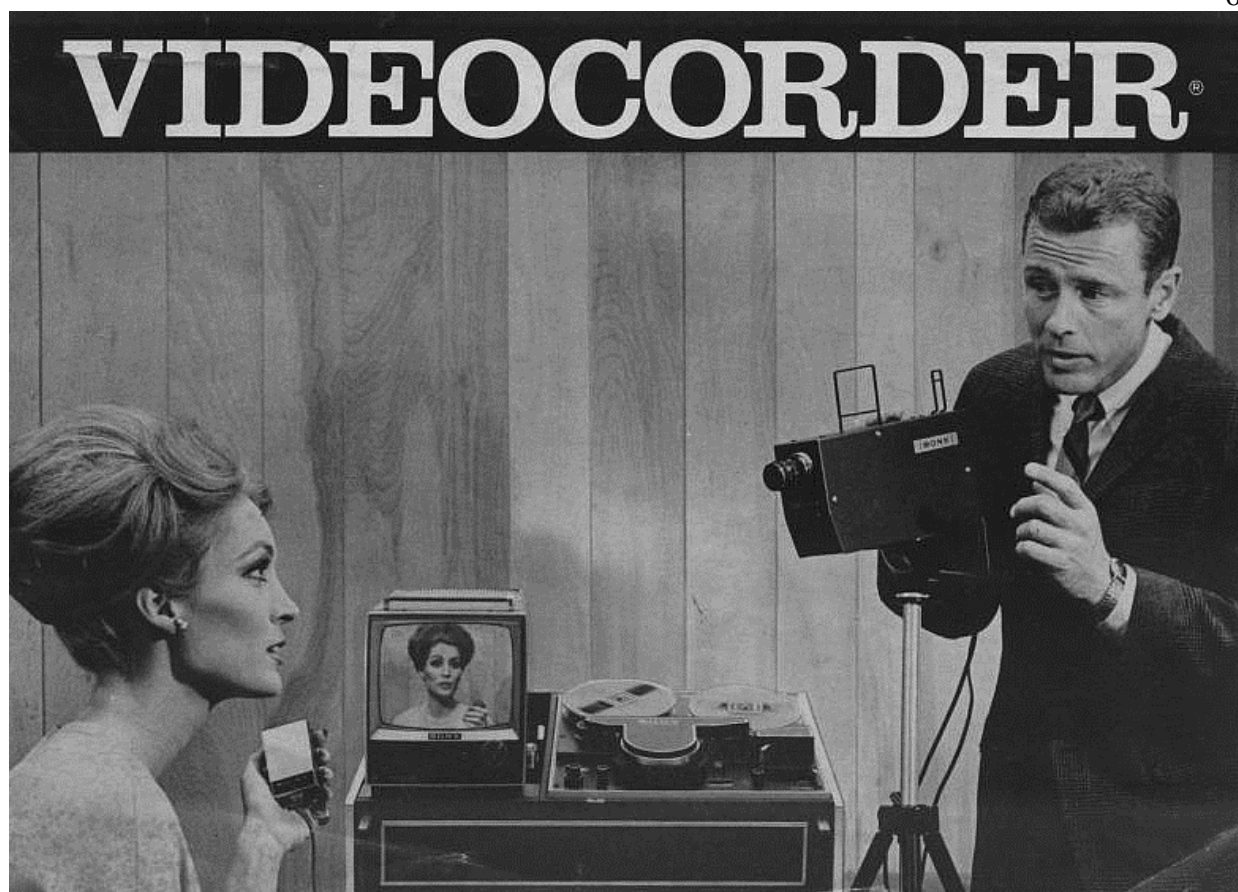


Figure 1.1 Detail from “Sony Videocorder” Advertising flyer, 1967.

The earliest advertisements, news stories, and magazine articles dedicated to the promotion and discussion of video recorders and video cameras emphasized the capacity of these new electronic devices to offer an intimate alternative to broadcast television that still captured a sense of the medium’s liveness and immediacy.¹⁷ They stressed video’s unique technological and cultural properties, distinguishing it from both broadcast television and celluloid home movies through a series of distinct representational and rhetorical strategies. Visually, home taping

¹⁷ This positive representation of home video technologies is unsurprising in advertisements given that selling video equipment is the governing force behind their discursive production. However, it should be noted that many of the early news reports and magazine articles on consumer video followed the rhetorical patterns present in such promotional materials. This embrace of video is especially apparent in those articles that appeared in hobbyist magazines like *Popular Mechanics* and *Popular Science*. These magazines, which were geared towards readers with a vested interest in technology and DIY mechanics, generally express an enthusiasm for any new invention or device. As such, their investment in video fits their overarching mandate.

systems were consistently depicted through images of individuals recording their loved ones on magnetic tape and reviewing their recordings on television screens. In many of these representations, the moments of taping and playback were pictured simultaneously, so that the person being recorded appeared twice, both inside and outside the TV set.

For example, a promotional pamphlet for Sony's 1967 Videocorder featured numerous depictions of individuals using their home video systems to record and review homemade television.¹⁸ In one particularly striking image, a man is pictured recording a woman (presumably his wife) with his new Videocorder camera. The camera is connected to the device's television monitor, on which the recorded image of his wife is displayed, creating a doubling effect, a *mise-en-abyme*, in which the woman's face is shown twice: once in profile, as the object of the camera's (and by extension her husband's) gaze, and once head-on, as an electronic, televised image visible only to the advertisement's audience. Together these doubled faces provide viewers access to a privileged gaze. The clear view of the TV set allows them to occupy the position of the cameraman, seeing a live electronic rendering of his technologically assisted vision, while still surveying the entire scene—the simultaneous recording and playback—from afar. As such, the visual composition of this particular Videocorder promotional photograph functions to emphasize the device's capacity to create unique visual experiences, capture everyday domestic life electronically, and transform one's television set into a space for the live display of oneself and one's family.

¹⁸ Sony, "Sony Videocorder" (Sony, 1967), <http://www.labguysworld.com/Sony-Catalog-1967.htm>.

**RCA presents the
new dimension in television.
You.**



You become the new dimension in television with the introduction of magnetic-tape equipment for home video recordings and the playing of pre-recorded video cartridges. We call it the "SelectaVision MagTape System".

You simply attach this equipment to your present TV set. Then you can do things like record one program while you watch another. Or take pre-recorded golf lessons from a champion. Or record your favorite TV programs even when you're not at home.

Also, your own home becomes your own studio with a compact, hand-held camera for recording family scenes on tapes. Tapes that play back on your TV set eliminating the fuss of portable screen set-up and time lost in film processing.

All of these capabilities—and more—are part of the RCA "SelectaVision" system we plan to launch this year. RCA "SelectaVision" is designed to have fewer parts and components than any other system announced to date. So we expect it to be more reliable and cost less.

With "SelectaVision", RCA makes you the new dimension in television home entertainment.

At RCA, we're concentrating on many areas of opportunity. Like consumer electronics, consumer services and, of course, communications technology. Areas in which RCA has an active role today and will seek an even greater role tomorrow.

RCA

"SelectaVision"™ in simulated operation

AD SAUSAGE

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Figure 1.2 "RCA Selectavision" Advertisement, 1973.

Though Sony's Videocorder pamphlet offers a particularly compelling example, similar doubled images can also be found in promotional pamphlets for General Electric Videotape Recording Systems,¹⁹ the Shibaden Videotape Recording System,²⁰ and Ampex Instavideo,²¹ as

¹⁹ General Electric, "General Electric Video Tape Recording Systems" (General Electric, 1967), http://www.labguysworld.com/GE_VTR-Flyer02.htm.

well as in numerous consumer technology articles covering the development of video recorders.²² This prevalence of *mise-en-abyme* did accurately represent the practice of home video recording to a certain extent as TV screens were often used as external monitors for early video cameras that did not possess their own built-in viewfinders. However, more often than not, the composition of these promotional photographs deployed visual doubling primarily for the benefit of the picture's external audience. In multiple images, the camera person is not shown looking at the TV screen, choosing instead to turn his or her gaze on the individuals he or she is recording. In others, the television set is placed in the very foreground of the frame, so that the camera operator could not see the screen even if he or she had wished to. Finally, there are also photographs that obscured the creation of the doubled image, hiding the process of video recording through the erasure of the camera or the reflection of the camera operator (see Figure 1.2).²³ The ambiguity of such images highlights their construction as promotional materials. They are designed to reveal the capacity of these new electronic devices to show oneself and one's loved ones on television, rather than simulate the actual process of recording home videos.

In addition to highlighting video's capacity for turning television into a site of personal display, many of the promotional images surrounding video recording systems throughout the 1960s and 1970s stressed video's status as a *home* medium. They saw it as the newest in a series of electronic devices that would become essential to domestic life. Domesticity and intimacy

²⁰ Shibaden, "Shibaden Videotape Recording System," 1968, http://www.labguysworld.com/Shiba-Catalog-1968_002.htm.

²¹ Ampex, "Ampex Instavideo" (Ampex, cir 1973), <http://www.labguysworld.com/AmpexInstavideo.htm>.

²² E.g. R. Benrey, "Home Videorecorder Works Like a Real TV Studio," *Popular Science*, November 1965, 68-69; Len Buckwalter, "Tape Your Own TV Shows," *Popular Mechanics*, April 1969, 108-112, 224; Anthony R. Curtis, "TV Recorders: Have the Best of Both Shows," *Popular Mechanics*, October 1977, 98-99, 166; Sheldon M. Gallager, "Big Boom in Cartridge TV," *Popular Mechanics*, January 1971, 76-84, 184, 190, 192; A. J. Hand, "For Color TV: A Player, Recorder, Do-Anything Cartridge System," *Popular Science*, October 1970, 62-63; Larry Steckler, "Tape Home Movies for Your TV Screen," *Popular Mechanics*, November 1965, 92-95.

²³ Steckler, "Tape Movies for Your TV Screen," 64; Benrey, "Home Videorecorder Works Like a Real TV Studio," 68; Buckwalter, "Tape Your Own TV Shows," 109; RCA Selectivision, Advertisement, 1973; John Free, "For TV on Tape, Buyer's Guide to Home VCR's," *Popular Science*, February 1979, 103.

have a long-standing connection. Scholars have thought about and theorized intimacy in a variety of different ways. Coming from sociology, Anthony Giddens traces the historical development of intimacy as a social norm, examining how the ideals of romantic love, confluent love, and the pure relationship emerge over time articulating private, familial life with different socio-cultural values.²⁴ In contrast, cultural theorist Gaston Bachelard concentrates his analysis on spaces of intimacy. He examines the ways in which houses, rooms, furniture, and other elements of the domestic environment—whether actual or literary—exist phenomenologically with human consciousness, as memorial and emotional spaces.²⁵ Finally, Lauren Berlant mobilizes intimacy in the context of affect theory. For Berlant, intimacy is tied to a specific emotional expectation and feminine culture. She argues that intimacy is not some sort of pure, apolitical emotional experience, but a distinct social and cultural affect; embedded in literary and media texts, it structures the ways in which women feel their oppression.²⁶ As such, Berlant sees intimacy as an explicitly political terrain rooted in gendered expectations, cultural productions, social norms, and historical conjunctures. Based in optimism, intimacy defines the ideals of what it means to have a ‘life,’ while naming the norms, constraints, and oppressive forces that limit how having a ‘life’ is understood.²⁷

Despite the differences between these theories of intimacy, one continuous thread amongst them is a connection between the terrain of the intimate and that of the private, the familial, and the domestic. Whether in the interpersonal connections elucidated by Giddens, the poetic and actual interiors theorized by Bachelard, or the feminine conditions and constraints

²⁴ Anthony Giddens, *The Transformation of Intimacy: Sexuality, Love, and Eroticism in Modern Societies*. (Stanford, CA: Stanford University Press, 1992).

²⁵ Gaston Bachelard, *The Poetics of Space*, New Edition, Penguin Classics (New York, NY: Penguin Books, 2014).

²⁶ Lauren Gail Berlant, *Cruel Optimism* (Durham, NC: Duke University Press, 2011); Lauren Gail Berlant, *The Female Complaint: The Unfinished Business of Sentimentality in American Culture* (Durham, NC: Duke University Press, 2008); Lauren Gail Berlant, ed., *Intimacy* (Chicago, IL: University of Chicago Press, 2000).

²⁷ Lauren Gail Berlant, “Intimacy: A Special Issue,” *Critical Inquiry* 24, no. 2 (1998): 281–88.

examined by Berlant, intimacy emerges as an experience and an expectation imbricated with the spaces, fantasies, and politics of home and family. And conversely, the spaces, fantasies, and politics of home and family are always bound with the experiences and expectations of intimacy. Thus, by positioning video as a *home* medium, the articles and advertisements that surrounded its release in the 1960s also functioned to construct it as an *intimate* one.

Indeed, despite the fact that artists and activists most commonly deployed video equipment for creative and political purposes, advertisements and magazine articles often photographed such devices in domestic spaces. Video cameras and recorders were frequently photographed in what looked like living rooms, positioned on carpeted or tiled floors, amongst armchairs, coffee tables, couches, framed paintings, and potted plants. This compositional strategy functioned to make these new devices fit seamlessly into living room decor. Rather than obtrusive, clunky objects, they were photographed as inconspicuous additions to established home entertainment systems, extensions of the television set. Men, women, and children were repeatedly shown using the video systems, recording family celebrations or documenting moments of domestic intimacy within the comfort of their own homes. In these photographs, children were the most frequent subjects of the camera's gaze. They were pictured posing on the stairs,²⁸ enjoying piggyback rides,²⁹ playing instruments,³⁰ dressing up in elaborate costumes,³¹ and blowing out birthday candles.³² In each of these images, an adult—presumably one of the

²⁸ Akai X-500VT, Advertising Flyer, 1969

²⁹ Steckler, "Tape Home Movies for Your TV Screen," 92-95.

³⁰ Buckwalter, "Tape Your Own TV Shows," 108-112, 224.

³¹ Shibaden Videotape Recording System, Advertising Flyer, 1968

³² Anthony R. Curtis, "TV Recorders: Have the Best of Both Shows," *Popular Mechanics*, October 1977, 98-99.

children's parents—captured their image, creating a kind of electronic, audiovisual photo album documenting their child's life.³³

This mode of family-focused, home recording was, of course, by no means novel. American families, particularly upper and middle class families, long used amateur still and moving image photographic equipment to document domestic life.³⁴ In particular, during the postwar era, as the nuclear family emerged as a national ideal (an ideal which was both white and suburban), amateur filmmaking became increasingly integrated into the practices and ideological imperatives of domestic life, curtailing its previous associations with documentary and the avant-garde. According to Patricia Zimmermann, when amateur film was mobilized as nuclear family recreation, it supported familial ideology and patriarchal power dynamics. With fathers occupying the role of filmmaker and wives and children becoming objects for the camera's gaze, home movies functioned to reassert patriarchal power relations and paternal authority embedded in the structures and assumptions of the bourgeois nuclear family.³⁵ Thus, in promoting video cameras with explicit reference to practices of domestic documentation established by photography and celluloid home movies, video's proponents worked to naturalize

³³ It should be noted that alongside such promotional techniques, another competing representational strategy arose around the sale of the Sony Portapak—a portable video camera-recorder, the first iteration of which was released in 1965. Unlike the promotional techniques of its sister technologies, the portapak, whose very name suggests portability and movement, was not relegated to domestic space. Indeed, in one advertisement for the 1967 Sony DV-2400 Video Rover, the portapak is not only shown venturing in the outside world, but actually pictured up a tree. Perched almost relaxedly on a branch, the camera operator captures this hard to reach view as the accompanying tagline reads: "Now, a videotape recorder that goes anywhere you go." Rather than fixed in domestic space, being used to photograph the intimate terrain of family life, this advertisement worked to emphasize the portapak's mobility. It constructed the device as a flexible medium that could accompany the adventurous, independent, and in this case masculine videomaker into the world, capturing daring views and on-the-ground (or in-the-tree) perspectives. Sony, *Now, a Videotape Recorder That Goes Anywhere You Go*, 1967, Advertisement, 1967, retrieved from <https://www.metv.com/stories/these-vintage-ads-prove-1967-was-far-more-hi-tech-than-you-remember>; Newman, *Video Revolutions*.

³⁴ For more information on amateur film, photography, and home movies see: Richard Chalfen, *Snapshot Versions of Life* (Bowling Green, OH: Bowling Green State University Popular Press, 1987); Gillian Rose, *Doing Family Photography the Domestic, the Public, and the Politics of Sentiment* (Burlington, VT: Ashgate, 2010), <http://site.ebrary.com/id/10376624>; Patricia R. Zimmermann, *Reel Families: A Social History of Amateur Film* (Indiana University Press, 1995).

³⁵ Patricia R. Zimmermann, *Reel Families*, 122-132.

its position in family—particularly nuclear family—life, the obvious successor to the Kodak Brownie. By emphasizing the domestic, these advertising techniques worked to distinguish home video from the political and countercultural deployments of the medium that had principally defined it throughout much of the 1960s and 1970s, binding it instead to the demands of family documentation.³⁶

The emphasis on domesticity, integral to much of home video's promotion (though not its most common deployment), was not only highlighted visually in the images that accompanied advertising campaigns and electronics reporting. It also formed an essential aspect of the written materials surrounding home video's development. Nearly every report on home video technology mentioned the "accessory camera," which when connected to the recorder, could "be used to make...original TV shows at home—instant home movies."³⁷ In a November 1965 issue of *Popular Mechanics*, contributor Larry Steckler discussed his experience using a home video recorder for the first time:

I switched on the lights, aimed and focused the camera, pushed the record button and shouted 'Action'! Gail, my 3-year-old daughter, cavorted about the room—climbing over the couch, crawling under the ottoman and trying (but not succeeding) to stand on her head—until she collapsed into a wriggling heap on the living room floor... Minutes later my wife and I were comfortably settled down before the TV screen. A slight pressure on the playback button and there was Gail again—over the couch under the ottoman and trying to stand on her head—this time on the TV screen.³⁸

³⁶ The history of video art and alternative video movements has already been traced by many scholars, including Deirdre Boyle, David Joselit, Marita Sturken, and Gene Youngblood. While such deployments of video are vitally important to the history, aesthetics, and politics of the medium, the tendency to emphasize such public uses of video sometimes masks the home-centered, domestic vision of early video which sought engage the medium for the production of small-scale, intimate encounters and documentation of family life. Thus, while video art and alternative video collectives will appear from time to time throughout this dissertation, my focus is on those more private, micro-level reimaginings of television engaged not by artists and activists, but by everyday consumers and the electronics industry. For more see: Deirdre Boyle, *Subject to Change*; David Joselit, *Feedback: Television Against Democracy* (Cambridge, MA: MIT Press, 2007); Marita Sturken, "Paradox in the Evolution of an Art Form: Great Expectations and the Making of a History," in *Illuminating Video: An Essential Guide To Video Art*, ed. Doug Hall and Sally Jo Fifer (New York, NY: Aperture, 2005), 100–121; Gene Youngblood, *Expanded Cinema*, First Edition edition (New York, NY: E P Dutton, 1970).

³⁷ David Scott, "From England: First Home TV Tape Recorder," *Popular Science*, October 1963, 94.

³⁸ Steckler, "Tape Home Movies for Your TV Screen," 92.

For Steckler, home video represented the future of domestic documentation. The ability to see his daughter on his television set and have her image appear almost instantly after recording was amazing, something that had been impossible with any previous system of home movie making.³⁹

In addition to emphasizing the televisual playback as one of video's unique features, *Popular Mechanics* strove to distinguish home videomaking from home moviemaking in other ways. In a 1969 report, entitled "Tape Your Own TV Shows, Len Buckwalter wrote about his experience using a home recorder. Alongside descriptions of the video camera and home recorder's technical specifications, he also explicitly compared the devices to their celluloid equivalents. According to Buckwalter: "Video taping invokes none of the tensions of home moviemaking. There's no pressure to make every minute count. Forget about watching the footage counter. With a VTR, you simply let the tape roll, knowing that you can always erase it and make a new recording later."⁴⁰ Buckwalter argued that video's extended playing time and ability to be erased and rerecorded transformed the experience of home movie production, enabling a more relaxed and realistic mode of domestic documentation.

In his 2002 publication *There's No Place Like Home Video*, James Moran takes Buckwalter's assessment of video even further. According to Moran, video's relative cheapness, "extended recording time," and ephemeral character increased "the potential range and volume

³⁹ Alongside celluloid home movies, home videomaking also has a deep connection to audiotape recording. Indeed, technologically these practices are in some ways much closer than video recording is to amateur filmmaking as both are performed using magnetic tape. However, perhaps due to its lack of visibility, audio recording is rarely compared to home videomaking in the hobbyist magazine and popular press articles I examined. For more on audiotapes and amateur sound recording see: Karin Bijsterveld, *Sound Souvenirs Audio Technologies, Memory and Cultural Practices*, Transformations in Art and Culture, 2 (Amsterdam, NL: Amsterdam University Press, 2009).

⁴⁰ Buckwalter, "Tape Your Own TV Shows," 112.

of events and behaviors recorded during” the production of home movies.⁴¹ As such, he contends that video holds the *potential* for producing a more politically progressive, or at least more representative vision of domestic life. Moran argues that video technology “closes the gap between [the] production and reception” of home movies, as videos can be easily reviewed immediately after they have been recorded, and exhibited even as a documented event is occurring.⁴² He reasons that this proximity between the moments of production and exhibition imbues home videos “with a self-conscious reflexivity foregrounding the theatricality inherent to” the creation of domestic media texts.⁴³ The simplicity of video’s production and exhibition creates “continuity” between home video and “the everyday activities it depicts.”⁴⁴ While this apparently seamless connection “between life and image” may run the risk of naturalizing the effects of home video, Moran argues that the functions of video recorders to fast-forward, pause, and generally “manipulate the flow of images” helps to remind viewers that the tapes are not transparent reflections of reality but synthetic constructions created and assembled by individuals. Although home video is still caught up in the representation of the domestic sphere, video technology encourages the recording of a diverse array of social events and practices.

While neither sharing the faith in video’s capacity for progressive representations, capable of deconstructing the traditional modes of familial documentation, nor the inherent critique of celluloid home movies, video’s early proponents (whether advertisers or journalists) did express a faith in the transformative power of video’s specific technological qualities and televisual possibilities. Indeed, ever since video was first made available to American consumers,

⁴¹ James M. Moran, *There’s No Place like Home Video*, Visible Evidence v.12 (Minneapolis, MN: University of Minnesota Press, 2002), 41.

⁴² *Ibid*, 42-43.

⁴³ *Ibid*, 42.

⁴⁴ *Ibid*, 43.

technology reporters began to speculate that video might usher in a new era of television, one dominated by homemade TV. According to *Popular Mechanics*' Midwestern editor, Clifford Hocks, home tapes held the potential to replace broadcast television: "While the machines are designed for recording TV programs off the air, most people like myself probably couldn't care less about recording the *Munsters* or *My Three Sons*... But I *do* care about recording the activities of *my* three sons."⁴⁵ Similarly, Deena Rosenberg of the *Chicago Tribune* claimed: "Video cassette systems can do more than enable people to control what they see on TV, and when. Simple, versatile equipment should encourage people to explore a new creative art medium: videotape movies."⁴⁶ For these technology reporters, it seemed almost inevitable that individuals, when given the opportunity, would forgo commercial content, choosing instead to watch their personal, homemade television shows, filled with the faces of their friends and families.

Taken together, these early discussions of video recording technologies heralded this new technology as a personal, flexible, and intimate communications medium, a desirable feature of the modern home and the high-tech family. In claiming it as a powerful alternative to commercial broadcasting, an improvement on celluloid home videos, and a way of transforming domestic life into personal television programs, video's early proponents saw the medium as something which would increasingly transform the way people thought about and used the TV set. Rather than a one-way medium for mass communication, video could turn television into a site of domestic communication and intimate expression. Armed with their new video equipment, individuals could put more and more of their lives on tape and use their TV sets as an electronic family

⁴⁵ Clifford Hocks quoted in Steckler, "Tape Home Movies for Your TV Screen," 93.

⁴⁶ Deena Rosenberg, "The Picture in Cartridge TV," *Chicago Tribune*, November 12, 1972, sec. G, 8.

album, a place to display and relive their memories more easily and more flexibly than any ever before.

Home Video and Televisual Intimacy in the 1980s

By the 1980s, video was no longer a fringe technology, but a prominent and popular part of American media culture. Over the course of the decade, home video technologies proliferated, offering diverse forms of entertainment, cheaper prices, and easy-to-operate interfaces. The complicated video recorders of the 1960s and 1970s evolved into streamlined VCRs, and open-reel videotape was replaced by compact cassettes. Video cameras shrunk in size with the development of the camcorder (the combination recorder and camera) and became a viable alternative to celluloid home movies. Indeed, between 1985 and 1995, camcorder ownership grew from 500,000 to sixteen million and according to manufacturers “reached at least 18 percent of all income levels.”⁴⁷ This rise in video camera consumption was met with a corresponding increase in discussions of these technologies in popular media. For instance, the *New York Times*, which throughout the 1970s published less than a hundred articles that mentioned video cameras, ran more than 3000 articles the following decade. In 1986, *Popular Mechanics* launched a home video department and *Videomaker Magazine*, a publication dedicated to amateur video production, was founded.

Moreover, the 1980s also marked the end of the classic three-network TV era, with the launch of Fox in 1986. The rise of the cable industry, as well as its protection in federal communication policy, transformed both how television was transmitted and increased the number of programs and channels people could watch. Major movie studios—not to mention

⁴⁷ Laurie J. Ouellette, “Camcorder Dos and Don’ts: Popular Discourses on Amateur Video and Participatory Television,” *The Velvet Light Trap: A Critical Journal of Film and Television Studies* 36 (1995): 34.

pornography distributors—released increasing numbers of their films on tape, spurring the emergence of video purchase and rental industries. And the availability of blank tapes and home recorders meant that more and more people were time-shifting TV shows.⁴⁸ Between 1980 and 1989, VCR households increased from 1,850,000 to 62,259,000, cable subscriptions rose over 150%, and videotape sales expanded, growing 1,766.7% for blank tapes and 6,599.7% for pre-recorded tapes.⁴⁹ With so many channels, the capacity for time-shifting, the availability of prerecorded tapes (be these Hollywood films or pornography), and of course the possibility of amateur video production, anyone could “watch whatever whenever.”⁵⁰ The televisual image was proliferating, forming new industries, aesthetics, and subjective properties.⁵¹

Correspondingly, investment in home video's impact on family life, though clearly integral to video's early history, became especially acute throughout the 1980s. Indeed, the decreased cost and widespread adoption of home video equipment meant that it could finally become a mass family medium. Whereas a prominent strand of its promotion and popular discussion in previous decades had focused on its domestic possibilities,⁵² the actual deployment was out of reach of most American consumers. As such, those who most frequently used video were artists and activists who deployed these new devices to produce their own political and countercultural

⁴⁸ Daniel Herbert, *Videoland: Movie Culture at the American Video Store* (Berkeley, CA: University of California Press, 2014); Lucas Hilderbrand, *Inherent Vice: Bootleg Histories of Videotape and Copyright* (Durham, NC: Duke University Press, 2009); Megan Mullen, *The Rise of Cable Programming in the United States: Revolution or Evolution?* (University of Texas Press, 2003); Patrick Parsons, *Blue Skies: A History of Cable Television* (Philadelphia: Temple University Press, 2008); Frederick Wasser, *Veni, Vidi, Video: The Hollywood Empire and the VCR*, 1st ed., Texas Film and Media Studies Series (Austin, TX: University of Texas Press, 2001).

⁴⁹ “The 1980s: A Reference Guide to Motion Pictures, Television, VCR and Cable,” *Velvet Light Trap* 27 (1991): 86-87.

⁵⁰ Betamax, “Betamax Advertisement,” 1978.

⁵¹ Jane Feuer, *Seeing through the Eighties: Television and Reaganism*, *Console-Ing Passions* (Durham, NC: Duke University Press, 1995), 1-12.

⁵² Indeed, the fact that most of the articles written about home video at this period appeared in publications like *Popular Mechanics* is telling. Their presence in such magazines signal video's status as an emerging medium, accessible primarily to a technologically savvy audience of early adopters as opposed to the general public.

forms of television practice.⁵³ Thus, it was not until the 1980s, when video cameras could be easily purchased by private individuals, that the medium's association with activism and guerilla television could be tempered (though never eclipsed) by its large-scale adoption in the documentation of family life. This is not to say that such alternative video practices disappeared in the 1980s. Indeed, alternative video and video art continued throughout this decade gaining prominence on public access cable and in art museums.⁵⁴ Rather, it witnessed a reversal in the positions of alternative video and home video. Unlike the 1960s and 1970s, where the former emerged as the dominant form of video practice, in the 1980s, it was video's role in domestic documentation that rose to cultural prominence.

Alongside this increase in video's consumer penetration, other social and political realities rendered its position as a family medium particularly suited to the cultural climate. In particular, the election of Ronald Reagan in 1980 marked the decade with a new right wing politics defined by deregulation, neoliberalism, and investment in 'the family.' This shift occurred after—and in part in response to—the gains made by the social movements of the 1960s and 1970s.⁵⁵ These movements challenged the hegemony of the nuclear family, and by the decades' end, many Americans lived in diverse familial settings. Although these domestic arrangements had existed before the 1980s and more research is necessary to fully tease out the connections between changing familial structures and the social movements of the 1960s and 1970s, working parents,

⁵³ Boyle, *Subject to Change*.

⁵⁴ Ibid; Joan Hawkins, *Downtown Film and TV Culture: 1975–2001* (Intellect Books, 2015); David Joselit, *Feedback: Television Against Democracy* (Cambridge, MA: MIT Press, 2007); Sturken, "Paradox in the Evolution of an Art Form," 100–121.

⁵⁵ Although the progressive politics of the 1960s and 1970s appear diametrically opposed to the conservatism of the 1980s, there is a stronger connection between them than might be obviously observed at first glance. In his study of lifestyle and the counterculture, Sam Binkley contends that the self and commitment to self-improvement embodied in the countercultural drive to 'get loose' (which dominated approaches to lifestyle in the 1960s and 1970s) were integral to the rise of Yuppie culture and neoliberal self-fashioning that would come to define the 1980s. Thus, rather than a distinct break from the previous decades, the neoliberalism and corporatism of the Reagan era represented a new articulation of norms and desires integral to the counterculture of the 1960s and 1970s. For more see: Sam Binkley, *Getting Loose: Lifestyle Consumption in the 1970s* (Durham, NC: Duke University Press, 2007), 244–249.

single parents, childfree couples, and same sex relationships seemed increasingly visible in the 1980s. Despite (or perhaps because of) this, during this decade, the nuclear family reasserted its idealized and normative position in social life. Along with the roll back of many regulatory structures of the welfare state and the loosening of corporate regulations, antifeminist backlash and 1950s nostalgia marked the era as conservative, defined by neoliberal agendas and ‘family values’ politics.⁵⁶

According to Berlant, 1980s American life was defined by a politics of the intimate. The rise of Reaganite neoconservatism stripped away older visions of citizenship and public culture—visions which were far from perfect, rooted in assumptions of white masculinity—in favor of new concerns about “pornography, abortion, sexuality, and reproduction; marriage, personal morality, and family values,” which collapsed “the political and the personal into a world of public intimacy.”⁵⁷ As home video technologies proliferated throughout the 1980s, they confronted this political terrain of the intimate. Established as both a desirable and affordable mode of domestic documentation, video cameras seemed poised to take over the functions of the celluloid home movie camera. Even more significantly, they seemed capable of transforming video’s reputation, turning the medium from an artistic and political tool to a domestic one. Indeed, video’s movement from counterculture to domestic culture resembles the broader turn towards the family that characterized social and cultural life in the 1980s. Building off the domestic discourses already present in the promotion of previous generations of home video equipment (which of course ran counter to its more common activist and alternative

⁵⁶ Michael D. Dwyer, *Back to the Fifties: Nostalgia, Hollywood Film, and Popular Music of the Seventies and Eighties*, The Oxford Music/media Series (New York: Oxford University Press, 2015); Robert O. Self, *All in the Family: The Realignment of American Democracy since the 1960s*, First edition (New York: Hill and Wang, 2012).

⁵⁷ Lauren Gail Berlant, *The Queen of America Goes to Washington City: Essays on Sex and Citizenship*, Series Q (Durham, NC: Duke University Press, 1997), 1.

deployments), this new discussion of video cameras and home videomaking expanded the significance of video's role in family life. It constructed the medium as an essential part of modern domesticity, capable of bringing new levels of intimacy to the family and the TV set.

Indeed, throughout the 1980s, newspaper reports that discussed electronic video devices, particularly those which profiled video cameras and camcorders, included frequent comments that assumed consumer interest in the technology was centered on domestic documentation.⁵⁸ Hobbyist publications ran numerous articles dedicated to helping readers improve their home videos, offering expert advice on how to turn recordings of children's birthday parties or trips to Disneyland into compelling (or at least not completely boring) productions.⁵⁹ Sony promoted its 1986 Handycam (an early 8mm video camcorder, weighing roughly two and a half pounds) by referring to its video recordings as "moving snapshots" and showing images of parents taping their children at summer camp.⁶⁰ In each of these examples, video was referenced as a domestic technology, something that despite being 'revolutionary' was used primarily by parents to record

⁵⁸ Ronald Alsop, "JVC and Sony Start Slugging Over Video-Camera Formats," *Wall Street Journal*, June 5, 1986; Myron Berger, "Videotape Works Way into Picture for Home Movies," *Chicago Tribune*, November 22, 1981, sec. A; Doug Brown, "Videotape: A Moving Record for Families," *Los Angeles Times*, March 18, 1982, sec. C; Lisa DeNike, "Home Movies: Videotaping a Family's Cherished Memories," *Baltimore Sun*, November 18, 1982; Danny Goodman, "How to Select the VCR That Fits Your Needs," *Chicago Tribune*, November 15, 1981, sec. O; Williams J. Hawkins, "Save the Action with Color Video Cameras," *Popular Science*, November 1980; Janet Kealy, "Will Videotape Systems Replace Home Movies?," *New York Times*, July 12, 1981, sec. D; Jim Lukas, "More Families Are Using and Enjoying Videotape Cameras," *Chicago Tribune*, November 9, 1980, sec. J; Bruce McCabe, "Goodbye Movie Camera, Hello, Videotape," *Boston Globe*, October 15, 1983, sec. 10-11; Neil Shapiro, "New Take-along Video Challenges Home Movies," *Popular Mechanics*, October 1981; Paul Turner, "Cameras Get the Last Laugh on Guffaws," *Chicago Tribune*, April 4, 1986, sec. A; Frank Vizard, "Camcorders On Location," *Popular Mechanics*, June 1989; Michael Winerip, "Families Are the Stars of Home Videotapes," *New York Times*, September 2, 1983, sec. B; Christine Winter, "Tempo: Video Discs, Games, and Computers Keep Changing Television's Station," *Chicago Tribune*, February 25, 1980, sec. A.

⁵⁹ Stephen A. Booth, "Home Video: Small Screenings," *Popular Mechanics*, October 1991; Carl Calati, "Hollywood at Home," *Popular Mechanics*, February 1986; Armand Ensanian, "How to Make Better Home Videos," *Popular Mechanics*, July 1989; Robert Lachman, "When It's Time for the Dreaded Slides, Treat Guests to Video Show," *Los Angeles Times*, March 5, 1988, sec. C; Henry Scarupa, "The Story on Home Videos: The Story," *Baltimore Sun*, December 12, 1986, sec. C; Jim Sulski, "Classes Can Help Home Productions," *Chicago Tribune*, August 12, 1988, sec. G; Frank Vizard, "How to Make Better Home Videos: Cutting Room," *Popular Mechanics*, July 1989; Michael Winerip, "Now! On Video! Harry, Watching His Grass Grow," *New York Times*, February 10, 1989, sec. B.

⁶⁰ *Sony Handycam Commercial*, 1986, <https://www.youtube.com/watch?v=RUD3KRNJpsE>.

everyday scenes and memorialize family events. Rather than transforming domestic life, video was assisting it, updating home moviemaking with new electronic tools, immediate exhibition, and extended recording time.

In addition to providing Americans with a modern way of documenting family recreation, video technology also facilitated other mediations of intimacy. Professional wedding videos, family history documentaries, recorded messages, memorial tapes, and homemade pornography all formed important dimensions of this new technology, defining its cultural significance and social uses. Although many of these practices were not unique to video (celluloid photography had long been a part of wedding celebrations and pornography was by no means invented with home taping), journalists and advertisers proposed that video's relative cheapness, portability, and televisual exhibition made the medium uniquely suited to these recording practices. They noted that videomakers could tape longer, easily erase any mistakes, review their recordings immediately, and circulate copies of their final products to friends and family members. These uses of video technology were often merely mentioned in passing, included in a brief line in a more detailed article about a new camera or specialty VCR. However, several newspaper reports did offer more in-depth discussions of such practices.

In "Bringing the family tree to life on videotape," the *Boston Globe's* Bill Fripp profiled Steve Cohen, a lawyer who made a video documentary of his family history. Cohen interviewed his relatives. He gave them a chance to talk about their lives and recount their memories, and edited his recordings in a video genealogy, which he screened for one hundred and fifty family members at his annual Passover Seder. The video offered his relatives the opportunity to learn about one another's lives. They heard a wide variety of stories from "an old woman who described being smuggled out of Lithuania as a child, who said that at the border her father

muffled her cries to conceal the family from the border guards” to “a man who recalled that when he bought a car in Boston in the ‘20s, he simply drove it off from the showroom, without owning a driver’s license.”⁶¹ According to Fripp, after Cohen completed his own personal project, and saw the joy it gave his relatives, he started his own video business, producing professional tapes of family history for paying clients.

Similarly, in “Family Memories Preserved on Videotape,” a 1985 *Los Angeles Times* article, Mike Granberry interviewed Phil Clarke, a former real-estate agent, who ran a business making video biographies. Like Cohen, Clarke interviewed his video subjects, giving them a chance to tell their life stories and transforming their recollections into an audiovisual record of who they were. As tangible objects, these tapes could be stored, passed down from one family member to the next, and reviewed at will, so that every generation could hear the stories of their ancestors, even after their tellers have died. “Clarke has a vision that a little girl, sitting before a vast entertainment center, might learn of her great-great-grandfather's life without having a time machine like the one in the movie *Back to the Future*.” For him, “Videocassettes, bearing the stuff of ancestry, are...a time machine.”⁶² They brought families together, communicated important life stories, and fostered intimacy from one generation to the next—an intimacy which had been lost with the generational limits of the nuclear family.

In addition to fostering family intimacy over time, other articles imagined home videomaking as a technological remedy to the spatial diffusion and disconnection of contemporary family life. Magazine articles suggested consumers spruce up their Christmas gifts

⁶¹ Bill Fripp, “The Break through in Video Therapy,” *Boston Globe*, October 5, 1980, sec. C, 1.

⁶² Mike Granberry, “Family Memories Preserved on Videotape,” *Los Angeles Times*, November 28, 1985, sec. E, 1.

with personalized video messages.⁶³ Independent production companies ran advertisements promoting their “video greeting cards,” which combined music and images to wish friends and family an audiovisual “Happy Birthday” or “congratulations.”⁶⁴ Newspapers frequently included discussions of grandparents feeling connected to their children and grandchildren through the home tapes they received in the mail.⁶⁵ In her column, “Family Saga Moves Into Video Age,” June Immerman reflected on her own relationship with video technology, discussing how this new medium has brought her and her family closer together:

My son, who has permanently absconded to the Midwest and established a family, recently bought a video camera. Now, nearly in the 21st century, whenever I suffer an attack of missing my grandson (and incidentally his parents) I switch on the television set. I smile, talk to the box and clap, a child again who believes in Tinkerbell. ‘It’s such a great invention,’ I say about the videotape over the phone. ‘It’s second-best to a visit.’⁶⁶

For Immerman, although video could never replace in-person interaction, it represented a valuable substitute. It provided a way of feeling connected to her grandchildren even when she was far away. Video recordings functioned as coping mechanisms, means of assuaging (at least temporarily) the pain of her son’s absence and the spatial separation that defined her videographic encounter. Thus, even as video was integrated into the intimate domain of family communication, it was shaped by broader conditions of distance and disconnection, as parents, grandparents, and siblings found themselves physically and perhaps emotionally separated.

Moreover, for some, video’s lack of simultaneity and essential temporal distance actually served to heighten its potential to facilitate intimate communication. In “More Tangible Than

⁶³ William Carlquist, “Season’s Video Greetings,” *Videomaker Magazine*, December 1990, 87-89, 116; Andrew Fry, “Greetings, Videomakers!,” *Videomaker Magazine*, December 1988, 41-53; Charlie Robinson, “Better Than a Letter,” *Videomaker Magazine*, September 1990, 96.

⁶⁴ “Video Greeting Cards Are Due,” *Billboard*, June 8, 1985, 30.

⁶⁵ E.g. Doug Brown, “Videotape: A Moving Record for Families,” *Los Angeles Times*, March 18, 1982, sec. C; June Immerman, “Family Saga Moves Into Video Age,” *New York Times*, February 7, 1988, sec. WC; Roger Plantadosi, “Memories Are Made of This,” *Washington Post*, October 2, 1983; Winerip, “Families Are the Stars of Home Videotapes.”

⁶⁶ Immerman, “Family Saga Moves Into Video Age,” 38.

Memories: Videotaping Private Thoughts,” *Los Angeles Times* reporter Dave Larsen profiled John Grenner and Carole Brill, whose Videograph business used the medium explicitly for its capacity to elicit personal and emotional communications.⁶⁷ Grenner and Brill, both counselors by profession, believed that video technology could be used to help individuals express their private feelings and communicate them to their friends and family. Part therapy, part love letter, Grenner and Brill’s clients spent an hour being recorded. Talking about their lives, they spoke directly to the people they cared about. For Grenner, video provided a new way for individuals to communicate their thoughts and emotions. “Our feeling is that people rarely have the time to sit down and tell their loved ones all about themselves and how they feel about those close to them... In person such statements of love might make the recipient uncomfortable...but seeing them on a television screen, the viewer suspends disbelief, as he or she might at a movie or a play.”⁶⁸ Thus Grenner contends that the distance and mediation fostered by the video camera and television screen actually allowed for an unprecedented level of intimacy. It facilitates the communication of thoughts and feelings which might have previously gone unspoken.

In addition to using video and television technology to produce familial modes of intimate communication, often employing personal narrative and linguistic messages to bridge physical and generational distances, these electronic devices were also construed as ideal media with which to perform another kind of intimate interaction: the production and exhibition of homemade pornography. According to Jonathan Coopersmith, pornography has long been affected by technological change. From the printing press to the internet, new media have repeatedly transformed illicit material, encouraging new practices of production, distribution,

⁶⁷ Dave Larsen, “More Tangible Than Memories: Videotaping of Private Thoughts,” *Los Angeles Times*. November 10, 1980, sec. F, 1,7.

⁶⁸ John Grenner as quoted in *Ibid*.

and consumption. Within this history, video recording devices—the VCR, the video camera, and the camcorder—represented a particularly significant development, changing the relationship between porn audiences and porn performers. “As well as viewing professionally produced films, owners of VCRs and video tape recorders (now called camcorders)⁶⁹ could—and did—produce their own pornography.”⁷⁰ Thus, for Coopersmith, the camcorder (along with the Polaroid still camera, which he suggests operated in a similar manner) functioned to democratize pornography, eliminating “the distinction between producers and consumers” and “empowering...individuals to actively create, not just passively consume, their own pornography.”⁷¹

This new illicit way of using video technology made its way into the popular discourse. Newspaper and magazine articles included offhand comments about this particular videographic practice.⁷² *Videomaker Magazine* went further and ran a story, entitled “Sex, Lives and Videotape” (a pun on Steven Soderbergh’s 1989 film *Sex, Lies, and Videotape*) that discussed the possible pleasures and benefits of making erotic videos, as well as the legal and ethical issues at stake in such productions.⁷³ Pornographic magazines, like *Playboy* and *Adam Film World*, also ran stories about new erotic practices enabled by video technologies. In 1980, *Adam Film World*, a porn magazine specifically dedicated to pornographic film, published an article entitled “The

⁶⁹ It is worth noting that Coopersmith seems to be using the word ‘camcorder’ as a kind of catch all term for both video cameras, which were two-piece units, composed of a TV camera and an external VCR, and camcorders, which combined camera and recorder into a small, one-piece device. Camcorders were only released in the 1980s, and thus, the references he makes to camcorders in the 1970s are presumably actually referring to video cameras.

⁷⁰ Jonathan Coopersmith, “Pornography, Technology, and Progress,” *ICON* 4 (1998): 106.

⁷¹ I am a cautious of assuming that these practices were necessarily empowering. Amateur pornography though different than its professional counterpart is still embedded within economic, gender, and power relationships that shape its conditions and its politics.

⁷² Wayne Warga, “TV Device That Steals a March on Media Giants,” *Los Angeles Times*, June 23, 1972, sec. G; Winter, “Tempo: Video Discs, Games, and Computers Keep Changing Television’s Station.”

⁷³ Dr. Pat Henson, “Sex, Lives and Videotape,” *Videomaker Magazine*, October 1990, 46-47.

Great Videosex Explosion.”⁷⁴ This piece (which ran with photographs of a naked woman caressing a VCR and posing for a video camera) profiled video’s contribution to the porn industry, discussing the availability of pre-recorded pornographic videotapes and the possibility of starring in one’s own erotic videos. It provided their readers with technical information about VHS and betamax video systems and practical advice on how to make pornographic tapes themselves: “You’ll have to do it in a brightly-lit room. Otherwise your porno epic will be dark and unclear—and that’s definitely not what you want!” Moreover, the article also insisted on the power of pornographic video, whether pre-recorded or homemade, to encourage sexual intimacy and romantic connection. According to a testimonial quoted in the article:

My husband Ralph and I have been married for 11 years, and we had tried just about everything sexual that we could think of. I guess you might say that things around our bedroom were getting a little dull. But then, for my birthday, Ralph got me a Betamax and several porno films. Well, as soon as I put *Hot Sex* on the machine, Ralph and I were pawing each other like two horny teen-agers! Our Betamax brought us closer together.⁷⁵

Thus for *Adams Film World*, when used to record or playback pornography, video could serve as a powerful tool, not only providing its users with sexual pleasure but even restoring the spark in a marriage.

Like *Adams Film World*, *Playboy* also profiled video equipment in their magazines.⁷⁶

These articles, which often mentioned video cameras and electronic equipment as gift ideas or presented them as part of an idealized high-tech bachelor pad,⁷⁷ were rarely explicit about

⁷⁴ Norman Bates, “Shooting Your Own,” *Adam Film World*, March 1982; Chuck Dixon, “The Videosex Scene,” *Adam Film World*, March 1982; Nigel Fleming, “The Great Videosex Explosion,” *Adam Film World*, March 1980.

⁷⁵ Nancy Williams as quoted in Fleming, “The Great Videosex Explosion,” 26.

⁷⁶ E.g. Goodman, Danny, “The Electronic Frontier,” *Playboy*, June 1986; Jim Harwood, “Tuning In On The New TV Technology,” *Playboy*, October 1979; “Playboy’s Electronic Entertainment Wall,” *Playboy*, October 1964; “Sights & Sounds of ’68,” *Playboy*, February 1968; “Home Video Take-One!,” *Playboy*, September 1983; “The New Video,” *Playboy*, May 1984.

⁷⁷ *Playboy*’s articles regularly presented a masculine fantasy of domestic life. They often pictured the imagined *Playboy* reader as a sophisticated, middle-class man, dwelling in a technologically advanced bachelor pad that actively resisted the seemingly feminized spaces of the suburbs. For more see: Steve Cohan, *Masked Men*:

video's pornographic potential. Focusing instead on profiling video's technological features and transformative possibilities, these reports often made reference to video's erotic uses through playful phrasing and imagery. Articles with titles like "Video Goes to Bed"⁷⁸ and "Hot Stuff"⁷⁹ appeared alongside photographs of scantily clad women, posing provocatively with VCRs and video cameras. In these images, women are often pictured in their underwear leaning over a viewfinder while adjusting a microphone amongst an array of video cameras.⁸⁰ They are shown naked, emerging from the shower, their image captured by their masculine partner on video.⁸¹ They lie back, clothed in a bathing suit pointing a video camera at the ceiling.⁸² Thus, even though homemade pornography was rarely explicitly suggested, the video equipment profiled in *Playboy* was often accompanied by suggestive language and imagery. This worked to construct video as an erotic technology capable of eliciting sexual pleasure and interpersonal intimacy, in a manner which played into *Playboy's* vision of its middle-class, masculine reader.

Masculinity and the Movies in the Fifties (Bloomington, IN: Indiana University Press, 1997); Elizabeth Fraterrigo, "The Answer to Suburbia: Playboy's Urban Lifestyle," *Journal of Urban History* 34, no. 5 (July 1, 2008): 747-74, <https://doi.org/10.1177/0096144208316712>.

⁷⁸ "Video Goes to Bed," *Playboy*, December 1984, 218-221.

⁷⁹ "Hot Stuff," *Playboy*, December 1983, 252.

⁸⁰ B. Robert Angus, "Modern Screen Romance," *Playboy*, February 1982, 117.

⁸¹ "Shoot & Show!," *Playboy*, May 1972, 117.

⁸² "Video Goes to Bed," 221.

Play and Replay

The glamorous Penthouse Pet in this ad is demonstrating just one great way to get it on—on video tape—for instant play and replay. You too can make the scene with an AKAI portable 1/4" video tape recorder. Capture sight and sound—*action and reaction*. A million exciting and provocative uses—limited only by your imagination. See it all!

An AKAI VTR is really portable. Camera, recorder and attached TV monitor weigh less than 20 lbs. Each inexpensive 5" reel of tape records and plays 20 minutes of fun and entertainment *on your own TV set** with startling detail. And you can re-use the same tape time and time again.

And here's a really great offer. Every buyer of an AKAI portable VTR will receive a personal invitation from one of the provocative Penthouse Pets to attend a video taping session in a city near them.

Sound exciting? You bet. And even more remarkable is the price. Just \$1295.00 for the complete VTS-1005 system.

Get turned on...on an AKAI VTR. See your AKAI dealer now.

*AKAI RF Converter required. Optional accessory

AKAI™

AKAI America, Ltd. / PO Box 55055, Los Angeles, Calif. 90055
 For your nearest AKAI dealer call 800-243-4000 toll free. In Connecticut, 1-800-882-6596.
 In Canada: Electronic Distributors, Ltd., Vancouver, B.C.
 In Mexico: Mexico National Imports, S.A., Apartado Postal 66-672, Mexico 12, D.F.

Model: Lynn Partington, Penthouse Pet of the month, December 1971.

Figure 1.3 Akai "Play Replay" Advertisement, *Penthouse*, 1971.

In addition, numerous video camera manufacturers advertised their products within these publications, sometimes running standard advertisements and at other times rendering their cameras' pornographic potential more explicit.⁸³ As early as 1971, Akai ran promotions in *Penthouse*, promoting their video recording system (e.g. Figure 1.3). In these advertisements, a semi-clothed man and a naked woman, her long hair covering her bare breasts, were shown using their Akai camera and recorder. Posed in an explicitly domestic setting—a bed or a shag carpet on a living room floor—the couple recorded one another in a moment of sexual intimacy, indulging in video's illicit possibilities. In addition to the woman's coy smile and the man's prostrate position, video's capacity to serve as a homemade pornographic medium was stated explicitly in the advertisement's copy: "Play and Replay. The glamorous Penthouse Pet in this ad is demonstrating just one great way to get it on—on videotape—for instant play and replay. You too can make the scene with an Akai portable 1/4" video tape recorder. Capture sight and sound—action and reaction. A million exciting and provocative uses—limited only by your imagination."⁸⁴

Similarly, in 1984, Sanyo promoted their Betamovie camcorder in international issues of *Playboy*. Though less explicit than Akai's earlier promotion, the advertisement still played with video's pornographic potential. Sanyo promoted their camera with an image of a bikini-clad woman, posed against a black background, carrying the Betamovie recorder in on hand. Looking seductively at the camera, her photograph is accompanied by the tagline: "Co-star with our latest model. (An affair with no strings attached.)"⁸⁵ As such, the advertisement suggested a parallel between the bikini clad model and the video camera. It playfully aligned the (presumably male)

⁸³ E.g. Akai, "Play Replay," *Penthouse*, December 1971; Sanyo, "Co-Star With Our Latest Model," *Playboy*, 1984; RCA, "No One Gives You More VCR Than RCA," *Playboy*, December 1981.

⁸⁴ Akai, "Play Replay."

⁸⁵ Sanyo, "Co-Star With Our Latest Model."

reader's sexual and consumer desires, as though the Betamovie camera offered as much illicit pleasure as an affair with a beautiful woman—and implying that the woman was just as consumable as her camera. Thus, whether explicitly referencing the production of homemade video pornography or merely hinting at the eroticism of a new camera, throughout the 1970s and 1980s the connection between video technology and sexual intimacy was firmly entrenched in the popular imagination. It suggested new kinds of erotic mediations and inspired highly gendered pornographic advertising strategies.

Throughout the 1980s, as video technologies began to grow in cultural and commercial prominence, a wide range of popular discourses and everyday practices emerged, dedicated to thinking through and making use of this no-longer brand new medium. Although these discussions and uses of video technologies ranged in purpose, venue, and conviction, many of them were joined by a belief in video's unique power to foster new forms of intimacy. For some, this intimacy was best expressed by the everyday, domestic uses to which the video camera and home recorder were deployed. They championed practices of personal representation, comparing the TV screen to a family album, a space for the depiction of private life, and a site of emotional connection. Video represented a way of closing generational gaps by preserving audiovisual records of family members which can be watched by their decedents even after they have passed away. Similarly, many of its proponents praised the capacity of video cameras, videotapes, and VCRs to bring people together over vast distances, providing a virtual mode of face-to-face interaction and an alternative means of communicating a private message. For others, video offered more illicit kinds of intimate pleasures; its role in facilitating the production of homemade pornography was mentioned in several newspaper reports, advertisements, and pornography magazines. Taken together, these various iterations of video intimacy defined an

important effort at remaking television. They shaped how the video camera and the home recorder were understood, encouraged new forms of videographic practices, and thus, functioned to expand and transform the home TV set. By playing back homemade recordings, individuals personalized their televisions. They transformed them from spaces of one-way broadcast transmission and commercial networks into complex sites of intimate expression and personal display, capable of creating memorial, emotional, and even sexual experiences.

Video, Television, and the Society of the Spectacle

Although many of the discourses surrounding the introduction and adoption of video technologies throughout the 1960s, 1970s, and 1980s were often dominated by positive assessments of these new devices, home video's intersection with television was not exclusively endorsed. Alongside its staunch supporters, many journalists, scholars, artists, and critics expressed a growing concern over video's increased presence in American culture. For them, video's persistent intrusion into domestic practice was not a cause for celebration. It represented a dangerous level of mediation that would transform all aspects of everyday life into a televisual spectacle. It threatened to corrupt family relationships and interfere in the sacred terrain of home and childhood. Video's convergence with television did not change the medium for the better. It did not fight against television's tendency towards commercialism and one-way transmission by encouraging multiple amateur and personal uses of TV technology. Instead, opponents of video's proliferation argued that this technology functioned to heighten television's pernicious reach. By expanding the spaces of the televisual and breaking down the barriers between viewer and viewed, critics condemned the new medium. They saw video increasing television's prominence and pushing America more deeply into a society of the spectacle, transforming it into a fully

postmodern world in which truth, politics, and human connection were rapidly and ubiquitously eroded.

During this period, many scholars, theorists, and cultural critics attempted to make sense of the changes they were witnessing in social, cultural, political, and economic life. Throughout the 1960s, 1970s, and 1980s, decades recovering (at least initially) from the upheavals of World War II and deeply embroiled in the Cold War, the world was in a state of aggressive transformation. Capitalism, long defined by and analyzed in terms of production, became increasingly tied to a culture of consumption. In Western Europe and North America, capitalism and the ideals of consumer abundance were not merely the reigning political economic system. They became an essential part of national identity, something which needed to be defended and promoted in order to safeguard against the threat of communism. In addition, the postwar period marked a distinctive rise in the power and presence of the media. Television had brought advertising, entertainment, and other forms of electronic content into the home at unprecedented levels, reshaping domestic life and proliferating commercial images. For individuals on the left, this extension and entrenchment of capitalism was a dangerous development. It marked an immanent threat to the varying political movements struggling to find ground in both Europe and North America. In response, many concerned scholars and critics began to examine these social, cultural, political, and economic transformations. They sought to understand how it was that a society, which for so long seemed on the verge of revolution, had sunk into capitalist complacency.⁸⁶ While there were many books and articles dedicated to this subject, two books,

⁸⁶ E.g. Stuart Hall, *The Hard Road to Renewal: Thatcherism and the Crisis of the Left* (New York, NY: Verso Books, 1988); David Harvey, *The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change*, 1990 edition (Cambridge, MA: Wiley-Blackwell, 1992); Fredric Jameson, *Postmodernism, Or, the Cultural Logic of Late Capitalism*, Reprint edition (Durham, NC: Duke University Press, 1992); Jean-Francois Lyotard and Fredric Jameson, *The Postmodern Condition: A Report on Knowledge*, trans. Geoff Bennington and Brian Massumi, 1st

Guy Debord's *The Society of the Spectacle* (written originally in 1967 and published in English 1977) and Jean Baudrillard's *Simulacra and Simulation* (published first in French in 1981 and translated into English in 1994) were of particular importance in the critical discourse dedicated to the analysis late capitalism and the prominence of the media.

In *The Society of the Spectacle*, Guy Debord puts forward a series of theses on the conditions of life under late capitalism. According to Debord, modern society has entered a new and dangerous phase, one defined by the ubiquity and dominance of spectacle. He contends that spectacle is a direct consequence of capitalism, the logical end point of commodity fetishism. Throughout his book, he maps the historical progression of social life, arguing that society has been defined by a “downgrading of being into having”⁸⁷ and having into appearing. Initially, social life had been expressly concerned with being. Individuals’ lives were primarily structured around satisfying their physical and emotional needs; they cultivated food, built shelters, enjoyed family relationships, and supported one another as a community. However, with the development of capitalism and the economy’s increasing “domination over social life,” the emphasis on being was replaced by a new all-consuming value on having. Now, the natural rhythms and practices of day-to-day life were replaced with those designed specifically to support the demands of capitalism. In this new political economy, one’s economic value, the objects he or she possessed, and place he or she held in the system of production was paramount, structuring how individuals experienced their labor, power, and social positions.

Over time as the commodity form proceeded further into social life, the significance of having—integral to early capitalism—gave way to a new emphasis on appearing. In this present

edition (Minneapolis, MN: University Of Minnesota Press, 1984); Raymond Williams, *Politics of Modernism: Against the New Conformists* (New York, NY: Verso, 2007).

⁸⁷ Debord, *Society of the Spectacle*, Thesis 17.

state of social life, “All effective ‘having’ must now derive both its immediate prestige and its ultimate *raison d’être* from appearances.” In the society of the spectacle, the ability to appear, to be represented, defined what was important, valuable, and real. The social importance and cultural power of objects was no longer determined simply by their use and exchange values. Now their meaning and significance was intimately connected to their semiotic value. Similarly, social relationships, were increasingly reified, experienced and exchanged like objects, and perpetually “mediated by images.”⁸⁸ As such, Debord contends that the advent late capitalism and the dominance of spectacle imbued the world with such a profound, all-encompassing ideology that the essential qualities of human life have been damaged almost beyond repair, pushed into a state of perpetual schizophrenia. Traditional ways of conceiving the world and envisioning political change have been forever reshaped by the operations of spectacle. Thus, Debord ends his book with a call to a new kind of political action, one which cuts into the very heart of spectacle’s operations, hijacking its language in order to jolt the public out of their stupor and expose them to the contradictory oppressions of capitalism.

In *Simulacra and Simulation*, Baudrillard offers his own analysis of late capitalist society. Writing nearly fifteen years after the publication of *The Society of the Spectacle*, he confronts a world in which capitalism has reached even greater heights. The media had saturated more and more areas of everyday life, and the promise of social revolution, particularly that of May 1968 in France, had ultimately collapsed. As such, even the small degree of hope and political promise that still permeated the pages of Debord’s writing is almost entirely gone from Baudrillard’s analysis. For him, capitalism has taken such a deep hold of society, particularly in the United States, that it defines every aspect of experience. Baudrillard argues that in contemporary life, the

⁸⁸ Debord, *Society of the Spectacle*, Thesis 4.

real has been continuously eroded, so all previous distinctions between reality and image have completely disappeared. There is no original to precede representation, no authentic object against which to define abstraction. The world has been over taken by simulations and simulacra, “by models of a real without origin or reality: a hyperreal.”⁸⁹ For Baudrillard, “It is no longer a question of imitation, nor duplication, nor even parody. It is a question of substituting the signs of the real for the real.”

In a society of simulation and simulacra, individuals experience the world through the signs, images, and models that define everyday life. All events and actions, even those with unabashedly ‘real’ consequences, are still processed through the symbols and language of media. A war, though *real*, inflicting actual pain and taking actual lives, is still “inscribed in the decoding and orchestration rituals of the media, anticipated in their presentation and their possible consequences.”⁹⁰ As such, even those events whose effects are violent and shocking still operate in the realm of simulation, understood and lived by many as hyperreal. Unlike other Marxist critics, Baudrillard contends that this way of experiencing the world cannot be reduced to ideology. It is not a false consciousness which can be thrown off or transcended and reality exposed. “Ideology only corresponds to a corruption of reality through signs; simulation corresponds to a short circuit of reality and to its duplication through signs. It is always the goal of the ideological analysis to restore the objective process, it is always a false problem to wish to restore the truth beneath the simulacrum.”⁹¹ The real has disappeared entirely. It has been permeated with and subsumed by the processes of simulation and the proliferation of simulacra that it cannot be recovered. Thus for Baudrillard, simulation and simulacra do not conceal how

⁸⁹ Jean Baudrillard, *Simulacra and Simulation*, The Body, in Theory (Ann Arbor, MI: University of Michigan Press, 1994), 1.

⁹⁰ *Ibid*, 21.

⁹¹ *Ibid*, 20.

the world *really* is, but define it. It is through their processes that society operates and through their images that people experience their lives.

Although written nearly fifteen years apart, *The Society of the Spectacle* and *Simulacra and Simulation* are both expressly concerned with the proliferation of media in late capitalist society. In particular, Debord's spectacle and Baudrillard's hyperreality are both connected to the significance and ubiquity of television following the Second World War. While Debord rarely discusses TV on its own, more frequently referring to 'the media' as a whole, his analysis of spectacle suggests television as a particularly essential site for the production and circulation of spectacle. According to Debord:

In all its specific manifestations—news or propaganda, advertising or the actual consumption of entertainment—the spectacle epitomizes the prevailing model of social life. It is the omnipresent celebration of a choice already made in the sphere of production, and the consummate result of that choice. In form as in content the spectacle serves as total justification for the conditions and aims of the existing system. It further ensures the permanent presence of that justification, for it governs almost all time spent outside the production process itself.⁹²

Television does not simply serve as a central node through which these manifestations of spectacle are consumed. Watching TV is also an important pastime, something Debord notes "the average American spends three to six hours" doing everyday.⁹³ In combining radio's domestic reception and advertiser-supported broadcast system with cinema's audiovisual power, television entrenched itself in postwar society. It became an integral part of the media landscape, an essential tool in the promotion of capitalism, a dominant space for the consumption of images, and for Debord, a fundamental site of spectacle.

Unlike Debord, Baudrillard offers a more dedicated analysis to the operations and effects of television. Although the proliferation of simulacra and simulations are by no means the

⁹² Debord, *Society of the Spectacle*, Thesis 6.

⁹³ *Ibid*, Thesis 153.

exclusive products of TV media, television does occupy an important position in late capitalism, producing unprecedented levels of mediation. Baudrillard concludes “The Precession of Simulacra” (the first essay included in *Simulacra and Simulation*) with an extended analysis of *An American Family*, a twelve-part 1973 PBS television documentary series, which followed the lives of Bill and Pat Loud and their five children (a wealthy Santa Barbara family) for seven months. From May to December 1971, producer Craig Gilbert and his crew entered the Louds home, recording them constantly without a set plan or a prewritten script, in an attempt to capture ‘life as it happens.’ During the documentary’s seven-month shoot, the television crew recorded the Louds’ everyday lives, tracing their successes, their struggles, and the eventual collapse of Bill and Pat’s marriage. Baudrillard points to this “experiment in American TV verité” as a particularly poignant instance of the hyperreal.⁹⁴ Although the public debate that followed the broadcast of *An American Family* was particularly concerned with Bill and Pat’s divorce, as critics and TV viewers alike speculated about the role that television may have played in the family’s collapse, for Baudrillard, such discussions missed what was most fascinating about the television program. Instead of trying to assess how television might have changed the family’s destiny, Baudrillard was particularly interested in “the illusion of filming the Louds as if TV weren’t there.”

By actively erasing the presence of television equipment and crew members, Gilbert and PBS presented *An American Family* as if the Louds were simply appearing in the public’s living rooms without any degree of mediation. However, in watching *An American Family*, the presence of television in the Louds’ home was inescapable. Viewers saw the Louds on their TV sets; they watched *An American Family* as they would any other television program, and thus,

⁹⁴ Baudrillard, *Simulacra and Simulation*, 20

there is no question that the program's audience knew that they were consuming something mediated, whose events and actions had been created by the presence of cameras, editors, and electronic screens. *An American Family*'s ten million weekly viewers were actively enjoying a simulation of domestic life. There was no illusion that what they were watching was completely and absolutely 'real.' Rather, the program's viewers relished in the hyperreal, taking pleasure from a program so firmly entrenched in the realm of simulation.

In addition, Baudrillard contends that the hyperreality of *An American Family* did not merely begin with the intrusion of the television camera into the daily lives of the Bill and Pat Loud. "The family was already hyperreal by the very nature of its selection: a typical ideal American family, California home, three garages, five children, assured social and professional status, decorative housewife, upper-middle-class standing. In a way it is this statistical perfection that dooms it to death."⁹⁵ As such, the 'truth' of the Louds was already tied to the realm of television and the terrain of simulation. "In fact, it is TV that is the truth of the Louds, it is TV that is true, it is TV that renders true." For Baudrillard, the advent of TV verité indicated a significant social transformation. The breakdown between viewer and viewed, as those who watched television became the subjects of its gaze, signified an end to the distance between media and that which exists outside of mediation. Television has ceased to be spectacular; it has permeated so absolutely into the realm of the everyday that it has now imbued all other aspects of life. "There is no longer a medium in the literal sense: it is now intangible, diffused, and diffracted in the real, and one can no longer even say that the medium is altered by it."⁹⁶ For Baudrillard, late capitalism has ushered in a new era of all-consuming mediation, in which the televisual was no longer distinct from any form objective, external reality. Public space and

⁹⁵ Baudrillard, *Simulacra and Simulation*, 21

⁹⁶ *Ibid*, 22.

private space “have ceased to be either spectacle or secret. The distinction between interior and exterior, which was just what characterized the domestic stage of objects and that of symbolic space of the object has been blurred in a *double obscenity*.”⁹⁷ Life had dissolved into TV and TV into life so completely that they were now all but inseparable. As the world unfolds on our domestic screens, “the most intimate operation in your life becomes the potential grazing ground of the media.”⁹⁸ For in this postmodern world, “We are all Louds doomed not to invasion, to pressure, to violence and blackmail by the media and the models, but to their induction, to their infiltration, to their illegible violence.”⁹⁹

Although missing their explicit political convictions and philosophical depth, numerous newspaper and magazine articles exploring the development and popularity of home video technologies echoed many of Debord and Baudrillard’s concerns and discussed these new devices with persistent anxiety. For many journalists and electronics reporters, home recorders and video cameras, while offering their users new ways of recording themselves and their loved ones, also threatened to damage domestic life. The increased opportunities for mediation and the continual extension of and interaction with the home TV set held the potential to degrade true intimacy and authentic experiences. It threatened to transform them to fit the demands and expectations of the video screen. The fear surrounding video’s introduction to the American home is perhaps most severely expressed in Tom Shales’ 1977 article for the *Washington Post*. Throughout his article, Shales provides a pessimistic vision of a futuristic everyday, in which all values, relationships, and judgments are filtered through and defined by the televisual.

By 1995 the mirror will be dead...In the twenty-first century children will say, ‘Tell us about the mirrors mommy,’ and ask, ‘Daddy, daddy, what’s a mir-ror?’ The mirror image

⁹⁷ Baudrillard, *The ecstasy of communication* (Los Angeles, CA: Semiotext(e), 2012), 25-26.

⁹⁸ *Ibid*, 26.

⁹⁹ Baudrillard, *Simulacra and Simulation*, 22.

will have been replaced by a new image; the iconography of the self will have been electronically restructured; and a software explosion will have used in a golden-glitter age of pampered human vanity...we are all going to be on television. We're all going to get to see *what* we look like on television—and what we look like on television will be the new standard of what we look like, period.”¹⁰⁰

Individuals will cease to seek validation in others, turning instead to their TV screens, treating their appearance there as the only affirmation they need of their prominence or self worth. For Shales, the newfound possibility to see oneself on television represented a profound cultural shift, something that would permanently alter how individuals related to technology, one another, and themselves. Rather than seek relationships with other people or experience life as it happened, individuals would now only engage with the TV screen, electronic images becoming the sole barometer of truth, authenticity, and happiness. “The Camera will validate us. The Camera will certify us. The camera will tell us we exist and pull us outside our own bodies to look at ourselves. And find ourselves rather delightful if we do say so ourselves.”¹⁰¹ In Shales’ speculative vision of the future, the newfound televisual intimacy afforded by video recording equipment would dissolve into spectacle. Ushering in a new age of mediated narcissism, the capacity to appear on TV turns everyone into a star.¹⁰² For with video-expanded television, “Technology is about to put the ME back in MEDIA.”¹⁰³

¹⁰⁰ Tom Shales, “Christmas Present,” *The Washington Post*, December 4, 1977, 18.

¹⁰¹ *Ibid.*, 33.

¹⁰² Here Shales strongly echoes Rosalind Krauss’s canonical 1976 article “Video: The Aesthetics of Narcissism.” In this piece, Krauss argues that the medium of video art is the psychological state of narcissism. She analyzes the works of video artists like Richard Serra, Vito Acconci, and Bruce Nauman which almost exclusively focus on the human body (often the body of the artist or that of the audience) and turn the TV screen into a mirror, encouraging, even demanding a state of total self-reflection. Video’s capacity for feedback creates the conditions for video’s narcissistic foundations. By seeing your own image mirrored back to you in a TV screen, there an “inherent movement...toward fusion. The self and its reflected image are of course literally separate. But the agency of reflection is a mode of appropriation, of illusionistically erasing the difference between subject and object” (56-57). As such, video takes as its medium the psychoanalytic drive of narcissism. By reflecting and retransmitting the self onto the TV screen, video art takes that the external object and reconfigures it as an internal one, rendering the Other an escapable part of the Self. Rosalind Krauss, “Video: The Aesthetics of Narcissism,” *October* 1 (1976): 51–64, <https://doi.org/10.2307/778507>.

¹⁰³ Capitalizations in original; Shales, “Christmas Present,” 33.

In addition, Shales argues that this new relationship with the television screen will not end with the transformation of the individual and his or her sense of self. In the future, Shales contends that *all* objects, events, and experiences will also be understood and appreciated solely based on their capacity to be represented and communicated through televisual media. Rather than understand or value the world on its own terms, “The TV camera will become our guarantor of posterity. Nothing that happens will really happen until the camera sees it, the machine records it, and we play it back.”¹⁰⁴ Together, Shales contends that with these transformations caused by the proliferation of video equipment and the corresponding extension of television’s presence in contemporary life. “We will move into an exalted state of higher consciousness never known on the human race; we will come to realize that the RECORD button is less important than the PLAYBACK button and that the replica is more important than the original.” Thus, echoing Baudrillard, Shales contends that in our hyper-mediated future, the categories of truth, authenticity, and the real will cease to exist. Wrapped up in a narcissistic desire for mediation, “the replica will become the original” and “reality will take on a new meaning: No meaning whatsoever.”¹⁰⁵

In addition to Shales, other reporters offered similar—albeit significantly less apocalyptic—assessments of video’s development. Even those articles that discussed home recorders and video cameras in a predominantly positive light, still included some misgivings about these new devices and questioned the possibility of their damaging effects. In “Second Chance at Life: Video Replays Offer Another Way to Look at Things,” Barbara Isenberg, though

¹⁰⁴ Shales, “Christmas Present,” 33.

¹⁰⁵ Ibid; it should be noted that scholars writing about the contemporary fixation with celebrity’s everyday life and the rise of selfie culture express many similar connections to those articulated by Shales. For more see: Joshua Gamson, “The Unwatched Life Is Not Worth Living: The Elevation of the Ordinary in Celebrity Culture,” *PMLA* 126, no. 4 (October 1, 2011): 1061–1069, <https://doi.org/10.1632/pmla.2011.126.4.1061>; Katie Warfield, “MirrorCameraRoom: The Gendered Multi-(in)Stabilities of the Selfie,” *Feminist Media Studies* 17, no. 1 (January 2, 2017): 77–92, <https://doi.org/10.1080/14680777.2017.1261843>.

overwhelming encouraged by video's proliferation, still concludes her article with a word of caution. She notes that the obsession with home recording could damage the ability to truly experience life as it happens. "At its extreme, this electronic second chance could then become the first chance—let life go by, I'll catch it later. Conditioned by our television-watching habit, we'll start looking at videotaped events as not just more permanent but somehow more authentic once they're on the small screen."¹⁰⁶ Even Phil Clarke, whose video memoir business was profiled by Mike Granberry in his 1985 *Los Angeles Times* article, remarked that there is an irony in the creation video messages and memories. Clarke's clients, who are typically elderly, produce their video memories for their children and grandchildren, who could, if they were willing to give their parents and grandparents the time, hear all their recollections first-hand.¹⁰⁷

The concern with video's capacity to encourage mediation at the expense of authentic experience was a subject of repeated discussion in articles reporting on the use of video cameras for vacations and family events. In "The Absolute Mania for Recording Our Lives," Ellen Goodman reflects on this development, noting how this "video narcissism" has reached such a state of prominence that travelers seldom go anywhere without a camera to capture and bring back moving images of their vacations.¹⁰⁸ For Goodman, the impulse to make a video recording of one's travels, while understandable and linked to a long history of souvenir collection, fundamentally changes how individuals experience the world around them. The camera confines human vision; it directs how and what we choose to do and see. It is the filter through which all experience is understood and the defining force in how memories are validated. Thus, "Instead of

¹⁰⁶ Barbara Isenberg, "Second Chance at Life," *Los Angeles Times*, October 24, 1982, sec. L, 2.

¹⁰⁷ Granberry, "Family Memories Preserved on Videotape," 1, 20.

¹⁰⁸ Ellen Goodman, "The Absolute Mania for Recording Our Lives," *Washington Post*, May 24, 1988, sec. A, 23.

doing something for the sake of doing it, we are now as likely to do it for the record. At its most extreme, the message in the mania is that anything that's worth doing is worth having on tape."

Similarly, a 1991 *New York Times* article, entitled "Vacation Videos," critiques the constant concern with creating videotaped records of special events and family trips at the expense of everything else. Written from the perspective of an anonymous bather, who while watching a family on vacation laments video's domination of experience. He expresses his anxiety as he sees children playing dangerously on a rocky beach, encouraged by their parents, who seem to care more about capturing exciting footage than ensuring their children's safety. He sympathizes with the children, as he watches their parents direct their activities for the camera. They are rarely allowed to simply play, but must perform for the camera, only doing those actions that look good on camera. Now, individuals do not let themselves live, experiencing life for the sake of experiencing it. Instead, they act for the purpose of recording, for the creation of videotapes that will come to almost replace original experiences. As such, the article concludes with a sinister reflection, noting that with this heightened dependence on the video image "the camera was playing an ever stronger role in determining what was real. The bather's anxious minutes watching the children, for example, were ether minutes; no video vouched that they had ever happened."¹⁰⁹ Thus, in each of these articles, the increased presence of the video camera in everyday life is viewed with apprehension. It is seen not simply as a new tool for the documentation of family life, but as a pernicious force, capable of destroying authentic experience, colonizing memory, and redefining the real.

¹⁰⁹ "Video Vacations," *New York Times*, August 29, 1991, sec. A, 28.

This cynical view of video became a central element in several films released throughout the 1980s. According to Moran, video, rarely understood and discussed on its own, has been frequently conceptualized in relation to and as relations of other media. While television was undoubtedly its closest sibling, intimately connected to video technologically, aesthetically, and culturally, film holds a distinctly fraught relationship with the medium. Film and video have rarely been conceived as allies; more often, they have been opposed as “Oedipal adversaries.” As Moran contends, “Cinema’s precarious claim to authority, that is, must offset an acknowledgement of the newer medium’s challenge to filmic institutions with a denial of video’s potency to usurp them altogether.”¹¹⁰ As such, he argues that numerous films, including Atom Egoyan’s *Family Viewing* (1988) and Steven Soderbergh’s *Sex, Lies, and Videotape* (1989) position video as something verging on the pathological, a medium that needs to be destroyed or overcome, so the films’ central characters can lead happy, healthy, and productive lives.

For instance, in *Family Viewing*, video becomes a catalyst in Van’s conflict with his father, Stan.¹¹¹ A video enthusiast, Van discovers that Stan has been using old family videos that show him and his mother, who had left the family to escape Stan’s abuse, to record him and his girlfriend Sandra having sex. Van, determined on protecting these images of his mother, switches these tapes with blank ones, hiding them from Stan. Once in possession of the tapes, Van examines them, discovering recordings of his mother and father having sex, in which she appears bound against her will. Stirred by these images, Van rebels, seeking to reclaim his family, reunite with his mother, and protect both his grandmother and his videotapes from his father’s dangerous reach. In *Sex, Lies, and Videotape*, video is used to both facilitate intimacy and impede it. On the one hand, for those in front of the camera, Ann, Cynthia, and eventually Graham, video functions

¹¹⁰ Moran, *There’s No Place like Home Video*, 164.

¹¹¹ Atom Egoyan, *Family Viewing*, Drama, 1988.

as a therapeutic confessional.¹¹² Under the camera's gaze, they speak about their challenges and fantasies, giving voice to unspoken frustrations and unexpressed desires, and thus helping them recognize what it is they really want. On the other hand, for Graham, who for the majority of the film resides behind the camera, video represents an unhealthy mode of vicarious existence. Incapable of having a relationship with a flesh and blood woman, Graham uses his video camera to interview women about their sexuality and can only achieve sexual satisfaction when reviewing the tapes after the women leave. As such, Graham's tapes operate as a kind of simulated relationship, producing an artificial closeness by the layers of technology and mediation that serve to cut him off from those he interviews.

Through their narratives, Moran argues that *Family Viewing* and *Sex, Lies, and Videotape* construct video as a dangerous technology, whose powers of simulation, omnipotence, and vicariousness encourage destructive behaviors.¹¹³ For many of these films characters, video is deployed in an attempt to experience some kind of intimacy. Yet the mediation and distance demanded by the camera, recorder, and television screen mean that the connection and closeness they seek can never actually be attained. Rather than have an authentic experience and engage with people in the world, video allows many of the films' characters to engage in dysfunctional intimacy. Watching other individuals on their TV sets or through their camcorder, they are forever disconnected from those with whom they seek to connect, experiencing a desire for and closeness with electronic images. As such, intimacy dissolves into spectacle and simulation. Like Debord and Baudrillard, the films' dysfunctional protagonists (and antagonists) occupy a world in which all experiences and relationships are mediated through images. Real, authentic experience has been lost, inhibited and prevented by the pervasive power of electronic media.

¹¹² Steven Soderbergh, *Sex, Lies, and Videotape*, Drama, 1989.

¹¹³ Moran, *There's No Place Like Home Video*, 191-203.

Yet, unlike Debord and Baudrillard whose analyses examined the broad social conditions of late capitalism and focused on their political and cultural consequences, *Family Viewing* and *Sex, Lies, and Videotape* remain concerned with the personal. In each of these films, Moran contends that the character's "dependency on video as a medium of vicarious experience is symptomatic of an unhealthy relation of the real world,"¹¹⁴ something which must be combatted and ultimately overturned: "In *Family Viewing*, Van must reframe himself outside of Stan's video surveillance to usurp the father's position and take control of his own life as an adult...and in *Sex, Lies, and Videotape*, Graham must smash his TV monitor, camcorder, and videocassettes to bits—in effect go cold turkey—so that he can beat his video addiction." For, as Moran concludes, "A proper narrative resolution may transpire only under the omnipotent eye of the film camera's omniscient lens. Video, a vicarious and precarious alternative, is a siren whose seductions must be navigated at one's own peril, at least in the myths of cinema."¹¹⁵



Figure 1.4 *Sex, Lies, and Videotape*, 1989, Screen Grab

¹¹⁴ Moran, *There's No Place like Home Video*, 203.

¹¹⁵ *Ibid*, 203.

Taken together, these theoretical, journalistic, and cinematic accounts of video articulate a pessimistic and anxious vision of the medium, its power, and its relationship with television. Instead of changing television for the better, taking over the TV screen and fighting its inherent commercialism with personal images of intimate communication, the development and proliferation of video technologies threatened to expand television to potentially apocalyptic levels, saturate everyday life with unprecedented mediation, and subsume the realm of intimacy into that of spectacle. For theorists like Debord and Baudrillard, the heightened levels of mediation essential to late capitalism brought dangerous political, social, cultural, and economic transformations whereby image and reality, appearance and being ceased to be distinguishable. Though video and video's intersection with television are not discussed explicitly by these scholars (who were writing predominately at a time when such technologies had yet to reach widespread public adoption), journalists, TV critics, and filmmakers offered assessments of video's proliferation that carried many similarities to Debord and Baudrillard's analyses of postmodern media. Whether imagining a future so dominated by television imagery that all other modes of perception cease to exist, lamenting the loss of in-person experience, or constructing a narrative in which video is deployed in the service deviance and pathology, many reporters, columnists, and directors working throughout the 1970s and 1980s grappled with video's new position in the American media landscape. They did not see the home recorder and video camera as a positive tool of televisual intimacy, capable of producing new kinds of intimate connections and personal uses for the home TV set. Instead, they conceived these new electronic devices as dangerous tools of mediation, poised to destroying authentic experience, impeding communication, disrupting memory, and transforming the intimate into the spectacular.

Broadcasting Video: Spectacular Intimacy and *America's Funniest Home Videos*

The debate surrounding video's growing presence in American culture came to a head in 1989 following the release of *America's Funniest Home Videos*.¹¹⁶ The program, which aired initially as a one-off Thanksgiving special, has endured for more than seventeen years, broadcast every Sunday night on ABC—ever since the network, encouraged by the show's surprising popularity and low production cost, extended the special into a full season run in early 1990. The premise for *AFHV* was relatively simple. Cashing in on the popularity of video cameras and amateur videomaking, the show was composed of a series of short, humorous video clips, introduced by comedian Bob Saget,¹¹⁷ and exhibited in front of a live audience. To gain its content, *America's Funniest Home Videos* solicited tapes from its viewers, offering them a chance to have their videos selected for on-air broadcast with the subsequent possibility of winning cash prizes, the largest of which was a hundred thousand dollars. From the program's first season, it was an instantaneous success. Not only did Americans send the program's producers thousands of tapes each week (submissions were so numerous that producer Vin Di Bona hired a group of screeners whose only job was watching all the tapes mailed to the program), it also became one of the top ten rated shows in the United States, posing a challenge to such established programs as *60 Minutes* (1968-present) and *Murder, She Wrote* (1984-1996), and inspiring similar series around the world.¹¹⁸

By bringing amateur home video onto broadcast television, making what had once been an explicitly private, non-broadcast mode of televisual practice into commercial entertainment for a large, public audience, *America's Funniest Home Videos* marked a new moment in American

¹¹⁶ "America's Funniest Home Videos" (Los Angeles, CA: ABC, November 26, 1989).

¹¹⁷ Bob Saget hosted the program until 1999, after which he was succeeded by a variety of other hosts, including Daisy Fuentes, John Fugelsang, and Tom Bergeron.

¹¹⁸ Daniel Cerone, "The Candid Camcorder," *Los Angeles Times*, February 14, 1990, sec. F, 1, 12; "America Loves Its 'Videos,'" *Chicago Tribune*, March 18, 1990, sec. G, 14.

media culture and a curious conjunction of intimacy and spectacle. The program's very existence, not to mention its popularity, announced the prominence of amateur videomaking and Americans' interest in seeing their tapes on television, as well as establishing modes of televisual production essential to reality TV's development and viewing practices still embodied by viral video.¹¹⁹ Of course *America's Funniest Home Videos* was not the only televisual space that featured amateur video productions. Early video practitioners regularly made tapes for televisual exhibition and public access cable, which developed in the United States concurrently with consumer video, allowing individuals to produce and exhibit their own TV programs.¹²⁰ However, unlike many of these other video programs, *AFHV* was neither 'alternative' nor created by amateurs. Rather, it was a professionally produced TV program whose content was gathered from the previously private tapes of everyday, domestic events recorded by amateur American videomakers. Thus, unlike the work of amateur public access TV enthusiasts, alternative video activists, or video artists, *AFHV* brought amateur videos emphatically rooted in the spaces of home and the practices of family life—true *home* videos—into the domain of commercial, broadcast TV.¹²¹ In broadcasting homemade videos on network TV, transforming what had been private, personal modes of media production into texts for mass televisual exhibition, *AFHV* merged video and television together. And, in so doing, it pushed the tension between intimacy and spectacle essential to these two media to new heights.

¹¹⁹ E.g. David Gurney, "Recombinant Comedy, Transmedial Mobility, and Viral Video," *The Velvet Light Trap* 68 (July 27, 2011): 3–13, <https://doi.org/10.1353/vlt.2011.0018>; Chad Raphael, "The Political Economic Origins of Reali-TV," in *Reality TV: Remaking Television Culture*, ed. Susan Murray and Laurie J. Ouellette (New York, NY: New York University Press, 2004), 123–40.

¹²⁰ For more see: Boyle, *Subject to Change*.

¹²¹ And as such, Laurie Ouellette has argues that the presentation of amateur video in such a format functions discursively to contain the potential radicalism of home video practice. Ouellette, "Camcorder Dos and Don'ts," 33–44.

This tension was present within the structure and televisual composition of *America's Funniest Home Videos* itself as well as the news reports and TV reviews that followed its release. On November 26, 1989, when millions of Americans turned on their TV sets to ABC to watch the premiere of *America's Funniest Home Videos*, they were confronted with a new kind of television. As animated graphics introduced the program's name in brightly colored lettering, a male voice proclaimed: "Tonight on *America's Funniest Home Videos*, you might see your brother working out, your bride dancing, your baby window cleaning, your team competing, your little girl bathing, your neighbor singing, or your son swinging." With each new description of what "you might see," an animated TV screen displays a different video clip: a man falls from gymnastics bars, a woman trips over her wedding dress, a baby licks a window, and a boy slips after an overly vigorous swing with a baseball bat. These videos, all clearly shot with amateur video cameras, are accompanied by raucous laughter and jaunty, fast-paced music. As the clips end, the show's title reappears. It first fills the screen and then shrinks into an actual TV console, which is installed in the *AFHV* studio and placed on a set furnished to resemble a living room. Around this TV set a family (consisting of a mother, father, and two small children) gather, and the narrator concludes his introduction with the exciting or possibly ominous claim: "You might even see yourself."

Following this initial introduction, the lights turn on and the camera pans, revealing the sound stage and live studio audience behind the posed family. Like the explicitly domestic living room set from the program's opening, the sound stage also functions to evoke an impression of home and community. The stage is divided into three segments. The left and right of sides of the

stage are each occupied by a video wall¹²² held up by similar set pieces designed to resemble the exterior facade of a house—complete with fake brick paneling, illuminated windows, stylized roofs, and patio furniture. In contrast, the middle section of the stage is designed to resemble a domestic interior. It is framed by a series of light blue free-hanging walls with white moldings at the center of which is a large TV screen on which an animated image of the program’s title is displayed. A white painted door is cut into the right side of the wall. This door, through which Saget enters the stage, as if coming home to *America’s Funniest Home Videos*’ studio audience, connects the ‘indoor’ and ‘outdoor’ sections of the stage, serving as a kind of threshold. Other markings of home (a potted plant, a wooden table with matching chairs, lamps, a sofa, easy chairs, and an area rug) are arranged across the middle of the stage. Tying the program’s domestic aesthetic together, outlines of houses and images of windows are displayed behind the stage and above the audience. All this works as if to imply that the TV studio, though clearly artificial and bearing all the features of a television production, complete with a studio audience, is nestled into an average American neighborhood—a home just like any other.

Once the studio is displayed and the artifice of the domestic living room made manifest, the scene dissolves and the narrator announces “and now, the host of *America’s Funniest Home Videos*, *Bob Saget*,” as Saget walks through the door and enters the stage. Standing in a suit and taking the position of a variety host, he launches into an opening monologue. After saying his name and restating the show’s title, he introduces its premise:

I love home movies everybody, even other people’s. So when I was asked to host a show made up of those private, real moments, I said how much will I be getting paid. No that’s a joke. I actually said that is a great idea. We gave you handsome people of America...a simple task. We said if what you shot makes you laugh, send it in. And you did. We received almost two thousand tapes, most of which we erased and recorded our favorite

¹²² The video walls are each composed of sixteen television monitors arranged on top of one another in a grid formation.

movies on. No that's not true, we kept them and we'll be seeing moments of people's lives tonight that even they never expected to see on national television. Well you know what they say, one man's misfortune is another man's TV show.

This opening address not only serves as comedic entry into the program's structure and Saget's family-friendly yet sardonic hosting style, but also articulates a particular vision of both the show's appeal and home video's identity. For Saget, home videos are "private, real moments," amateur everyday comedy, often rooted in slapstick accidents and embarrassing mishaps that happened to be caught on tape. *America's Funniest Home Videos*, by inviting individuals to submit their home recordings and sharing them with the world at large, provides access to "moments of peoples lives...that...they never expected to see on national television."

Following this introduction, the program cuts to a series of amateur videos: a man breaks a diving board and falls into a pool, a toddler hits himself in the head with a toy, a boy accidentally breaks his parents' camcorder with a golf ball (my personal favorite), a son hits his father in the groin with a baseball bat, and a little boy is knocked down by his sister on a swing. These videos are accompanied by sound effects and Saget's commentary, which oscillates between mocking and conciliatory. He makes jokes about a yoyo being a "full contact sport" and reassures the audience that none of the videos' participants actually got hurt. Once the series of videos ends, the camera cuts back to the sound stage and the final shot of the last clip shown shrinks into one of the TV monitors on the side of the stage. Saget turns again to the audience and introduces the next series of clips.

This structure—short monologue followed by a compilation of video clips accompanied by Saget's signature commentary—makes up the majority of the show. The clips are often grouped together according to various themes. There are weddings, animals, dance performances, songs, and even recreations of popular television genres, including commercials and TV shows.

Children are the most common subjects of *AMFHV*'s clips. They are so prevalent that multiple children-focused clip segments appear throughout, organized into various themes, e.g. children getting into trouble, children falling down, children 'playing' with animals, and children falling asleep while eating. Throughout the episode, different participants from the various videos are brought out from the audience and interviewed by Saget. And one boy is even given the chance to recreate his home video tape live and performs a lip sync on stage. As such, the blurring between 'home video' and 'network TV,' between tapes produced for intimate consumption and domestic enjoyment and the spectacle inherent in televisual variety show and commercial media is repeatedly performed. Indeed, at the same time as home videomaking's private, domestic, and everyday dimensions are explicitly invoked through the show's set, structure, and dialogue, the spectacle and thrill of being on TV permeates *America's Funniest Home Videos*. From the show's premise to its audience guests, *AFHV* collapses videographic intimacy into televisual spectacle in a way unprecedented by previous conjunctions of these two media.

Faced with *America's Funniest Home Videos*' widespread popularity, entertainment reporters and television critics grappled with the program. They interviewed industry experts and reflected on its surprising success. An extension and expansion of the 'video revolution,' numerous articles connected the program's popularity with that fundamental televisual desire—a desire considered simultaneously natural, exhibitionist, and troubling—the wish to both *see oneself* and *be seen by others* on television. In "The Candid Camcorder," a *Los Angeles Times* article about the program, Daniel Cerone explores the appeal of *America's Funniest Home Video*, interviewing Saget and Di Bona, as well as TV analyst, Larry Gerbrandt. According to Gerbrandt:

TV is at best a pale reflection of humor in real life. The camcorder is a window into that world. You get enough video cameras out there in enough people's hands, and eventually some hilarious and frightening things are going to happen in front of the camera. The serious things you see on the news, and the funny things you see on 'America's Funniest Home Videos.'¹²³

In contrast, Saget sums up the program's appeal, arguing that with *America's Funniest Home Videos*, "Everybody gets their Andy Warhol 15 minutes... It's like driving by and looking into people's living rooms."¹²⁴ While Gerbrandt connects the program's success to its capacity to capture real life and insert it into the artificial and spectacular space of the broadcast television, Saget, despite his position as the host of *America's Funniest Home Videos*, sardonically links the show's popularity to individuals' longings for stardom, celebrity, and voyeuristic satisfaction.

In "Inside 'America's Funniest Home Videos,'" *Chicago Tribune* reporter Max Jacobson provides a similar commentary on the program's success. He notes even though only ten percent of Americans own a camcorder (a relatively small number when compared with the TV set or the VCR), *AFHV* receives over a thousand submissions each day, and these are only expected to increase as more and more people invest in video cameras. Like Saget, Jacobson sees both the popularity of the show and the increasing prominence of video recording technology as evidence of Americans' deep desire to look at themselves. As such, he concludes his article noting that "Come this Sunday night, a whole bunch of your friends may be crowded around a TV set watching this show, hoping to catch one of their friends hamming it up before a national audience... No one will ever go broke overestimating the exhibitionist tendencies of the American public."¹²⁵ Thus, *America's Funniest Home Videos* offers a curious extension of the desire for televisual self-presentation so central to the video camera. Yet, instead of replacing

¹²³ Larry Gerbrandt as quoted in Cerone, "The Candid Camcorder," 12.

¹²⁴ Bob Saget as quoted in *Ibid.*

¹²⁵ Max Jacobson, "Inside 'America's Funniest Home Videos,'" *Chicago Tribune*, March 30, 1990, sec. CN, 2.

commercial broadcast images with those of one's own making, the program encouraged individuals to transform their home recordings into commercial content. It worked to turn productions of intimacy (if pratfalls and comedic accidents can be considered 'intimate') into broadcasts of spectacle.

In addition to puzzling over the underlying desires behind the program's popularity, several reporters and TV columnists also criticized *America's Funniest Home Videos* for its more explicitly sinister dynamics.¹²⁶ In particular, several critics, most notably Howard Rosenberg of the *Los Angeles Times*, who wrote two articles condemning the program, expressed concern over the violence inherent in many of the videos selected for broadcast exhibition. In his most damning article, entitled "America's Unfunniest Home Videos," Rosenberg interviews one of the show's screeners, identified with the pseudonym "Smitty." Throughout the article, Smitty describes the disturbing videos he had to watch, including a tape of a rabbit being eaten by a dog and a small girl falling off a slide and hitting her head, in which animals and children are shown in dangerous, violent, and occasionally fatal situations. Although such videos were rejected by the screeners and not selected for broadcast, Rosenberg contends that the fact "they even got made and were considered humorous...is a deeply disturbing commentary on the mentality of some Americans."¹²⁷ Moreover, Rosenberg notes that many of the videos that do get selected for broadcast, often accompanied by Saget's assurance that none of their participants were ever seriously injured, still feature pratfalls and slapstick escapades. Children fall, men and woman hit their heads, and the camera operator keeps on recording, as if capturing a video is more

¹²⁶ E.g. Cerone, "The Candid Camcorder," 1, 12; Jacobson, "Inside 'America's Funniest Home Videos,'" 2; John O'Connor, "A Prime-Time Ratings Runaway With Low Costs," *Los Angeles Times*, March 1, 1990, sec. C, 22; Howard Rosenberg, "America's Unfunniest Home Videos," *Los Angeles Times*, April 9, 1990, sec. F, 1, 12; Howard Rosenberg, "The Sadness Behind 'Funniest Home Videos,'" *Los Angeles Times*, March 21, 1990, sec. F, 1, 12.

¹²⁷ Rosenberg, "America's Unfunniest Home Videos," 1.

important than helping someone in distress. Rosenberg notes that when such tapes are played back on the program, “the sounds of pain...are missing.”¹²⁸ Despite the injuries that the videos’ participants must have sustained—whether minor or major “there is no sound of crying here because each video usually ends on impact with crunched bodies becoming punch lines, leaving you only to speculate about the possible unpleasant consequences of these cute little scenes.” Thus, rather than a light, entertaining television program or even an expression of deep exhibitionist and voyeuristic desires, Rosenberg argues that *America’s Funniest Home Videos* represents a deeply sadistic impulse, in which men, women, animals, and most prominently, children are subject to violence in service of spectacle, television, and the possibility of a hundred thousand dollars.

By taking individuals’ home videos, editing them together, and exhibiting them on broadcast TV, *American’s Funniest Home Videos* offers a distinct blurring of intimacy and spectacle. Moreover, by turning the *AFHV* studio into an impressionistic simulation of a domestic interior, selecting a quintessential ‘TV dad’ as its host, and inviting the program’s contestants to the live taping, the show constructs a distinctly televisual model of both home and home video. Through *AFHV*’s operations, the incidents and documents of domestic life are transformed and rechanneled into commercial content, directed not to the people and places of their production but a mass audience, who are all hailed as the same televisual family. This blurring of intimacy and spectacle is troubled further by the journalistic discussion of the program, which suggests the darkness and exploitation behind the show. As the American public serves as the show’s contestants, its very structure encourages everyone to turn home life into a site of potential profit and celebrity. However, since violence and pain—particularly when

¹²⁸ Rosenberg, “The Sadness Behind ‘Funniest Home Videos,’” 12.

experienced by children—is played for laughs, the suggestion that one’s familial connections and domestic domain should become the subject of one’s televisual desires carries with it a particularly troubling consequence. When the intimate is exploited for spectacle, the ever-present push towards mediation often comes at the expense of care, consideration, and the cultivation of safe and loving home.

Conclusion

Throughout this chapter, I have analyzed the ways in which home video technologies intersected with the TV set and converged with televisual form, giving the medium new uses and multiple functions. These new devices were framed as a way of transforming TV. By enabling people to record their own amateur videos and use their TV sets to watch their homemade tapes, video cameras and recorders functioned to remake the home television console into a personalized and interactive machine, something more than the receiver of one-way broadcast transmissions. Home video provided individuals with unprecedented control over their TV sets. It encouraged different kinds of private technological engagements and gave viewers the opportunity to see themselves and their loved ones on television—a desire which had been articulated to the medium since its initial demonstration at the 1939 New York World’s Fair.

As these video technologies developed, intersecting with and expanding upon television, discourses emerged grappling with the impact of these new electronic devices, questioning how they might affect culture, politics, and domestic life. Among such discussions and debates, two seemingly opposed conceptions of home video technologies emerged. On the one hand, numerous advertisements, news reports, and magazine articles expressed a predominantly positive, if almost utopian, reading of video-extended television. Proponents of video

technologies argued that these new devices transformed television for the better, combatting its destructive commercialism, and producing new forms of intimacy and closeness. For them, video held a unique power to bring people together and facilitate communication. On the other hand, this positive assessment of video's effects was contradicted by negative readings of these same developments. Journalists, critics, scholars, and filmmakers argued that instead of offering a remedy to television's damaging influences, home video technologies embodied pernicious extensions of TV. Instead of fostering communication and closeness, video-expanded television inserted new modes of mediation into everyday life, transforming authentic, intimate experiences into spectacle and simulation.

Despite the seeming opposition between these two perspectives, those who praised video and its conjunction with television as a tool of intimacy and those who condemned it as medium of spectacle are far more connected than one might initially presume. First, numbers of reporters, critics, and filmmakers alternate between both sides of this debate. Journalists, like Barbara Isenberg and Ellen Goodman, who offered predominantly optimistic readings of home video practices, still included cautionary statements in their articles. They expressed a profound anxiety about what might happen if the compulsion to record is taken too far. Conversely, even filmmakers whose cinematic narratives seem to demonize video do not want to entirely dismiss the medium. In an interview with the *New York Times*' Annette Isendorf, Atom Egoyan contends:

[Moving image technology] has the tremendous capacity to either trivialize experience or enhance it, depending entirely on how we decide to use it...I'm not condemning it; I'm just concerned about its misuse, particularly when instruments enshrine sentiment—a camera, a projector or a videotape monitor. These are bits of technology which the industry has told us can make memories 'come alive.' What a potent dramatic device!¹²⁹

¹²⁹ Atom Egoyan as quoted in Annette Isendorf, "Images Problems: A Director's Specialty," *New York Times*, February 11, 1990, sec. H, 25.

Thus, even as this debate is unfolding, the sides are messy and intermingled; reporters, critics, and filmmakers offer complex and sometimes contradictory readings of video, as they struggle to make sense of the relatively new medium, unpacking its relationship with television, cinema, social practice, and family life.

Second, support for video's powers of intimacy and censure of its capacity for spectacle both emerge from an opposition to traditional broadcast television. Those who saw the possibilities brought to TV by video technologies as a positive development admired these devices for changing television. They praised video's capacity to turn a medium marked by commercialism, mass communication, and one-way broadcast transmission, into a malleable, controllable tool uniquely suited to private communication, personal interaction, and intimate display. In contrast, those who criticized video saw these new technologies as a mere continuation of television, and not as a means of transforming it. For them, these devices represented a way for televisual logic to pervade more and more aspects of everyday life, subjecting them to power of image and mediation.

Finally, both proponents and opponents of video expanded television express an investment in family closeness, childhood experience, and domestic life. Whether its praising video for enabling new forms of interpersonal connection or condemning it for inhabiting in-person experience with layers of mediation, both perspectives seem to value the intimate as a sphere which should be cultivated and protected. Regardless of their specific position on video's role in helping or hindering the production and preservation of family relationships, childhood memories, and domestic connection, the majority of the advertisements, articles, television segments, and cinematic texts I examined hold up these ideals. They are sometimes questioned but never overturned. Thus, taken as a whole, the debate between intimacy and spectacle does

not represent an opposition as much as it embodied two different responses to the social crises of postwar America, a way of combatting the power of commercial television, protecting the decline of domestic idealism, and reclaiming authentic experience.

CHAPTER 2

Picturephoning the Future: ‘Tele-Vision,’ Intrusion, and the Telephone of Tomorrow

“The day when you’ll be able to phone Aunt Helen 3,000 miles across the country and show her Johnny’s first tooth isn’t here yet. But by the time Johnny is a gangling teen-ager, he may be able to place and receive video phone calls as commonly as you make regular phone calls today.”

—“Video Phone Service Target in Next Decade,” October 1967

At the 1964 New York World’s Fair, AT&T introduced the American public to the Picturephone: a new device developed at Bell Laboratories they claimed as the future of communication, the telephone of tomorrow, and an electronic tool ready to usher in a new era of enhanced, multimedia interaction. The Picturephone combined telephone and television technology, bringing together TV’s capacity for live audiovisual transmission and the telephone’s power of two-way, point-to-point interactivity. With Picturephone, individuals could transmit both their voice and their image across vast distances and engage in virtual face-to-face conversations in real time. By merging the television with the telephone, the Picturephone reimagined television. It transformed TV from a one-way commercial broadcast medium into an interactive tool of personal communication capable of providing new forms of virtual travel, interpersonal connection, and private exposure.

In this chapter, I examine the history, discourses, and fantasies that surrounded video telephony. Paying particular attention to the Picturephone, this chapter traces the development of video calling systems. I map their original imaginings in the late nineteenth century, the two-way TV experiments of the 1920s and 1930s, their eventual crystallization in the Picturephone of the 1960s, and the various rekindlings and false starts of the Videophone in the 1980s and 1990s. My chapter draws from previous work on the Picturephone. Most notably, it builds on Kenneth

Lipartito's "Picturephone and the Information Age: The Social Meaning of Failure." This article offers a complex rereading of the Picturephone's status as a failed technology, arguing instead for its reassessment in terms of the logics which encouraged its invention. In particular, Lipartito contends that rather than simply represent a new kind of telephone, the Picturephone embodied a multimedia vision of communication. It marked the first step in the move towards data-transmission services which would come to define the so-called 'information age.'¹

Although I do not disagree with Lipartito's arguments, and see this dimension of the Picturephone as integral to both its development and its cultural legacies, my own analysis of video telephony does not so much focus on reexamining notions of failure or elucidating the distinctly multimedia and data-driven technical system it helped construct. Instead, I concentrate my analysis on the discourses, imagery, and fantasies—many of which were embedded in gendered ideologies and conservative cultural logics—that surrounded the Picturephone (and subsequent video calling systems) throughout its history.

In mapping this industrial and technological history, I pay particular attention to the social, political, and cultural stakes of these developments. As video telephony strove to establish itself as an essential means of communication, something that no technologically savvy person should be without, hopes and fears about these various devices emerged, articulated in advertising, news releases, the popular press, and trade journals. Alongside applause for video calling's capacity to reduce physical transportation and simulate face-to-face interaction, it also threatened to invade the routines, sacred spaces, and private rituals of everyday life, revealing domestic secrets that might be better left unseen. Indeed, as the television's capacity for two-way communication grew, enabling its use as a tool for virtual travel and interpersonal contact, its

¹ Kenneth Lipartito, "Picturephone and the Information Age: The Social Meaning of Failure," *Technology and Culture* 44, no. 1 (2003): 50–81, <https://doi.org/10.1353/tech.2003.0033>.

powers of intrusion and exposure, already present in the discourse surrounding broadcast TV,² emerged in new configurations. With its capacity for two-way communication, the medium threatened to destroy boundaries and fantasies of domestic life which had to be so carefully constructed and contained.

Video telephony did not begin with the Picturephone or even with the two-way television experiments of the 1920s and 1930s. According to Uricchio, the idea of some form of video calling has existed in scientific and popular discourse since the late nineteenth century, ever since Alexander Graham Bell's invention of the telephone. During this period, individuals across the globe were caught up with the possibility of a visual telephone; something that could transmit sound and images live across vast distances. As Uricchio contends: "Within one year of the telephone's invention, writers took the idea of a directable, simultaneous, point-to-point linkage, and replaced the grain of the voice with the grain of the image."³ These imaginary devices appeared across all kinds of cultural platforms, evident in science fiction texts, experimental patents, and futuristic cartoons.⁴ Perhaps the most detailed description of this imagined device emerged in Albert Robida's 1883 publication *Le vingtième siècle: La vie électrique*. In this book, Robida maps a speculative vision of the future. He describes the "telephonoscope," a television-like device with a wide range of different entertainment and practical functions, including

² In *Make Room for TV*, Spigel shows how television's introduction into the American home was accompanied by anxieties about the medium's effects on domestic life. There was an ever-present concern, evidenced in everything from science fiction texts to TV set design, that the television could be used as a surveillance medium, an 'evil eye' capable of exposing a home's inhabitants to the outside world. As such, the discourse surrounding two-way TV was not so much a radical break from what came before but a particular reimagining of established televisual logics, evoking new iterations of the hopes and fears that long defined the medium. Lynn Spigel, *Make Room for TV: Television and the Family Ideal in Postwar America* (Chicago, IL: University of Chicago Press, 1992), 115-135.

³ William Uricchio, "Television, Film and the Struggle for Media Identity," *Film History* 10, no. 2 (June 1998): 119

⁴ For instance in 1877, a description of the "telectroscope" appeared in a French scientific publication, a few years later *Punch* published an illustration of a girl speaking internationally with her family through an "electronic camera obscura" Ibid.

bringing “distant entertainment into the living room,” serving “as a means of surveillance,” and facilitating “real-time face-to-face communication over vast distances.”⁵

Although every writer imagined their particular audiovisual telephonic device differently, with a distinct appearance and operation, in envisioning such futuristic technologies, these late-nineteenth century writers constructed a shared fantasy of television; one that stemmed from the functions and identity of the telephone. For despite their differences, each device contained “an explicit integration of liveness and point-to-point links offered by the telephone” and “an interface through which spectators could interact with ‘live’ moving-picture images of their interlocutors in real time.”⁶ Thus, according to Uricchio, these initial writings, in imagining a new method of mediated communication defined by fantasies of liveness, simultaneity, and point-to-point contact, represented the earliest conceptions of television—conceptions which predated or at least accompanied the invention of cinema. As such, Uricchio contends that these technological imaginings represent an important and powerful counter-narrative to established media histories. Taking these initial constructions of audiovisual telephony seriously, he argues that they do not merely represent outlandish speculation or fantastic science fiction. They reveal the role television has played in the development of media technologies since the nineteenth century.⁷

⁵ Uricchio, “Television, Film and the Struggle for Media Identity,” 118.

⁶ William Uricchio, “Television’s First Seventy-Five Years: The Interpretative Flexibility of a Medium in Transition,” in *The Oxford Handbook of Film and Media Studies*, ed. Robert Kolker (New York, NY: Oxford University Press, 2008), 290.

⁷ Uricchio shows how television fantasies actually made their way into practice, informing many audiovisual experiments of the late nineteenth and early twentieth centuries and infusing discourses surrounding the telephone, the phonograph, and cinema. As such, he contests the common tendency among media scholars to conceive television “as deriving from some existing medium, existing as a variation rather than a self-standing medium,” and insists that it was the television, or at least the fantasies that anticipated it, that served to construct the desires and the limits of cinema—not the other way around. Uricchio, “Television, Film and the Struggle for Media Identity,” 122.

In addition to informing the development of other media, this vision of two-way TV shaped the technological experimentation and imagined uses for television throughout the 1920s and 1930s. Over the course of this era, many nations were working on developing their own TV systems. Germany, during the rise and reign of the Nazi party, was one of the earliest creators and promoters of television. Not only were they one of the first nations to have a working TV system, but different bodies within the country's corporate agencies and fascist government held distinct visions for the medium, leading to diverse uses and multiple competing identities. The electronics industry envisioned the medium as an extension of radio. They conceived it as a domestic object that would serve as the famous 'window on the world,' delivering news and entertainment into the home.⁸ In contrast, Goebbels and other members of the Propaganda Ministry favored public forms of televisual exhibition. They envisioned erecting television halls in which groups of people could gather to view programming en masse. As the war progressed, the German military deployed television technology to aide in "reconnaissance" and "telepresence"—creating "visual guidance systems" for torpedoes, rockets, and bombs. Finally, and most importantly to this chapter, television was also envisioned as "a two-way communication medium linked to the telephone."⁹ By the middle of the 1930s, Berlin, Hamburg, Leipzig, Cologne, and Nuremberg were all connected together by a television-telephone system. Operated by the Post Office, audiovisual telephone booths were set up in postal outlets in major cities, thus making Germany the first country to offer video calling to the public.

Although the United States did not establish such a system until the 1960s, the possibility of two-way televisual communication was integral to the mechanical television experiments undertaken by AT&T's Bell Laboratories throughout the 1920s and 1930s. During this period,

⁸ Uricchio, "Television's First Seventy-Five Years," 297.

⁹ Ibid, 297.

attempts to create a television system capable of simulating face-to-face interaction that would use AT&T's existing telephone lines became a central concern for Bell Labs, encouraging a flurry of experimentation, prototypes, patents, and public demonstrations. Despite the eventual triumph of electronic television systems modeled after radio and rooted in one-way broadcast transmission, two-way TV should not be relegated to the stasis of 'failure' and subsequently ignored. Indeed, as Luke Stadel argues, "Two-way television offers an alternative way to understand the function of television as a communication system which served to replicate the experience of face-to-face communication, even if the eventual one-way development of the broadcast system only allowed for a partial fulfillment of that possibility."¹⁰ For technicians employed at Bell Labs in the 1920s, adding image to voice transmission seemed like the natural next step in completing the communicative promise of the telephone. Working with their parent company AT&T, these engineers and technicians engaged in a long process of research and experimentation. They attempted to develop a system that could transmit sounds and images back and forth through the telephone network without overwhelming the system.

Bell Labs initially displayed their experimental two-way TV system to the American public in April 1927. Throughout their two-part demonstration, Bell Labs showed off their television's multiple functions: first showing a two-way conversation between Bell personnel and Herbert Hoover, and then transmitting a series of live performances. While the display generated popular attention, numerous viewers noted the occasional poor image quality, which sometimes prevented them from viewing what was occurring on screen.¹¹ After this first attempt, Bell engineers sought to improve their prototype, turning their attention away from the presentation of entertainment and towards perfecting face-to-face interaction. As such, throughout the end of the

¹⁰ Luke Stadel, "Television as a Sound Medium, 1922-1994" (Ph.D., Northwestern University, 2015), 54.

¹¹ *Ibid*, 64-68.

1920s and early 1930s, researchers sought to remove the presence of the telephone receiver so no part of a video caller's face would be obscured, and thus interfere with the impression that individuals were speaking in person. They worked to perfect the relationship between sound and image, so that the sound remained consistent and synchronized. And most significantly, they strove to manage the bandwidth of their transmissions, so that audiovisual information could be delivered clearly and efficiently.¹² In 1930, Bell publicly debuted their new and improved two-way television, the ikonophone, which they had installed in a series of booths in AT&T's New York offices. Giving up on using their TV system to display modes of popular entertainment, they concentrated their demonstration on showing off the ikonophone's capacity for producing virtual face-to-face communication. Although this test was successful and viewed, according to Stadel, by over 17,000 people, the ikonophone was never launched commercially¹³ and RCA's electronic one-way broadcast model of television designed for the transmission of mass entertainment (as opposed to intimate, interpersonal interaction) won out.¹⁴

Picturephone: Complete Communication, Familial Connection, and Virtual Travel

Although AT&T and two-way television had lost the initial attempt to define the medium, the convergence of the telephone and the television was not dead. Throughout the 1940s and

¹² Stadel, "Television as a Sound Medium," 70-73.

¹³ It should be noted that following these efforts by AT&T to develop an interactive television system, amateur radio enthusiasts turned their attention to two-way TV in the 1930s and 1940s. According to Jeanne Allen, hobbyist publications like *Radio News* and *Popular Science* profiled build-your-own television kits and offered "how-to" articles that instructed readers on how to make their own TV transmitters. These hobbyists typically produced low-resolution images and transmitted their communications to the experimental television stations—which were in operation briefly in the 1930s and 1940s. However, these practices rapidly came under siege as corporations worked to secure their own TV licenses and advocated for the establishment of television standards that prevented the low-resolution transmissions of amateurs from securing space on their airwaves. Thus, by the end of World War II this brief amateur engagement with interactive television had all but disappeared. For more see: Jeanne Allen, "The Social Matrix of Television: Invention in the United States," in *Regarding Television: Critical Approaches--An Anthology*, ed. E. Ann Kaplan (Frederick, MD: University Publications of America, 1983), 109–17.

¹⁴ Stadel, "Television as a Sound Medium," 75-80.

1950s, AT&T worked to develop ways of transmitting television over telephone lines. By the mid-1950s, Bell Labs was back developing prototypes for a new two-way TV system: the Picturephone, which was ready for public release in 1964. According to Lipartito, during this period the Picturephone held central importance at AT&T. More than just a video calling system, Bell engineers saw it as the next crucial development in communications technology. It was envisioned as a natural progression in the evolution of the telephone, grounded in the “faith that image inevitably followed voice” in history of technological development. And even more significantly, Picturephone enthusiasts contended that the device represented an important entry into the speculated “information revolution.” It represented a move towards the fantasy of “an integrated approach over a single network for multiple media—data, voice, text, graphics, and video—in both digital and analog form.”¹⁵

In April 1964, when the Picturephone was debuted at the New York World’s Fair, AT&T seemed on the verge of delivering its long-held promise of introducing two-way television services to the American public. The first call, made between the fairgrounds and Disneyland, California, was accompanied by a wave of popular and industrial rhetoric examining the new device. News reports and industry discussions, transfixed by the Picturephone’s novelty, offered many speculations and predictions about its future and inevitable cultural impact. Following its release, AT&T promoted the Picturephone’s innovation and commercial potential. They described it as an improvement on both the telephone and the TV set, the most advanced form of intimate communication, and the next best thing to face-to-face conversation. Industrial pamphlets, promotional events, advertising images, and product design all constructed this new device as the telephone to tomorrow and the “hardware of progress,” an important instance of

¹⁵ Lipartito, “Picturephone and the Information Age,” 64-65.

technological innovation that would open up new opportunities, fulfill old desires, and foster social change.¹⁶

According to a 1964 Pamphlet entitled “Seeing by telephone... The Picturephone Story,” “Ever since the first telephones were put into service almost a century ago, people have wondered if the day would come when they could see—and be *seen*—by telephone.”¹⁷ In this pamphlet, the Picturephone represented a long anticipated extension of telephony, something the public had expected and desired since the nineteenth century. “To telephone people, there never was any doubt that it would be done—the only real question was *when*.” Even as the device itself was depicted as new, revolutionary, and futuristic, the desires to which it responded were represented as age-old and natural. It represented an expression of a profound human drive towards “better, warmer, and more nearly complete” mediated communication.

This narrative of the invention of the Picturephone as almost inevitable, the logical next step in human communicative desire, was reinforced repeatedly by AT&T and Bell Labs in their promotion of the new device. In press releases and corporate publications, they regularly opened their profiles on the Picturephone with poetic musings on its place within the history of communication. For instance, an article discussing the Picturephone II (the device’s second iteration released in 1968) begins with:

It may have started eons ago when hunters brought a large beast to bay and slew him with rocks. Perhaps someone started a fire to signal to the women and children back in camp. Or maybe someone banged on a hollow tree trunk with a club to call the village to the feast. With the passing of the ages, tree trunks were followed by drums, gongs, cannon, smoke signals, mirrors, lamp semaphore, rocket flare and, until the 19th century, courier. Then came the telegraph, the telephone, radio and television.¹⁸

¹⁶ S. O. Ekstrand, “Devices - The Hardware of Progress,” *The Record*, 1969, 175–80.

¹⁷ Bell Laboratories, “Seeing by Telephone... The Picturephone Story” (Bell Laboratories, 1964).

¹⁸ “In Brightness,” n.d., Collection No. 2: SBC Communications Inc. Record Group No. 5: Predecessor and Subsidiary Companies Southwester Bell Telephone Co. Box 82, Folder Picturephone Meeting Service (Videoconferencing, Teleconferencing), 1970-1983, AT&T Archives and History Center.

After this opening, the article then turns to the Picturephone. “Since the earliest days when man made his first crude attempts to communicate, few forms have captured his imagination as readily as ‘see-while-you-talk’ telephone service.” Despite the fact that the majority of the article focuses on the Picturephone II’s technological features, particularly its possession of a new and improved silicon tube, it still opens by insisting on the Picturephone’s connection to the history of human communication in all its forms. In a similar gesture, a 1970 AT&T article discussing the inauguration of Picturephone service in Pittsburgh also begins by tying the device to older communicative desires. With an Orientalist inflection, the article claims:

‘Let us move closer to the fire,’ the ancient Chinese were fond of remarking, ‘and see what we are saying.’ They understood the value of seeing the person one talks to, the feeling of increased intimacy that proximity brings, the extra dimension that facial expressions add to conversation. But since the dawn of man this kind of communication has been restricted to face-to-face encounters between people no farther than ten to twelve feet apart. Greater distances blurred the image and—until the invention of the telephone—restricted the voice.¹⁹

Again, this article presents the desire for audiovisual communication as an eternal and fundamental dimension of human interaction. The Picturephone with its capacity to extend “man’s...eye” alongside his voice promises to fulfill this long-held desire, bringing the intimacy of face-to-face interaction into the realm of mediated communications.

In their public demonstrations of the device, AT&T also worked to position the Picturephone within the history of communication technology. At the 1964 New York World’s Fair, the Picturephone debuted at the Bell Pavilion in its exhibit “Communications—Key to Universal Understanding.” The display, which consisted of a ride that took visitors through the history of communication, from smoke signals to satellite, and an array of different

¹⁹ AT&T, “Picturephone Service: Adding Sight To Sound,” June 1970, Collection No. 2: SBC Communications Inc. Record Group No. 5: Predecessor and Subsidiary Companies Southwestern Bell Telephone Co. Box 127, Folder Picturephone, 1969-1982 (2 of 2), AT&T Archives and History Center.

demonstrations, displays, and games, placed the Picturephone explicitly as a new exciting step in the trajectory of mediated human interaction in which Bell had long been a key player.²⁰ Displayed next to information on the life of Alexander Graham Bell, touch-tone telephones, undersea cables, and Telstar (Bell's newly launched communication satellite), the Picturephone was explicitly integrated into AT&T's corporate legacy and communications system. It was positioned as a key feature within a broader communications revolution that would transform the world and bring a "bright tomorrow for all."

This framing of the Picturephone also extended into other public demonstrations of the device. The first Picturephone call made from the New York World's Fair was to a similar Bell display in Disneyland. Like Bell's New York pavilion, Disneyland's exhibit also placed the Picturephone alongside other communication technologies, situating it again within the Bell network's history and vision of the future—as well as embedding the device within fantasies of familial recreation and American idealism synonymous with Disney's corporate identity. Moreover, shortly after Picturephone's initial debut, AT&T installed a series of Picturephone booths outside the fairgrounds in New York City, Chicago, and Washington, DC. In their promotion of this event, AT&T orchestrated a widely publicized call between fifteen-year-old Charles Winternitz, great-grandson of Thomas Watson, and twelve year old Edwin Grosvenor, great-grandson of Alexander Graham Bell.²¹ By connecting these two boys via Picturephone, AT&T recalled the very first telephone call between their great-grandfathers made nearly a hundred years before. As such, this publicity stunt constructed the Picturephone simultaneously

²⁰ AT&T, "Detailed Description of the Bell System Exhibition, Bell System Exhibit New York World's Fair," 1965, Collection No. 6: AT&T Corp., Record Group No. 4: Corporate Functions, Box. 19, Folder Bell System Exhibit: New York World's Fair 1964-1965 [press kit, 1965 season], 1965, AT&T Archives and History Center.

²¹ Pacific Northwest Bell, "Picturephone Service Inaugurated in Three Cities" (Pacific Northwest Bell, June 25, 1965), Collection No. 2: SBC Communications Inc. Record Group No. 5: Predecessor and Subsidiary Companies Southwestern Bell Telephone Co.Box 127, Folder Telephones, Picturephone, 1956-1981 (1 of 3), AT&T Archives and History Center.

as the natural ancestor to the telephone, tying it biologically to telephonic history, and a device with the potential to be just as revolutionary. Together, these various promotional tactics inscribed the Picturephone with Bell's legacy, constructing it not as a gimmick or novelty, but as an important communicative tool emerging from AT&T's long history of realizing humanity's deep desire to connect through technological progress.

In addition to situating video telephony within a broader history of communication, AT&T's public demonstrations also worked to enforce the Picturephone's connection with home and family. Rather than stage the first transcontinental video call from a government building or an office tower, AT&T demonstrated the Picturephone at fairs and amusement parks already associated with wholesome ideals of family-friendly entertainment. Alongside public demonstrations of calls between New York and Disneyland, fairgoers could also test out the device themselves. They could use the fair's Picturephone booths as one of the many "see-and-try" exhibits offered in the Bell pavilion.²² These booths (the design for which was replicated in public Picturephone installations outside the fairgrounds) were "modern and spacious," constructed "so family members, friends or business associates can also participate in the call."²³ They were rigged with microphones and speakers so that the Picturephone user did not need to speak into a telephone handset. This design decision worked to construct video telephony as a direct, almost unmediated simulation of face-to-face interaction. By removing the handset and allowing voice transmission to fill the entire space of the Picturephone booth, Picturephone calls could truly be a family affair, an experience designed to allow multiple people to speak and listen

²² AT&T, "New 'See and Try' Exhibits Featured at Bell Pavilion, Bell System Exhibit New York World's Fair," 1965, Collection No. 6: AT&T Corp., Record Group No. 4: Corporate Functions, Box. 19, Folder Bell System Exhibit: New York World's Fair 1964-1965 [press kit, 1965 season], 1965, AT&T Archives and History Center.

²³ Bell Laboratories, "Seeing by Telephone."

together.²⁴ In encouraging group conversations, AT&T positioned video telephony within the “family circle,” framing the device as a kind of virtual family visit enabled by the TV screen.²⁵

Thus, the construction of the Picturephone as a domestic technology capable of producing forms of familial closeness not only extended the telephone’s association with home and family. It also mobilized many of the discursive tendencies which had been essential to the marketing of television in the 1950s (and which would become central to promotion of the video camera).

Alongside facilitating family interaction, the Picturephone’s intimate and domestic qualities were also emphasized in the promotional imagery which surrounded it. While politicians and journalists were regularly photographed trying out the Picturephone at special press events, AT&T also pictured more mundane, familial uses of the technology. Promotional flyers and the company’s archives are full of images of parents, children, and grandparents using the device. In these photos, parents (most notably mothers) and children pose in New York, Chicago, or Washington’s Picturephone booths greeting a far away loved one (a father, an aunt, or a grandparent) with a smile, a wave, or a hand extended out towards the Picturephone screen.²⁶ In addition, although the Picturephone was largely contained within AT&T’s

²⁴ AT&T, “Futuristic Booths, Extensive Phone Network Server Fair Visitors, Bell System Exhibit New York World’s Fair,” 1965, Collection No. 6: AT&T Corp., Record Group No. 4: Corporate Functions, Box. 19, Folder Bell System Exhibit: New York World’s Fair 1964-1965 [press kit, 1965 season], 1965, AT&T Archives and History Center.

²⁵ Spigel, *Make Room for TV*, 36-72.

²⁶ AT&T Photo Service, *65-481*, 1964, Collection No. 6: AT&T Corp. Record Group No. 8: Audio-Visual Materials, Box 49, Folder Telephones--Picturephone--Model I (Oval)--In Settings, 1964-1965, AT&T Archives and History Center; AT&T Photo Service, *67-342*, cir 1964, Collection No. 6: AT&T Corp. Record Group No. 8: Audio-Visual Materials, Box 49, Folder Telephones--Picturephone--Model I (Oval)--In Settings, 1964-1965, AT&T Archives and History Center; AT&T Photo Service, *M866*, cir 1964, Collection No. 6: AT&T Corp. Record Group No. 8: Audio-Visual Materials, Box 49, Folder Telephones--Picturephone--Early Demonstrations (Bell System Picturephone Centers) 1964-1965 [folder 2 of 2], AT&T Archives and History Center; AT&T Photo Service, *Picturephone Mod I*, cir 1964, Collection No. 6: AT&T Corp. Record Group No. 8: Audio-Visual Materials, Box 49, Folder Telephones--Picturephone--Model I (Oval)--In Settings, 1964-1965, AT&T Archives and History Center; AT&T Photo Service, *Untitled*, cir 1964, Collection No. 6: AT&T Corp. Record Group No. 8: Audio-Visual Materials, Box 49, Folder Telephones--Picturephone--Model I (Oval)--In Settings, 1964-1965, AT&T Archives and History Center.

specialized booths and exhibition sites, the device was also photographed in simulated domestic spaces. Even before the Picturephone was released and its design finalized, various speculative mock-ups of the technology were regularly pictured in home-like settings.²⁷ In such images, men and more frequently women use various iterations of experimental Picturephones in different parts of the home—the living room, the “family planning area,” and even the bathroom.²⁸ After the Picturephone’s launch, this promotional tendency persisted. During its brief tenure in the American market, the Picturephone was never made available for home use, the thought being that this development would occur after its establishment as an essential business technology. However, AT&T and its subsidiaries continued to photograph the device in domestic settings. Like with images of the experimental Picturephone, these photographs often depicted women sitting inside surrounded by home furnishing (a couch, lamps, flowers etc.). They posed smiling into their domestic Picturephones, supposedly engaging in a conversation from the comfort of their own homes.²⁹ By presenting the Picturephone in domestic scenes, folding it into the family circle, and highlighting its use for intimate familial communication,

²⁷ This tendency also existed outside of AT&T. Speculative videophones were installed in Disneyland’s Monsanto House. Monsanto Chemical Company, *Picturephone of the Future*, 1958, Collection No. 6: AT&T Corp. Record Group No. 8: Audio-Visual Materials, Box 49, Folder Telephones--Picturephone--Experimental--In Settings, 1957-1971, AT&T Archives and History Center.

²⁸ Illinois Telephone Co., *3-188*, February 1962, Collection No. 6: AT&T Corp. Record Group No. 8: Audio-Visual Materials, Box 49, Folder Telephones--Picturephone--Experimental--In Settings, 1957-1971, AT&T Archives and History Center; Southwestern Bell Telephone Co., *59-416*, 1959, Collection No. 6: AT&T Corp. Record Group No. 8: Audio-Visual Materials, Box 49, Folder Telephones--Picturephone--Experimental--In Settings, 1957-1971, AT&T Archives and History Center; AT&T Photo Service, *59-417*, March 1962, Collection No. 6: AT&T Corp. Record Group No. 8: Audio-Visual Materials, Box 49, Folder Telephones--Picturephone--Experimental--In Settings, 1957-1971, AT&T Archives and History Center; AT&T Photo Service, *62-1106*, 1962, Collection No. 6: AT&T Corp. Record Group No. 8: Audio-Visual Materials, Box 49, Folder Telephones--Picturephone--Experimental--In Settings, 1957-1971, AT&T Archives and History Center; Illinois Telephone Co., *Equip--New Developments (Future)*, 1959, Collection No. 6: AT&T Corp. Record Group No. 8: Audio-Visual Materials, Box 49, Folder Telephones--Picturephone--Experimental--In Settings, 1957-1971, AT&T Archives and History Center.

²⁹ Western Electric, *F-140*, May 1965, Collection No. 6: AT&T Corp. Record Group No. 8: Audio-Visual Materials, Box 49, Folder Telephones--Picturephone--Model I (Oval)--In Settings, 1964-1965, AT&T Archives and History Center; Western Electric, *G-121*, April 1966, Collection No. 6: AT&T Corp. Record Group No. 8: Audio-Visual Materials, Box 49, Folder Telephones--Picturephone--Model I (Oval)--In Settings, 1964-1965, AT&T Archives and History Center.

AT&T repeatedly referenced fantasies that had long defined the both television set and the telephone. As such, it merged televisual discourses, telephonic histories, and domestic idealism into the promotion of visual-telephony.

In addition to emphasizing the Picturephone's domestic potential, AT&T stressed its capacity to overcome the inadequacies of other communication technologies. In a 1969 issue of *The Record*, Bell Laboratories in-house magazine, company vice-president Julius P. Molnar argued that although "real person-to-person conversation is still man's most complete and satisfying way of communicating," the Picturephone came closest to solving the shortcomings inherent in mediated interaction.³⁰ According to Molnar, unlike the letter writer or even the telephone caller, the Picturephone user "senses in his conversation an enhanced feeling of proximity and intimacy with the other party." Picturephone enthusiasts argued that by bringing together sound and image, the device's advanced mechanisms could replicate the pleasures and the power of face-to-face conversation. It could produce forms of intimacy and connection impossible with any other communication medium. By highlighting the Picturephone's capacity to authentically simulate live conversation, the promotional materials that surrounded its release marketed the medium as a mode of virtual travel, capable of overcoming spatial distance and eliminating the need for physical transportation. "Just as the telegraph overcame the distance barrier for written words, and the telephone for spoken words, so Picturephone service will bring people face-to-face across our continent and eventually over oceans."³¹ More than simply a window on the world, the Picturephone promised to act as door or even a vehicle, virtually bringing people together and bridging distant spaces.

³⁰ Julius P. Molnar, "Picturephone Service - A New Way of Communicating," *The Record*, 1969, 135.

³¹ *Ibid.*

This vision of the Picturephone with its capacity for virtual transport at the expense of physical movement functions like Paul Virilio's "last vehicle."³² In "The Last Vehicle," Virilio argues that the nineteenth and twentieth centuries have been repeatedly defined by the perpetual attempt to conquer space—to bring our bodies to the world and the world to our bodies. Sketching out a history of modernity, Virilio maps the different vehicles which have been developed over time to offer distinct modes of traversing space. Some of these devices, like the train and the automobile, promised to transport individual bodies over vast distances, moving them from one location to another with mechanical speed and industrial efficiency. While these tools for accelerating human movement provided an important means of traversing distances, Virilio argues that communication technologies (which Virilio construes as another class of vehicle) have also defined modernity's attempt to conquer space. Instead of moving bodies, these mediated vehicles provide a virtual form of travel. They give their users impressions and simulations of distance, offering audiences the feeling of transport without ever having to leave their living rooms. These technologies—which started with the window, persisted into cinema, intensified with television, and expanded alongside the proliferation of TV technology and computerized communication—have come to define modern and postmodern life. They have replaced "the conquest of space" with "the congestion of the mere *images* of space."³³ Eventually, Virilio contends that this static form of virtual travel will replace all physical movement. Fixed in our living rooms and surrounded by "the accessories, furniture, the hi-fi chain, radio telephone, telex, and video mobile that turn the means of long-haul transport into a means of transport in place, into a vehicle of ecstasy, music, and speed," our sense of time,

³² Paul Virilio, "The Last Vehicle," in *Looking Back at the End of the World*, ed. Dietmar Kamper and Christoph Wulf, Semiotext(e) (New York, NY: Columbia University Press, 1989), 106–19.

³³ *Ibid.*, 108.

space, duration, and distance will be uniquely structured by our proliferation of electronic media. “Domestic inertia” will set in, as “the more or less distant vision of our travels gradually recedes behind the arrival at the destination, a general arrival of images, of information that henceforth stands for our constant change of location.”³⁴

In many ways, the Picturephone embodies an extreme vision of Virilio’s electronic vehicle—much more so than commercial television whose virtual transportation is restricted to the transmission of mass entertainment and information. The Picturephone promises to provide individuals with a practical and direct form of travel, a means of virtually experiencing modes of in-person interaction impossible with any other form of electronic media. This fantasy, which for Picturephone’s proponents embodied one of its greatest advantages, does however carry with it dangers of both the domestic inertia articulated by Virilio and a somewhat fraught articulation of urban and suburban life. In his promotion of the Picturephone, Molnar argued that the device’s capacity to simulate in-person interaction would help the Picturephone operate as a means of virtual travel. He argued that this capacity would inevitably lead to the Picturephone’s use as a replacement for many face-to-face meetings. While never seeing it as a substitute for *all* in-person conversations, he claimed that with the Picturephone “the need for many ordinary trips for shopping, for conducting normal business, and for some social purposes should be greatly reduced.”³⁵ According to Molnar, the advantages of virtual-travel went beyond individual convenience. He argued that in reducing the frequency of everyday commutes, the Picturephone offered broad social benefits, including an end to traffic congestion and densely populated urban centers. More than simply represent another tool of communication, Molnar speculated: “It may in fact solve many social problems, particularly those pertaining to life in the big city.”

³⁴ Virilio, “The Last Vehicle,” 114.

³⁵ Molnar, “Picturephone Service,” 135.

Although such goals are laudable, they carry with them assumptions both as to the kind of American benefitted by the Picturephone and the type of urban arrangement best suited to US development. First, given the type of activities the Picturephone could supplant, most notably in-person meetings, the individual envisioned making the most extensive use of the device was not a working class laborer (whose manual work could not be completed virtually). It was a businessman or manager who could easily use the Picturephone to conduct personal meetings or perform supervisory tasks. Moreover, the constant references to the “social problems” of “dense populations centers,” “traffic jams,” and “life in the big city” suggest a domestic ideal rooted in low density spaces³⁶ and the ability to stay at home. Given both the price of the Picturephone and the kinds of labors it is imagined replacing, this vision of a Picturephone-enhanced future (though not intrinsically problematic) reinforces the city as a site of social problems, a place to avoid or to transform. Due to the history of redlining and white flight, such a position cannot be disentangled from the politics of class and race. As such, Molnar’s promotion of the Picturephone does not merely represent a benign suggestion of the device’s convenience, but envisions this technology in a way complicit in class and racial segregation. The modes of labor it supplants, the travels it eliminates, and the spaces its implementation promises to rearrange inscribe the Picturephone within a distinct spatial politics. Enabling virtual travel, the Picturephone promises to sequester the American middle and upper-middle class further into their homes. It gives them distance from those people and places that might violate the visions of order and comfort that mark their idealized conceptions of domestic living. Thus, even though Molnar posits the Picturephone as a technological solution for

³⁶ Here Molnar echoes thinkers like Lewis Mumford who advocated for a new kind of city in which the current urban arrangement was replaced by dispersed, low-density neighborhoods modeled after the Garden City model. Lewis Mumford, *The Culture of Cities* (San Diego, CA: Mariner Books, 1970).

everyone, what he really described is a remedy for a class of wealthy suburban managers and a fantasy for a new kind of urban arrangement that inscribes the city as a site of social problems.

Many of the newspaper articles reporting on the Picturephone's release followed similar rhetoric to that found in the Bell Laboratories and AT&T's promotional materials. Like the discussions found in corporate publications and press releases, news reports hailed the Picturephone as a technical triumph, the end result of a long history of experimentation and fantastic speculation. Journalists profiled the many practical and creative uses to which the device was being put. They noted that everyone from grandmothers to corporate executives were testing out AT&T's new product, making use of its uniquely *audiovisual* properties.³⁷ Journalists reported on how these dimensions were being used in the service of familial connection. They described the "proud grandmother [who] saw her grandson for the first time over the Picturephone"³⁸ or the "grandfather" who "showed up wearing a wig and made funny faces over the medium to his grandchildren in Washington," wishing not only to see their faces but to surprise and entertain them with dramatic gestures and visual gags.³⁹

Moreover, by adding sight to sound, the Picturephone enabled deaf Americans to use telephone services, allowing them to engage in immediate, interactive communication over vast distances for the first time. In an experimental exchange arranged by the New York University Center for Research and Advanced Training in Deafness Rehabilitation and AT&T, twenty deaf New Yorkers tried out the Picturephone. The event was heavily documented by AT&T's photo-service, a mark of the technology's capacity to remove barriers and facilitate all-forms of human

³⁷ E.g. Arthur Riley, "Picturephone Calls for Best Face Forward," *Boston Globe*, July 26, 1964, sec. A; "The Picturephone," *Baltimore Sun*, May 13, 1964.

³⁸ "Picturephone View-It-Yourself Proves Popular with Businessmen," *Hattiesburg America*, October 2, 1965, 16.

³⁹ "Picturephone Zooming Ahead," *Atlanta Journal*, November 28, 1965, 53.

communication.⁴⁰ Reports profiling the event described how deaf Americans enjoyed the Picturephone's audiovisual capacities: "Using sign language, finger spelling, speech and lip reading, the participants made plans for the Christmas holidays, inquired after each other's health and, in one case, held a birthday party."⁴¹ According to the newspaper articles of the day, many advocates for and members of the deaf and hard-of-hearing communities were impressed by the Picturephone. They argued that once it became widespread, it would open up new channels of communication, allowing them "to talk with their friends and business associates throughout the country."⁴²

In addition, reporters discussed how the Picturephone's addition of image to voice could be used to facilitate commercial ventures. In an interview with the *New York Times*' Leonard Sloane, William J. McKenna, executive vice president of the Hat Corporation of America, describes the benefits of conducting sales via Picturephone. "In selling merchandise, the most important thing is the face-to-face relationship. This method [selling by Picturephone] lets us demonstrate merchandise to customers miles and miles away whom you wouldn't ordinarily communicate with. We couldn't have accomplished more if we had been there in person."⁴³

Alongside conducting sales without the inconvenience of a business trip, journalists also echoed

⁴⁰ AT&T Photo Service, 64-473, cir 1964, Collection No. 6: AT&T Corp. Record Group No. 8: Audio-Visual Materials, Box 49, Folder Telephones--Picturephone--Early Demonstrations (Bell System Picturephone Centers) 1964-1965 [folder 2 of 2], AT&T Archives and History Center; AT&T Photo Service, 64-477, cir 1964, Collection No. 6: AT&T Corp. Record Group No. 8: Audio-Visual Materials, Box 49, Folder Telephones--Picturephone--Early Demonstrations (Bell System Picturephone Centers) 1964-1965 [folder 2 of 2], AT&T Archives and History Center; AT&T Photo Service, 64-491, cir 1964, Collection No. 6: AT&T Corp. Record Group No. 8: Audio-Visual Materials, Box 49, Folder Telephones--Picturephone--Early Demonstrations (Bell System Picturephone Centers) 1964-1965 [folder 2 of 2], AT&T Archives and History Center; AT&T Photo Service, *The Picturephone Opens an Entirely New Realm of Communications for the Deaf and Mute*, cir 1964, Collection No. 6: AT&T Corp. Record Group No. 8: Audio-Visual Materials, Box 49, Folder Telephones--Picturephone--Model I (Oval)--In Settings, 1964-1965, AT&T Archives and History Center.

⁴¹ "Deaf Take Part in Distant Calls on Picturephone Here," *New York Times*, December 15, 1968, 74.

⁴² Dr. Edna Simon Levine, director of deafness research, as quoted in "Deaf Take Part in Distant Calls on Picturephone Here," 74.

⁴³ McKenna as quoted in Leonard Sloane, "Picturephone Helps to Sell Over Hundreds of Miles," *New York Times*, January 3, 1965, sec. F, 9.

Molnar describing the Picturephone as providing an alternative to in-person meetings and eventually increasing the ability of executives to work from home. A 1965 article in the *Atlanta Constitution* profiling the different uses for the new device noted that on July 8th 1965 the Union Carbide Corporation “began a major trial using the see-while-you-talk medium for its executives to keep in touch between the company’s Chicago and New York operations,”⁴⁴ installing Picturephones in the company offices in order to facilitate videoconferences. According to a company executive quoted in the article, this Picturephone experiment was part of the company’s “continuing program to speed and improve communications for the purpose of increasing operational efficiency.”⁴⁵ Through such experiments, AT&T hoped to show that allowing for constant, complete contact, while cutting back on physical travel would radically improve business management, and thus, render the Picturephone a necessity for corporate America.

The Picturephone’s capacity to assist communication (particularly business communication) was further aided by the release of the Picturephone II in 1968. This new version of Bell Laboratories’ device had a larger screen, allowed its users to zoom the camera lens in and out, and interfaced directly with computers. These new devices were thus ideally suited not just for the display of faces but also for the transmission of documents and data. As such, they promised to bring about “a technological marriage between the computer and the Picturephone that is expected to add a whole new dimension to information retrieval, calculation and display.”⁴⁶ Now, Picturephone II subscribers could have instant access to a myriad of information, calculated and stored on computers, as well as display graphics and data in their video meetings. AT&T repeatedly promoted these new features. They were the subject of press

⁴⁴ “Picturephone Zooming Ahead,” 53.

⁴⁵ Sloane, “Picturephone Helps to Sell Over Hundreds of Miles,” 9; “Picturephone Zooming Ahead,” 53.

⁴⁶ William K. Stevens, “Picturephone Screen Shows Data, Not Faces,” *New York Times*, June 23, 1968, sec. F, 10.

releases, internal reports, and promotional pamphlets, as well as cited as central reasons behind the rise in commercial subscriptions following the launch of the newest model.⁴⁷ AT&T and Bell Labs saw this development as essential to a second communication revolution. They did not merely imagine a video-telephone. They envisioned a whole “communication interface” that would allow access to video, voice, graphics, and other information, facilitate “data transmission and computer networking,” and usher in a new era of instant, digital, networked communication.⁴⁸

In their promotion of the Picturephone, Bell Labs and AT&T repeatedly called up images of a future defined by the ubiquity of the Picturephone. In their press releases, marketing materials, internal documents, as well as many of the newspaper articles that profiled the new

⁴⁷ AT&T Public Relations Department, “Westinghouse Electric Corporation Picturephone Product Trial Press Kit” (AT&T, February 5, 1969), Collection No. 6: AT&T Corp. Record Group No. 4: Corporate Functions, Public Relations and Employee Information Department, 1969-1970, Box 22, Folder Westinghouse Electric Corporation Picturephone Product Trial, 1969, AT&T Archives and History Center; Thomas J. Kelly and Gabor P. Torok, “Picturephone,” *Bell Laboratories Record*, December 1973, Collection No. 2: SBC Communications Inc. Record Group No. 5: Predecessor and Subsidiary Companies Southwestern Bell Telephone Co. Box 127, Folder Picturephone, 1969-1982 (2 of 2), AT&T Archives and History Center; Bell System News Features, “New Picturephone Set Offers Unique Design Features” (AT&T, 1970), Collection No. 2: SBC Communications Inc. Record Group No. 5: Predecessor and Subsidiary Companies Southwestern Bell Telephone Co.Box 127, Folder Telephones, Picturephone, 1956-1981 (1 of 3), AT&T Archives and History Center; AT&T Information Department, “Bell Information File: Picturephone Service” (AT&T, January 1969), Collection No. 2: SBC Communications Inc. Record Group No. 5: Predecessor and Subsidiary Companies Southwestern Bell Telephone Co.Box 127, Folder Telephones, Picturephone, 1956-1981 (1 of 3), AT&T Archives and History Center; “Now You See It: See-While-You-Talk Picturephone Service Is on the Brink of Expansion. This New Dimension in Communications Promises More Varied Uses of the Phone Itself,” *Bell Telephone Magazine*, February 1969, Collection No. 2: SBC Communications Inc. Record Group No. 5: Predecessor and Subsidiary Companies Southwestern Bell Telephone Co.Box 127, Folder Telephones, Picturephone, 1956-1981 (1 of 3), AT&T Archives and History Center; “Giving Computers the Picture,” *Business Week*, July 13, 1968, Collection No. 2: SBC Communications Inc. Record Group No. 5: Predecessor and Subsidiary Companies Southwestern Bell Telephone Co.Box 127, Folder Telephones, Picturephone, 1956-1981 (1 of 3), AT&T Archives and History Center; Telephone News Line, “Picturephone/Computer Test” (Telephone News Line, June 14, 1968), Collection No. 2: SBC Communications Inc. Record Group No. 5: Predecessor and Subsidiary Companies Southwestern Bell Telephone Co.Box 127, Folder Telephones, Picturephone, 1956-1981 (1 of 3), AT&T Archives and History Center; Bell Telephone Laboratories Research and Development Unit, “New Picturephone Set ‘Zooms’ and Shows Graphics” (Bell Laboratories, December 14, 1967), Collection No. 2: SBC Communications Inc. Record Group No. 5: Predecessor and Subsidiary Companies Southwestern Bell Telephone Co.Box 127, Folder Telephones, Picturephone, 1956-1981 (1 of 3), AT&T Archives and History Center; AT&T Public Relations Department, “AT&T Public Relations Department, Press Release” (AT&T, December 14, 1967), Collection No. 2: SBC Communications Inc. Record Group No. 5: Predecessor and Subsidiary Companies Southwestern Bell Telephone Co.Box 127, Folder Telephones, Picturephone, 1956-1981 (1 of 3), AT&T Archives and History Center.

⁴⁸ Lipartito, “Picturephone and the Information Age,” 68.

device, the Picturephone was constructed as an invaluable communications system. It emerged as a device capable of transforming the operations, interactions, and management of everyday life—both at work and at home. With the Picturephone and especially the Picturephone II executives could check on their employees from the comfort of their home study, housewives could order the day's groceries in between vacuuming the living room and wiping down the kitchen,⁴⁹ and average “householders [could] retrieve information from a central data bank, or ask a computer to figure out their income tax, and then see the results on a home Picturephone screen where they could be studied at leisure.”⁵⁰ Although such services were largely confined to corporate offices, Bell Laboratories hoped that eventually they would be available everywhere, changing how private individuals engaged with technology, managed their day-to-day lives, and communicated with the world at large. As an audio-visual communication medium, the Picturephone promised to merge the power of television with that of telephony, provide an instant mode of virtual travel essential to facilitating interpersonal intimacy, assist commercial enterprise, and increase telephonic accessibility.

Video Telephony and the Threat of Intrusion

Although many positive and even utopian assessments of the Picturephone circulated in Bell Labs company journals, AT&T's advertising flyers, and the popular press, the Picturephone was also discussed in a far less flattering light. Alongside claims about its potential to connect people with their far away loved ones, facilitate sales, conduct meetings, simplify shopping, and

⁴⁹ I use these gender normative examples because, as I will discuss later in this chapter, despite the futuristic visions of technologically-assisted living, the newspaper reports, magazine articles, and promotional materials which expounded them still clung to normative gender roles and conservative constructions of the nuclear family, which repeatedly saw housework as the terrain of the housewife and corporate management as that of the breadwinning husband.

⁵⁰ William K. Stevens, “Picturephone Screen Shows Data, Not Faces,” *New York Times*, June 23, 1968, sec. F, 10.

expand interactive computerized communication, there were also concerns about the Picturephone's capacity to invade privacy, disrupt the home, increase emotional distance, and bring the spaces of labor and leisure too close together. As early as 1964, journalists (who were of course writing not to sell Picturephones but to report and reflect upon the new device) commented on its invasive dimensions. They offered words of caution or humorous commentaries about the problems that video calling was sure to bring. "Picture this," a *Boston Globe* article begins, "the telephone rings. A willowy blonde dashes from the shower. She picks up the phone. 'Smile,' the voice at the other end says, 'you're on Picturephone.' The blonde disappears from view in a dead faint."⁵¹ With this little opening sketch, the article points to one of the recurring anxieties that surrounded the device's release: the capacity of the Picturephone to catch you unaware and reveal your physical appearance, facial expressions, and home to whoever is on the other end of the line.

Rather than something completely new, the fear of the Picturephone's capacity for intrusion echoed many of the social and cultural anxieties that surrounded the release of the first telephones in the nineteenth century. In her history of the introduction of electric media and telephonic communication into American life, Carolyn Marvin describes how to both experts and popular writers, the telephone seemed poised to threaten domestic life.⁵² Though promoted as a means of facilitating business communication and household management, the new technology was embraced as a domestic medium. As such, it blurred boundaries between the private and public spheres, threatening to betray intimate communication and encourage undesirable connections. The idea that anyone, regardless of race or social class, could make a telephone call

⁵¹ "Smile, You're on Picturephone," *Boston Globe*, May 31, 1964, 54.

⁵² Carolyn Marvin, *When Old Technologies Were New: Thinking about Electric Communication in the Late Nineteenth Century*. (New York, NY: Oxford University Press, 1988), 63-108.

to anyone else seemed poised to violate those boundaries and divisions so essential to American, middle class, domestic ideology. Stories circulated about unsanctioned, cross-class and interracial courtship, as concern grew that young women would be seduced into uncontrolled and inappropriate telephonic unions with men unsanctioned by their parents. Thus, the (white, bourgeois) family—whose very stability was rooted in the insistence of the division of insiders and outsiders—was repeatedly constructed as the sacred terrain that needed to be defended from those individuals, particularly those working class and non-white individuals whose access to electric communications gave them unprecedented capacity to intrude its boundaries.⁵³

Although the anxieties about the telephonic capacity to bring strangers into the home, giving them new kinds of access to people and places normally kept at a distance, endured with the Picturephone, the specific form of that fear changed. Unlike the traditional telephone whose inherent capacity to conceal a caller's identity implied the threat of cross-class or cross-race masquerade, it was the Picturephone's capacity to render visible that produced new and specific fears of contact and exposure. Indeed, the narrative of the unsuspecting Picturephone user who is confronted with a Picturephone call moments after leaving the bath, wrapped in nothing but her towel appears repeatedly in newspaper articles profiling the new device, an undeniable testament to the problems that the technology was sure to bring.⁵⁴ Headlines like "Check Your Lipstick Before Using New Telephones," "Picturephone Will Invade Privacy," and "Cameras Are Watching; So Try To Look Pretty" circulated, reflecting on the Picturephone's power to render public what had once been private. Now individuals, who previously could come home, relax,

⁵³ Marvin, *When Old Technologies Were New*, 63-108.

⁵⁴ Charles G. Griffo, "Cameras Are Watching; So Try To Look Pretty," *Indianapolis Star*, June 30, 1964, 14; "How About a 'Picturephone'?", *Call-Leader*, June 1, 1964, 2; Edith Herman, "Life and Death of the Home Picturephone," *Detroit Free Press*, April 21, 1978, sec. C, 1; Eleanor Page, "Picturephone Might Have Its Hangups," *Chicago Tribune*, January 25, 1970, sec. 4, 9; Ruth Millett, "Picturephone Will Invade Privacy," *News Journal*, September 24, 1964, 39; Byron W. Hess, "Some Will Like Them," *Daily Journal*, March 21, 1966, 4; "The Picturephone: Ingenious or Nuisance?," *Hartford Courant*, July 9, 1970, 18.

take off their make up or put on a bathrobe were supposed to be “dressed and shaved at any hour from 6 a.m. to midnight” and ensure their home was “always tidy.”⁵⁵ Women would be obliged to keep “a mirror and make-up bar beside the phone so that they can check their hair and lipstick before saying ‘Hello.’”⁵⁶ And teenage girls would have to make sure that they removed their curlers and changed out of their nightgowns or old sweatshirts before answering the phone.⁵⁷

Alongside these new demands on one’s physical appearance (demands which were largely placed on women), the Picturephone also obliged new kinds of telephonic performance. In particular, now one could be seen as well as heard, individuals would have to ensure that they looked as well as sounded like they were paying attention. Under this new level of scrutiny, Picturephone users would have to stay still and look attentively at their screens, their every movement and facial expression monitored. The ability to let one’s mind wander, to paint one’s nails, write a shopping list, check the mail, or mouth a comment to someone else, so essential to coping with a boring or long-winded caller on the auditory telephone would be gone.⁵⁸ Now, one would have to truly listen or risk offending a caller. Indeed, with the Picturephone, everyone would have face the “frightening” reality of matching “your facial expressions with your words in all business affairs.” While “in face-to-face conversation,” people might be “accustomed to such a match but a telephone conversation can be something else. A matter in which you have no interest can produce a very bland facial expression, even though you may be treating the caller

⁵⁵ “Picturephone Zooming Ahead,” 53.

⁵⁶ Ruth Millett, “Picturephone Will Invade Privacy,” *News Journal*, September 24, 1964, 39.

⁵⁷ “How About a ‘Picturephone’?,” *Call-Leader*, June 1, 1964, 2; Millett, “Picturephone Will Invade Privacy,” 39; “Picturephone Zooming Ahead,” 53.

⁵⁸ Millett, “Picturephone Will Invade Privacy,” 39.

with certain verbal cordiality. What the Picturephone does is make you much more obedient to the actual reality of your face.”⁵⁹

In addition to exposing inattention, the Picturephone also threatens to reveal other realities, which according to many of the articles’ authors might be better left hidden. In a future defined by the Picturephone, workplace and domestic conflict seem inevitable. As William O. Dobler asks in his editorial profiling the new device: “What happens when the boss calls and, for some reasons or other, decides he can ‘see’ that you are not working? And when the wife calls and ‘sees’ that you are not paying attention, are smoking too much or some other thing.”⁶⁰ Or beyond this, “Suppose hubby picks up his phone at the office only to realize, too late, that wifey is on the other end of the line and his secretary happens to be ‘too close’ to hubby in the background.”⁶¹

Even if one does not have to worry about his or her workplace or marital shortcomings being exposed, the Picturephone also threatens to put an end to many white lies and excuses that define everyday telephone interaction. With this new device, individuals can no longer bend the truth to get out of a telephonic invitation or smooth over an awkward interaction.

Out of the window go all the excuses, all the tergiversations, all the polite fictions. ‘Sure I’m ready to go... No, we hadn’t sat down to supper yet... We were just doing our homework... John would love to come too... It’s been nice chatting with you... You didn’t disturb us one bit.’ And out go all the ideals, when a swain sees what his date looks like two hours before date time. And the proprieties: sooner or later one is bound to answer the phone dripping and with a towel insecurely hung about one.

The Picturephone—with its unforgiving eye and almost panoptic power—threatens to expose realities long kept concealed and in response, transform everyday behavior in ways that might be more damaging than they are fulfilling.

⁵⁹ William O. Dobler, “In Perspective,” *Lincoln Star*, September 15, 1970, 4.

⁶⁰ *Ibid.*

⁶¹ “How About a ‘Picturephone’?,” 2

Even though many of these articles noted that Bell engineers did provide Picturephone users the option to turn off their video screen, they did not think this would necessarily change the device's capacity for intrusion. They speculated that many people (except perhaps those so organized they could be seen without shame) would forget to shut off their Picturephone camera and that perhaps the absence of the video image might be as damning as its presence. For it begs the question, if they were not willing to be photographed, what exactly were they doing? Indeed, as Gail Lopaze, an employee at Pittsburgh's Mercy Hospital which had installed Picturephone service to help with its internal communication and operations management, said when asked what she would think if someone turned off his or her image: "Well, I'd wonder why...and I'd probably ask him about it."⁶² With the Picturephone, individuals were now subjected to a new level of scrutiny. Confronted with video call, they not only needed to execute an auditory performance but a visual one, keeping their home, their behavior, and their selves ready for televisual presentation.

Picture(phone)ing Women: The Gendered Politics of Video Telephony

Whether emerging from Bell Laboratories publications or the popular press, the rhetoric that surrounded the Picturephone was not neutral. It was imbedded within discourses of gender and power which shaped the technology's cultural and political contours. Women featured prominently in this discourse, depicted as Picturephone users and envisioned as its most common victims. Although appearing in many different aspects of the Picturephone's rhetoric, women were represented in ways which more often than not reinforced, rather than subverted, the norms,

⁶² Cindy Skalsky, "Mr. Seims' Picturephone," *Detroit Free Press*, December 13, 1970, sec. B, 4.

histories, and representational practices that have long defined the gendered dynamics of both the television and the telephone.

Many of the advertisements and promotional materials for the Picturephone featured images of women. While this may seem surprising, especially given its frequent discussion as a business technology, this promotional strategy has a long history. According to Haidee Wasson, “Women, or at least images of women, were key to the ways that...technologies were transformed from odd gadgets into mass-marketed, domestic objects,” appearing in advertisements for film cameras, 16 mm movie projectors, radios, and TV sets.⁶³ The Picturephone’s promotional images followed this tendency, often depicting women as both the initiators and the receivers of video calls. Photographs in magazine articles, advertisements, and AT&T press packets featured images of pretty well-dressed women, mostly young, and almost exclusively white, calling one another, respectable-looking men in suits, affectionate looking grandmothers, or excited children who smiled or pointed enthusiastically at the virtual maternal image occupying the Picturephone screen.⁶⁴ The women in these images ranged in their

⁶³ Haidee Wasson, “Electric Homes! Automatic Movies! Efficient Entertainment!: 16mm and Cinema’s Domestication in the 1920s,” *Cinema Journal* 48, no. 4 (2009): 19, doi:10.1353/cj.0.0133.

⁶⁴ E.g. Bell Laboratories, “How to Use Your... Picturephone Set”; Ohio Bell Telephone Company, *16010-2*, June 27, 1967, Collection No. 6: AT&T Corp. Record Group No. 8: Audio-Visual Materials, Box 49, Folder Telephones--Picturephone--Model I (Oval)--In Settings, 1964-1969, AT&T Archives and History Center; AT&T Photo Service, *64-465*, cir 1964, Collection No. 6: AT&T Corp. Record Group No. 8: Audio-Visual Materials, Box 49, Folder Telephones--Picturephone--Model I (Oval)--In Settings, 1964-1969, AT&T Archives and History Center; AT&T Photo Service, *Telephone Picturephone - Karen Calhoun*, September 30, 1964, Collection No. 6: AT&T Corp. Record Group No. 8: Audio-Visual Materials, Box 49, Folder Telephones--Picturephone--Model I (Oval)--In Settings, 1964-1969, AT&T Archives and History Center; AT&T Photo Service, *Untitled*; 1964, Collection No. 6: AT&T Corp. Record Group No. 8: Audio-Visual Materials, Box 49, Folder Telephones--Picturephone--Model I (Oval)--In Settings, 1964-1969, AT&T Archives and History Center; AT&T Photo Service, *64-328*, cir 1964, Collection No. 6: AT&T Corp. Record Group No. 8: Audio-Visual Materials, Box 49, Folder Telephones--Picturephone--Model I (Oval)--In Settings, 1964-1969, AT&T Archives and History Center; Western Electric, *E-242*, September 1964, Collection No. 6: AT&T Corp. Record Group No. 8: Audio-Visual Materials, Box 49, Folder Telephones--Picturephone--Early Demonstrations (Bell System Picturephone Centers) 1964-1965 [folder 2 of 2], AT&T Archives and History Center; AT&T Photo Service, *64-482*, 1964, Collection No. 6: AT&T Corp. Record Group No. 8: Audio-Visual Materials, Box 49, Folder Telephones--Picturephone--Early Demonstrations (Bell System Picturephone Centers) 1964-1965 [folder 2 of 2], AT&T Archives and History Center; “See You Sooner By Phone,” *Illinois Bell News*, December 1958, Collection No. 5: Ameritech Corporation Record Group No. 5:

engagements with the Picturephone. Sometimes the women photographed were simply Picturephone users, captured seemingly spontaneously in the midst of testing out the new device in one of AT&T's Picturephone booths. Other times the women depicted were AT&T employees. There were images of exhibition 'hostesses' whose job it was to show off the Picturephone's technical and communicative capacities, and photographs of models hired by AT&T to pose alongside the new technology for a magazine article, press release, or advertising flyer. Regardless of how they used the Picturephone in these photographs, women's bodies were regularly shown on either end of the Picturephone call. They dialed numbers, looked into the monitor, and appeared smiling on the phone's built-in TV screen—a model of friendly, inviting (white) femininity.

These promotional techniques functioned to make the Picturephone appear less strange. While the device's futuristic qualities were repeatedly marked in the reports surrounding its release, these images embedded the technology with familiar, softened visions of telephonic communication. On the one hand, this advertising strategy helped to ally the new device with the domestic sphere. Promotional images depicted women, long conceived as the moral guardians of family life in charge of the sanctity and spiritual wealth of the home,⁶⁵ as the Picturephone's

Predecessor and Subsidiary Companies The Ohio Bell Telephone Co. Box 94, Folder Telephones--Picturephone, 1968-1969 [2 of 3], AT&T Archives and History Center; Western Electric, "Picturephone Advertisement," June 1968, Collection No. 5: Ameritech Corporation Record Group No. 5: Predecessor and Subsidiary Companies The Ohio Bell Telephone Co. Box 94, Folder Telephones--Picturephone, 1968-1969 [2 of 3], AT&T Archives and History Center.

⁶⁵ This connection between women, family, morality, and domestic space stems from the nineteenth century when the home—particularly that belonging to members of the bourgeois class—was conceptualized as a space of privacy, intimacy, and domesticity, completely separate from the public realms of economic production and civil society. With the growth of industrial capitalism and urbanization throughout the 1800s, the middle-class home came to be understood as an increasingly important site of retreat, sanctuary, and moral restitution. Gender was deeply inscribed within the decoration, design, and ideology of the bourgeois interior. While middle-class men could easily flit between public and private spaces, working outside of the home, engaging in economic exchange, and attending commercial entertainments, bourgeois women, particularly during the first half of the nineteenth century, were often confined within the interior, their participation in the public sphere deemed dangerous and improper. As such, the home became increasingly construed as a feminine space. Women, conceptualized as "moral guardians"

natural users. As such, they helped embed the device within the everyday technologies and practices of domestic living, following a similar visual rhetoric as displayed by advertisements for TV sets in the 1950s and video recorders in the 1960s and 1970s. Allied with images of women, the Picturephone was presented as the natural extension of the telephone and the television which would fit seamlessly into the spaces and routines of the home, helping enhance domestic life and family communication.

On the other hand, the prominence of women in these advertisements functioned to embed this new audiovisual communication device in older ideas of telephonic labor, which historically had been dominated by young women working as switchboard operators.⁶⁶ The telephone industry, whose decision to hire women stemmed partly from the fact they could hire them at a fraction of the wages they would have to pay men working in a similar position, insisted on the uniquely feminine qualities of telephonic labor. As Michèle Martin argues in her history of gender, labor, and the telephone, the late nineteenth and early twentieth century trade publications and popular press reports about female telephone operators contended that women shaped by their “upbringing in Victorian society” had “all the necessary qualities to be a perfect operator ‘gifted’ with ‘courtesy,’ ‘patience,’ and ‘skillful hands’... She possessed a ‘good voice

and tasked with instilling “the family with Christian values,” were charged with keeping their houses clean, conformable, and beautiful (Spigel *Make Room for TV*, 13). Although the strict Victorian moral, behavioral, and aesthetic codes that had dominated British and American middle-class life throughout much of the 1800s were significantly relaxed by the turn of the century, enabling women to participate in certain public forms of entertainment and commercial modes of consumption, aspects of Victorian domestic ideology persisted. Up into the postwar period, women remained tied to both the interior and the family, defined by their roles as wife, mother, and homemaker. For more see: Leora Auslander, “The Gendering of Consumer Practices in Nineteenth-Century France,” in *The Sex of Things: Gender and Consumption in Historical Perspective*, ed. Victoria Furlough De Grazia (Berkeley: University of California Press, 1996), 79–112; Deborah Cohen, *Household Gods: The British and Their Possessions* (New Haven, CT: Yale University Press, 2006); Spigel, *Make Room for TV*.

⁶⁶ Kenneth Lipartito, “When Women Were Switches: Technology, Work, and Gender in the Telephone Industry, 1890-1920,” *The American Historical Review* 99, no. 4 (1994): 1074–1111; Michèle Martin, “Hello Central?”: *Gender, Technology, and Culture in the Formation of Telephone Systems* (McGill-Queen’s Press - MQUP, 1991).

and a ‘quick ear,’ and was ‘alert,’ ‘active,’ ‘even-tempered,’ ‘adaptable,’ and ‘amenable.’”⁶⁷

Citing this industrial history, the Picturephone’s promotion mobilized the image of the female telephone operator. It used her smiling face to remind consumers of the feminine understanding and soothing voice that once defined telephone communication. Thus, by promoting the Picturephone with images of women’s bodies, AT&T sought to ally video telephony with fantasies of domesticity, as well as mobilize nostalgic ideas of the female voice and feminine labor that had long worked shape and soften fantasies of telephone technology.

The use of images of women in the promotion of the Picturephone also constructed the device as a new tool for the visual display of the female body on screen. Now the telephone operator, secretary, housewife, or grandmother—once only heard—could be seen; her body thus subjected to the same demands as her voice. This connection between the Picturephone and the display of the female body was so essential to AT&T’s promotional strategy that it permeated even the most mundane aspects of the device’s visual representation. To simplify the process of photographing Picturephones and relieve photographers from picturing the device mid-operation, AT&T simulated the appearance of a Picturephone call by inserting a still photograph of a woman’s smiling face behind the Picturephone’s glass screen. These images were illuminated and then photographed, giving the appearance that the device was operational. Although these background photographs changed over the years, featuring different women whose hairstyles reflected the varying fashion trends of the 1960s and 1970s, they held certain enduring properties. Not only were these images almost exclusively of women, the women photographed were young, pretty, and white, smiling at the camera as if delighted to speak to whoever was on the other end of their Picturephone call. These images made their way into advertisements,

⁶⁷ Michèle Martin, “*Hello Central?*,” 59.

articles, service flyers, and instructional manuals.⁶⁸ Thus, even when the Picturephone was depicted without a user, AT&T promoted the machine by placing an image of a young attractive woman on its electronic screen, her smiling face the visual analogue to the soothing, feminine voice long associated with the female telephone operator.



Figure 2.1 Picturephone Model II, AT&T Archives and History Center, San Antonio, TX

⁶⁸ Bell Laboratories, "How to Use Your... Picturephone Set"; Bob Cislo, *70-1914-1*, May 20, 1970, Collection No. 6: AT&T Corp. Record Group No. 8: Audio-Visual Materials, Box 50, Folder Telephones--Picturephone--Model II (Square), 1968-1977, AT&T Archives and History Center; Michigan Bell Telephone Photographic, *69-481-6*, July 9, 1970, Collection No. 6: AT&T Corp. Record Group No. 8: Audio-Visual Materials, Box 50, Folder Telephones--Picturephone--Model II (Square), 1968-1977, AT&T Archives and History Center; Illinois Bell Telephone Co., *TX-14768*, cir 1964, Collection No. 6: AT&T Corp. Record Group No. 8: Audio-Visual Materials, Box 49, Folder Telephones--Picturephone--Model I (Oval)--In Settings, 1964-1969, AT&T Archives and History Center; Illinois Bell Telephone Co., *Untitled*; AT&T Photo Service, *65-858*, 1967, Collection No. 6: AT&T Corp. Record Group No. 8: Audio-Visual Materials, Box 49, Folder Telephones--Picturephone--Model I (Oval), 1964-1967, AT&T Archives and History Center; Illinois Bell, "Picturephone Introduction" (Illinois Bell, cir 1968), Collection No. 2: Ameritech Corporation Record Group No. 5: Predecessor and Subsidiary Companies; Illinois Bell Telephone Co. Box 41, Folder Telephones--Picturephone, 1956-1981, AT&T Archives and History Center.

This desire to see as well as hear the woman on the other end of the line was not only essential to AT&T's promotional and technical materials, it was also reflected in the Picturephone's journalistic discourse. Charles Smith of the *Clarion-Ledger* makes this desire explicit, opening his profile on the Picturephone by stating: "A pretty girl makes for a more pleasant telephone conversation. And when you can see the girl while you talk with her it becomes an intriguing situation."⁶⁹ Though less explicit, other articles repeatedly reference this capacity for female exposure, whether by describing Kathy Walsh (a young woman who thinks a Picturephone will improve her dating life) as "18 years old and blonde and...good-looking enough not to need blind dates"⁷⁰ or pithily comparing the Picturephone to a "call girl service."⁷¹ In addition, every description of a woman caught unawares, in which her unkempt hair and unclothed body exposed by the Picturephone's gaze, is marked by a note of voyeuristic pleasure. It is no coincidence that the blonde caught in her towel is "willowy"⁷² or that the Picturephone is imagined to ring after you "have been sunning yourself in one of the new topless suits."⁷³ Indeed, the Picturephone's capacity for the creation voyeuristic pleasure even encouraged a reporter to suggest that lonely users "might try dialing some 'wrong' numbers on your picturephone" and "make some interesting new acquaintances of the opposite sex."⁷⁴ And a skeptical businessman joked that he would purchase a Picturephone only when one is installed "in Racquel Welch's bathroom."⁷⁵

⁶⁹ Charles Smith, "Picturephone Uses Eyes As Well As Voice," *Clarion-Ledger*, June 23, 1973, 23

⁷⁰ Edward N. Eisen, "Picturephone User Has Only 17 Names He Can Look Up," *Philadelphia Inquirer*, August 23, 1970, 1.

⁷¹ George Dixon, "Picturephone, Call Girl Services Bared Together," *Pensacola News Journal*, July 7, 1964, 4.

⁷² "Smile, You're on Picturephone," 54.

⁷³ Charles G. Griffo, "Cameras Are Watching; So Try To Look Pretty," *Indianapolis Star*, June 30, 1964, 14.

⁷⁴ "How About a 'Picturephone'?", 2.

⁷⁵ Eisen, "Picturephone User Has Only 17 Names He Can Look Up," 1.

Additionally, the Picturephone's capacity to make women appear on screen was equated with a more general desire to see oneself on television—echoing the rhetoric that surround the promotion of video cameras and recorders I outlined in chapter one. While this fantasy was more often implied than stated explicitly, an advertisement from 1968 (Figure 2.2), which ran both in *Newsweek* and *Time*, brought this desire front and center. It promoted the device through a Picturephone screen image of fashionable young woman holding a telephone to her ear next to the tagline “Western Electric is Crossing a Telephone with a TV Set... Someday you'll be a star!”⁷⁶ Through this rhetoric, the Picturephone was conceived not only as an extended telephone, but also as the fulfillment of a deep-rooted televisual impulse, giving everyone (and especially every woman) the opportunity to appear on screen and become a kind of ‘TV star.’

The longings for stardom and celebrity mobilized by the Picturephone and represented through the image of the woman on screen were also invoked in a humorous 1964 *Los Angeles Times* article entitled, “The Picturephone—What Hath AT&T Wrought?” In this article, columnist Art Seidenbaum predicted that the Picturephone would usher in “a whole new form of show business through the world's most personal communications medium.”⁷⁷ Throughout his article, Seidenbaum imagines all the ways in which the Picturephone could transform everyday telephonic communication, giving even the most mundane communications an element of “show biz.” Following the Hollywood logic demanded by the Picturephone, Seidenbaum's future entails new aesthetic demands. Not only does he joke that telemarketers will also be actors, promoting their various products from a constructed set. With visual-telephony he contends that “the institution of the answering service changes radically.” Imagining this Picturephone

⁷⁶ Western Electric, “Picturephone Advertisement.”

⁷⁷ Art Seidenbaum, “The Picturephone—What Hath AT&T Wrought?,” *Los Angeles Times*, July 12, 1964, sec. B, 11.

enhanced future, Seidenbaum's sketches a world in which "beautiful girls" serve as personal telephone attendants for the rich and important. He envisions a scenario in which "Billy Wilder calls Harold Mirisch but no Mirisch is home. Instead, Belle Facsimile, the magnificent message-taker, appears before Wilder. She is articulate, well-chiseled and emotionally involved in helping a caller carry the word."⁷⁸ In Seidenbaum's sketch, the smitten Wilder is determined to devise a script for "the so reasonable Miss Facsimile" only to meet Miss. Starr, another beautiful telephone answerer in charge of receiving the Picturephone calls for a movie producer. Ultimately Wilder works to move both women from the Picturephone screen to the movie screen, writing a script to showcase them together.

Although Seidenbaum's article represents a sardonic commentary on the future of visual-telephony, it also presents a telling gendered narrative of visibility, technology, power, and stardom. In his story, young beautiful women become the telephone answering service for rich and powerful men. They are markers of masculine importance, enhancing the status of their employers, and technologically mediated images to be consumed and gazed upon by other male callers. As desirable screen images subject to the male gaze, they are one step away from cinematic and televisual stardom, a step which Wilder is only too happy to take. Thus, Seidenbaum constructs the Picturephone as more than simply the future of telephony, but another in a long line of technologies dedicated to the display and transmission of the female image.

⁷⁸ Art Seidenbaum, "The Picturephone," 11.

Western Electric is crossing a telephone with a TV set.



Someday you'll be
a star!

What you'll use is called, simply enough, a Picturephone® set. Someday it will let you see who you are talking to, and let them see you.

The Picturephone set is just one of the communications of the future Western Electric is working on with Bell Telephone Laboratories.

Western Electric builds regular phones & equipment for your Bell telephone company. But we also build for the future.

9 JUN 1968

 **Western Electric**
MANUFACTURING & SERVICE DIV. OF BELL SYSTEM

Figure 2.2 Western Electric "Picturephone Advertisement," 1968, Courtesy of AT&T Archives and History Center

Beyond the prominence of the female image in the Picturephone's promotion, the fears and anxieties that clustered around the device were also invested with a gender politics. Although the popular reports that surrounded the medium did include some men who expressed concern over being caught unawares by the Picturephone screen, the predominately male authors of the majority of these accounts envisioned women as the primary victim's of the Picturephone's intrusions. From the *Boston Globe's* "willowy blonde"⁷⁹ captured by the Picturephone as she exits the shower to the *News Journal's* woman who must keep "a mirror and make-up bar beside the phone"⁸⁰ to the *Atlanta Journal's* teenage girl who can no longer talk to her boyfriend first thing in the morning (when she is "without makeup and in curlers, and wearing her grandmother's nightgown"⁸¹), speculative narratives of women exposed by the Picturephone's obtrusive gaze peppered the journalistic rhetoric surrounding the technology's release.

These accounts of women's horror at their unclothed bodies or unmade up faces suddenly revealed by their Picturephone camera reinforce the imperative that women, even more than men, must always police their appearance. For many writers, the danger (and the thrill) posed by this new technology lay in its ability to intrude into private life and expose that which is supposed to remain hidden, particularly the uncoiffed, undressed, and unmade up female body. Thus by allowing for domestic space to be rendered visible to an outside caller, the Picturephone represented a new mode of enforcing feminine beauty standards. Rather than relaxing expectations of household cleanliness and personal appearance, these visions of the future expected women to extend the management of their appearance further into their private spaces.

⁷⁹ Riley, "Picturephone Calls for Best Face Forward," 8.

⁸⁰ Millett, "Picturephone Will Invade Privacy," 39.

⁸¹ "Picturephone Zooming Ahead," 53.

As their bodies and their homes were rendered increasingly visible to the Picturephone's ever-present camera, they were subjected to heightened levels of visual scrutiny that demanded new forms of domestic and personal labor.

In promising to connect individuals, simulate face-to-face interaction, and close spatial distance, the Picturephone threatened intrusion as much as it promised connection. Although this exposure would presumably affect men and women equally, the images, promotional tactics, and journalist discourse that surrounded the device were gendered. Women were repeatedly depicted as the subjects of the Picturephone's gaze, constructed as aesthetic, inviting feminine objects to be looked at, or victims of its new exposure, forcing their heightened attention to appearance and suggesting a thrill at their inevitable moments of failure. As such, the discourses that surrounded the Picturephone perpetuated longstanding gendered norms of feminine self-presentation and masculine viewing pleasure. By adding sight to sound, the Picturephone did more than simply enrich telephonic communication, it promised to render the private public, offering new voyeuristic possibilities and demanding that all people, especially women, live ready to appear on screen.

The End(s) of Picturephone and the Beginning(s) of Videophone

Despite the optimism and the fears that surrounded its initial release, both of which always insisted that it would one day transform everyday life, the Picturephone was a commercial failure. From its earliest days, the device was unable to generate a sufficient number of users. Shortly after the installation of Picturephone booths in New York City, Chicago, and Washington, interest in the device dwindled. While the booths began with seventy-one clients during their first four months of operation, they had none by the time they shut their doors in

1970.⁸² Initially, the launch of the Picturephone II in 1968 with its enhanced data and image transmission capacity seemed to indicate new applications for the device, striving to open doors for its expanded use. However, it too failed to make a lasting impact. In 1970, Pittsburgh became the first city to have Picturephone service made available, followed shortly by Chicago. However, by 1972, a mere thirty-two sets remained operational in Pittsburgh. Chicago, though peaking in 1973 with over four-hundred and fifty sets (Picturephone service in Chicago was cheaper than in any other city), also experienced a rapid decline in interest. By 1978, the majority of the city's Picturephone users had canceled their services, leaving the only remaining Picturephones relegated to "Bell offices."⁸³

According to Lipartito, narratives of the Picturephone's failure have often pointed to an incompatibility between Bell Labs' design and technological vision and the Picturephone's potential consumers' needs and desires. In particular, commentators have pointed to its high cost and undeniable intrusiveness. The cost of Picturephone service stemmed in large part from the limited bandwidth of the existing telephone system.⁸⁴ In the 1960s, the average American home was serviced by one telephone circuit, sufficient to transmit the audio signals of the common telephone but unable to handle the quantity of information necessary in a Picturephone call. In order for Picturephone service to work, consumers would need to update their homes adding two additional circuits to accommodate the transmission of video signals. The cost of such an expansion was high. Beyond the price of the set itself, "Customers paid line charges of \$1,200 per year at a time when the median family income was \$9,800."⁸⁵ In newspaper articles

⁸² Lipartito, "Picturephone and the Information Age," 52.

⁸³ Ibid.

⁸⁴ Ibid, 58.

⁸⁵ Kenneth Lipartito, "Picturephone and the Information Age," 58.

commenting on the Picturephone's demise, the most common assessment was cost.⁸⁶

Journalists frequently mentioned how, despite the initial fanfare and desire for Picturephone services, its exorbitant prices made it impossible for the average person to use regularly, let alone install it in their homes. Indeed, the Picturephone's financial inaccessibility transformed it into an emblem of failure, a testament to what happens when business people are out of touch with their consumer base. By the 1980s, AT&T executives even echoed this belief. As Douglass T. Davidoff of the *Indianapolis News* describes it in his profile of Richard C. Notebaert, Bell Indiana's new president: "Notebaert finds the picture-phone more amusing than impressive. It's an anachronism, he says, from a time when engineering, not customers, ruled the telephone industry."⁸⁷

In addition to cost, privacy has been cited as another central cause of the Picturephone's failure. Just as electronics reporters and cultural critics expressed concern over the Picturephone's capacity to invade personal privacy and expose people, spaces, and behaviors better left unseen, when profiling the Picturephone's novelty and power in the mid-1960s and early-1970s, these negative qualities were also cited in articles following the device's demise.⁸⁸ Certain reporters argued that even if the price of video-telephony was reduced so that the average individual could participate in the service, the technology would be bound to fail. Reflecting on the Picturephone's demise and cautioning against any future attempts to resuscitate it, *Los*

⁸⁶ "'Buyer Beware' on Phone Calls," *Journal News*, July 22, 1985, sec. A, 6; Douglass T. Davidoff, "Change Has Become Norm, Says New Bell Chief," *Indianapolis News*, September 19, 1989, sec. D, 3; Caroline E. Mayer, "Coca-Cola Joins List of Failed 'New' Ideas," *Cincinnati Enquirer*, July 14, 1985, sec. H, 2; Edith Herman, "Life and Death of the Home Picturephone," *Detroit Free Press*, April 21, 1978, sec. C, 1, 3; Roger Stuart, "Test Town, U.S.A.," *Pittsburgh Press*, May 1, 1983, 24-27.

⁸⁷ Davidoff, "Change Has Become Norm, Says New Bell Chief," 3.

⁸⁸ Nick Johnson, "We're Still Not Ready for Picture Phones," *Iowa City Press-Citizen*, August 27, 1986, sec. D, 2; Harry Levins, "Not Many Calls For Futuristic Phones Seen," *St. Louis Post-Dispatch*, January 27, 1992, 95; Lipartito, "Picturephone and the Information Age," 58-59; Michael Schrage, "Why Picturephones Are a Bad Call," *Los Angeles Times*, September 26, 1991, sec. D, 1, 11.

Angeles Times reporter Michael Schrage contends: “The videophone concept—direct face-to-face interaction—may be both technically and economically feasible, but it is still a lousy idea. It failed two decades ago, and it deserves to fail again because it doesn’t respect how people really want to interact.” The device, far from enhancing communication, stifles it, making “people more intimate than they want to be.”⁸⁹

There is undoubtedly some truth to these narratives; it is very likely that people did not want to pay hundreds or even thousands of dollars to run the risk that they might be exposed by the Picturephone’s unforgiving eye. Yet the Picturephone’s failure is more complicated. According to Lipartito, promoting *any* interactive, networked technology is difficult, given that it demands a large body of users before it can appear desirable on a mass scale.⁹⁰ Price and privacy, though factors, were far from the only reasons for the Picturephone’s failure. Indeed, many other successful devices were just as expensive when they began their tenure in the marketplace, their price reducing over time as technology improved and mass production increased. And many other devices—from the camera to the traditional telephone to the internet—have been considered as a threat to privacy without this concern inhibiting their widespread popularity. Thus for Lipartito, the Picturephone’s real issue was its failure to secure an active early adopter user base essential to the promotion and success of any technology, especially any interactive technology.

When AT&T launched the Picturephone, the company was facing new competition in its primary markets as well as pressure from regulatory bodies for its monopolistic practices.⁹¹ As a result, Bell played it safe in their promotional tactics. Despite claims of the Picturephone being a

⁸⁹ Schrage, “Why Picturephones Are a Bad Call,” 11.

⁹⁰ Lipartito, “Picturephone and the Information Age,” 74-75.

⁹¹ *Ibid*, 74-76.

revolutionary device, the future of communication and a fulfillment of age old desires, Bell advertised the Picturephone as an enhancement of AT&T's regular telephone services. They promoted it as something designed for a mass consumer market, rather than branching into new and different terrains. While near the end of the Picturephone's tenure, young Bell executives wanted to try new marketing techniques—such as giving Picturephones to an entire town, hoping that individuals might be more interested in the device if they actually had people to call—concern about violating Federal Communication Commission regulations inhibited such tactics. Within these conditions, the company privileged certain marketing practices and user bases over others and did not explore all possibilities for promoting Picturephone services to niche audiences and early adopters. As such:

Picturephone's failure can be traced to this complex social process, a series of small steps and choices, none of them fully determined by structural factors. Failure thus stemmed not from some functional flaw in the product or from a traditional notion of consumer demand, but rather from a contingent sequence of actions that reflected the influence of expectations, assumptions, uncertainty, politics, and self-reinforcing decisions.⁹²

Thus, Lipartito contends that the Picturephone's failure cannot be reduced merely to engineering hubris; it must be understood within a complex system of social, political, economic, and regulatory conditions that shaped its both its invention and its eventual failure.

Even though the Picturephone did fail, this was not the end of its history. It has had legacies that extend beyond the device itself. Its approaches and visions have been part of other technological developments. Video telephony has continuously been rekindled and retried, finally succeeding in the 2000s with programs like Skype and FaceTime. Both Lipartito and Mara Mills cite the Picturephone as part of a broader history media convergence that has become essential to the contemporary social and cultural landscape. This device, regardless of its failure,

⁹² Lipartito, "Picturephone and the Information Age," 75-76.

was part of a vision of electronic, multi-media communication that has endured to this day, epitomized by the internet and the mobile phone. According to Lipartito, the Picturephone was developed as the first step in a broader communications revolution that seemed poised to take hold in the postwar period. As Bell was developing the device, it hoped that one day soon all communication (voice, image, text, data, video etc.) would be centralized, transmitted by one, complete, unified network.⁹³ The Picturephone would thus be the first component in this multi-mediated future. Bell engineers imagined that once the device was popularized, it would be merged with new and improved digital technology, ushering in a host of complex services.

Picturephone the desktop box was only the user interface to a vast new architecture of information conveyance... Bell engineers saw themselves at work on ‘a technological marriage between the computer and the Picturephone’... Picturephone would serve as an input/output device for accessing files and recalling information encoded in digital form. Video capacity would provide a way of displaying data, sending text and graphical images, selling products, and conducting classes. All of this would be supported by a high-speed digital network.⁹⁴

For Lipartito, the Picturephone embodied an important moment in the broader history of multi-media information transmission, a desire that has structured the development and practices of computer systems and the internet.

Similarly, Mills places the Picturephone within the development of the smart phone.⁹⁵

Looking at the longer history of telephony, she argues that devices like the Picturephone are part of a broader tendency of media convergence that emerged out of telephone engineering and has lead to the complex multi-modal, audiovisual telephonic and digital devices that dominate contemporary life. For Mills, these developments must be traced back to the ways in which telephone engineers conceptualized sound transmission and telephonic communication.

⁹³ Lipartito, “Picturephone and the Information Age,” 64-65.

⁹⁴ *Ibid*, 68-69.

⁹⁵ Mara Mills, “The Audiovisual Telephone: A Brief History,” in *Handheld? Music Video Aesthetics for Portable Devices*, ed. Henry Keazor, Hans W. Giessen, and Wübbena Thorsten (Heidelberg: ART-Dok, 2012), 34-47.

“Telephone engineering—by reducing speech to a signal and dialogue to message-exchange, by coming to value communication over vocal immediacy, and by extending this ‘signal-thinking’ to other sensory phenomena, telephony was so successful that it erased the need for voice communication—its very foundation as a medium.”⁹⁶ In order to solve the problem of how to transmit sound via telephone wires, telephone engineers stopped thinking about sound as a unique property. Instead, they envisioned it merely as ‘information,’ a signal to be sent and received, and designed a system of mediated communication around this principal. Working from this conceptual framework, they reasoned that not only speech, but any form of communication (images, text, video) could also be conceived as information and thus capable of telephonic transmission. For engineers at Bell Labs, visual communication, reduced as it was to a signal, became the next step in their attempt to produce a more complete, more enriching system of mediated message exchange. The Picturephone, regardless of its commercial failure, represents an important step in the development of audiovisual telephony. It marked the extension of “signal thinking” to the terrain of the eye—alongside that of the ear—that would eventually lead to the complex and ubiquitous audiovisual telephones of today with their complete integration with computers and digital media and vast capacity for voice, image, music, video, and data transmission.

In addition to its legacies in digital media, the internet, and mobile telephony, the Picturephone also has had more direct rekindlings and offspring. Although AT&T abandoned any attempt to make Picturephone service available for private consumers (that is until the release of the VideoPhone 2500 in 1992), they shifted their model of video telephony more explicitly towards corporate clients. Throughout the late 1970s and the 1980s, AT&T launched

⁹⁶ Mills, “The Audiovisual Telephone,” 35-36.

Picturephone Meeting Service, a video conferencing program thought to be the way the company would reclaim the Picturephone's utility.⁹⁷ Rather than sell individual Picturephones or even install public Picturephone booths, AT&T's new vision for the device placed two-way TV systems within specialized videoconference rooms designed for virtual meetings. With their new Picturephone Meeting Service, AT&T could set-up videoconferencing rooms within corporate offices—room installation usually cost around \$120,000, with an additional \$11,000 a-month equipment fee.⁹⁸ As this financial output was out of the reach of most businesses, AT&T also established videoconference rooms in their own offices that anyone could rent. The idea being that it would be much easier for executives to travel thirty minutes to their local Bell office than six hours to another city.⁹⁹ Although the Picturephone Meeting Service did make use of Picturephone technology, the technology was not the same as that deployed in the booths of the 1960s. Indeed, AT&T's two-way TV and videoconferencing services relied largely on satellites and closed-circuit television technology. Rather than transmitting information strictly through the

⁹⁷ Michigan Bell, "Picturephone Meeting Service Press Release" (Michigan Bell, December 22, 1981), Collection No. 5: Ameritech Corporation Record Group No. 5: Predecessor and Subsidiary Companies, Michigan Bell Telephone Co. Box 128, Folder Picturephone Meeting Service, 1980-1994 [2 of 2], AT&T Archives and History Center; Lee Lindberg, "To All Managers with News Relations Responsibilities" (Michigan Bell, March 23, 1979), Collection No. 5: Ameritech Corporation Record Group No. 5: Predecessor and Subsidiary Companies, Michigan Bell Telephone Co. Box 128, Folder Picturephone Meeting Service, 1975-1979 [1 of 2], AT&T Archives and History Center; New York Telephone, "Press Release Advisory" (New York Telephone, July 26, 1978), Collection No. 5: Ameritech Corporation Record Group No. 5: Predecessor and Subsidiary Companies, Michigan Bell Telephone Co. Box 128, Folder Picturephone Meeting Service, 1975-1979 [1 of 2], AT&T Archives and History Center.

⁹⁸ Frederick Lowe, "Operator, Give Me Picturephone-1-800," *Philadelphia Daily News*, August 3, 1982, 12.

⁹⁹ AT&T, "Picturephone Meeting Service" (AT&T, 1982), Collection No. 6: AT&T Corp. Record Group No. 6: Publications, Box 91, Folder Picturephone Meeting Service (AT&T), 1982, AT&T Archives and History Center; AT&T, "20 Tips for a More Successful Picturephone Meeting" (AT&T, 1976), Collection No. 6: AT&T Corp. Record Group No. 6: Publications, Box 80, Folder 20 Tips for a more successful Picturephone meeting: Picturephone Meeting Service Planning Guide (Bell System), 1976, AT&T Archives and History Center; AT&T, "You Make Things Happen in a Picturephone Meeting" (AT&T, 1975), Collection No. 6: AT&T Corp. Record Group No. 6: Publications, Box 79, Folder You Make Things Happen in a Picturephone Meeting (Bell System), 1975, AT&T Archives and History Center.

phone lines, AT&T sent their audiovisual signals via satellite, making use of their increased signal capacity.¹⁰⁰

Although AT&T remained a major player in this field, it was not alone in the launch of video conferencing services. As satellite, fiber optic cable, and video technologies became increasingly commonplace, other media corporations, such as Videonet, the Robert Wold Company, and Dovetail, entered the business. These companies operated their videoconferencing services slightly differently than AT&T. Rather than install permanent video meeting rooms in their own company headquarters, these businesses often partnered with hotels. They equipped their pre-existing conference rooms with two-way TV capability, connecting cameras, TV screens, and closed-circuit loops to the hotels' satellite systems, or provided full videoconferencing services, planning all aspects of the event from equipment installation to room rentals to technical support.¹⁰¹

Despite the fact that these videoconferencing services were conceived largely for facilitating business communication and corporate management, newspaper articles and press releases also emphasized the system's contribution to the cultivation and enhancement of

¹⁰⁰ Stephen Braun, "Picture This, Phone Fans," *Detroit Free Press*, March 29, 1982, sec. C, 1-2.

¹⁰¹ Bill Cutting, "Anatomy of a Videoconference," *Marketing Communications*, October 1981, 42-43; Hilton Communications Network, "Trends Point To More Meetings, Not Less, With Advent of Videoconferencing" (Hilton Communications Network, March 25, 1982), Box 12, UCLA Arts Library Special Collections, Morris Gelman Cable TV Ephemera; Hilton Communications Network, "Videoconferencing: Limited Only By the Imagination" (Hilton Communications Network, March 25, 1982), Box 12, UCLA Arts Library Special Collections, Morris Gelman Cable TV Ephemera; Hilton Hotels Corporation, "Hilton Launches Nationwide Satellite Videoconferencing Service With Wold" (Hilton Hotels Corporation, November 12, 1981), Box 12, UCLA Arts Library Special Collections, Morris Gelman Cable TV Ephemera; Rogers & Associates Public Relations Marketing Communications, "Videonet Videoconferences: Business Seminars and Corporate Meetings" (Rogers & Associates Public Relations Marketing Communications, July 1981), Box 13, UCLA Arts Library Special Collections, Morris Gelman Cable TV Ephemera; Rogers & Associates Public Relations Marketing Communications, "Videoconferences: Their Origins and How They Work" (Rogers & Associates Public Relations Marketing Communications, July 1981), Box 13, UCLA Arts Library Special Collections, Morris Gelman Cable TV Ephemera; Rogers & Associates Public Relations Marketing Communications, "Videoconferencing: An Overview" (Rogers & Associates Public Relations Marketing Communications, July 7, 1981), Box 13, UCLA Arts Library Special Collections, Morris Gelman Cable TV Ephemera; Dan Shope, "Teleconferencing No Longer Just a Toy of the 'haves,'" *Morning Call*, November 27, 1989, sec. D, 1, 16.

domestic life. Shortly after its public launch, articles appeared both in AT&T's subsidiary publications and even occasionally in the popular press about using Picturephone Meeting Service rooms for personal calls.¹⁰² In these reports, video conferencing technologies could serve as virtual visits, a way of seeing ones grandparents at Christmas or surprising a friend on his or her birthday. Most of the individuals using the service in this way were AT&T employees—and indeed the appearance of such reports in Bell System publications designed explicitly for internal communication suggests that such individuals were a target market for the service. However, there endured a hope that Picturephone Meeting Service might be used more generally for domestic contact. In a 1980 article in the *Independent Journal*, AT&T's Larry Levy claimed that many people have used the service. It has been deployed it as a means of “showing the new baby. Lovers meeting on Valentine's Day... and in its several years of existence, it's been an increasingly popular Christmas present.”¹⁰³

In 1979, Picturephone Meeting Service received a boost of promotional attention when Linda Davis and Walter Lott decided to transmit their wedding ceremony via Picturephone. The couple, who were getting married in Detroit where Lott's family lived, wanted to make sure Davis's large extended family, who lived in Philadelphia and could not all afford to fly to Michigan, could participate in the ceremony. As such, they arranged for a Picturephone call between AT&T's Detroit and Philadelphia offices and got married in a Picturephone Meeting

¹⁰² Mike Bowen, “TV Phone Call for Christmas?,” *Independent Journal*, December 1, 1980, Collection No. 3: Pacific Telesis Group Record Group No. 5: Predecessor and Subsidiary Companies Pacific Bell Telephone Co. Box 86, Folder Telephones--Picturephone, 1975-1982; [n.d] [2 of 2], AT&T Archives and History Center; Joe McDonough, “Face-to-Face Talk with Folks across Continent,” *Update*, April 9, 1979, Collection No. 3: Pacific Telesis Group Record Group No. 5: Predecessor and Subsidiary Companies Pacific Bell Telephone Co. Box 86, Folder Telephones--Picturephone, 1975-1982; [n.d] [2 of 2], AT&T Archives and History Center; Lynn Ulm, “Next Best Thing to Being There,” *Update*, December 11, 1978, Collection No. 3: Pacific Telesis Group Record Group No. 5: Predecessor and Subsidiary Companies Pacific Bell Telephone Co. Box 86, Folder Telephones--Picturephone, 1975-1982; [n.d] [2 of 2], AT&T Archives and History Center.

¹⁰³ Larry Levy as quoted in Bowen, “TV Phone Call for Christmas?”

Room. This event, the first of its kind for AT&T, was promoted by the company. They sent out a dedicated press releases and successfully generated series of news reports about the wedding. These stories (which ran with headlines like “The Wedding Was ‘Picture Perfect’” or “Wedding Bells Ring 600 Miles By Phone”) offered a new perspective on Picturephone Meeting Service.¹⁰⁴ Instead of an exclusively corporate videoconferencing system whose importance was restricted to the realm of business communications, these articles asserted the Picturephone’s personal, intimate, and domestic powers. Echoing previous discourses on the Picturephone, these reports emphasized Picturephone Meeting Service’s potential to bring people together and forge meaningful connections. As Davis contends in a *Detroit Free Press* profile of the event: “When I was little, I thought the big church, the bridesmaids and all that was important... But now I know differently. It’s not the way you get married that’s important—it’s that you’ve found someone share the rest of life with... And whether it ends up on TV or not, that’s what counts.”¹⁰⁵ Thus getting married on Picturephone, while not necessarily embodying the ‘dream wedding’ Davis had envisioned as child, allowed her and Lott to share what was most important—their love and commitment—with their families.

In addition to these distinctly domestic moments of videoconferencing, proponents of the service argued that its necessity stemmed from changing workplace demographics. In a March 1982 press release discussing their new videoconferencing services, James C. Collins, senior vice president of marketing for Hilton Hotels Corporation, argued: “As more and more women

¹⁰⁴ “Wedding Bells Ring 600 Miles By Phone,” *Levittown Courier News*, July 2, 1979, Collection No. 5: Ameritech Corporation Record Group No. 5: Predecessor and Subsidiary Companies, Michigan Bell Telephone Co. Box 128, Folder Picturephone Meeting Service, 1975-1979 [1 of 2], AT&T Archives and History Center; “Their Wedding Was ‘Picture Perfect,’” *St. Joseph Herald Palladium*, July 7, 1979, Collection No. 5: Ameritech Corporation Record Group No. 5: Predecessor and Subsidiary Companies, Michigan Bell Telephone Co. Box 128, Folder Picturephone Meeting Service, 1975-1979 [1 of 2], AT&T Archives and History Center.

¹⁰⁵ Donna Britt, “Family Dialed A Wedding,” *Detroit Free Press*, July 1, 1979, sec. A, Collection No. 5: Ameritech Corporation Record Group No. 5: Predecessor and Subsidiary Companies, Michigan Bell Telephone Co. Box 128, Folder Picturephone Meeting Service, 1975-1979 [1 of 2], AT&T Archives and History Center.

leave the home for the office, new modes of family behavior, which include various forms of shared domestic responsibilities, are being worked out. The major meeting or convention will have to offer more value to both men and women because time away from home is at a premium.”¹⁰⁶ Thus, in addition to facilitating increasingly intimate forms of interpersonal contact, videoconferencing allowed both men and women to spend more time at home with their families and participate in those homemaking and care giving functions once the almost exclusive responsibility of the housewife. As such, it seemed ideally suited to accommodate the demands of modern family life, where women, as well as men, labored both inside and outside the home.

Although videoconferencing was one of the primary ways in which two-way television endured after the Picturephone’s demise, other companies took over from AT&T and attempted to create audiovisual telephones for the consumer market. Throughout the 1980s, Mitsubishi released VisiTel and Luma—two black and white Picturephones (the former designed for home use and the latter intended for businesses communication) that could transmit still images between callers.¹⁰⁷ Mitsubishi, Panasonic, Sanyo, and PicTel followed suit, releasing similar systems, most of which consisted of small desktop video-screens designed to be connected to a traditional telephone. Following the release of these devices, electronics reporters profiled this newest iteration of video telephony, speculating whether now at last it would prove successful. These articles discussed the different technical dimensions of the new devices, imagined their possible uses, and wondered if their high cost (the cheapest of these videophones retailed for

¹⁰⁶ Hilton Communications Network, “Trends Point To More Meetings.”

¹⁰⁷ Mark Lewyn, “Mitsubishi Phone Gets into the Picture,” *USA Today*, April 30, 1986, sec. B, Collection No. 5: Ameritech Corporation Record Group No. 5: Predecessor and Subsidiary Companies, Michigan Bell Telephone Co. Box 171, Folder Telephones--Picturephone, 1970-1995 [3 of 3], AT&T Archives and History Center; “Firm Seeks to Make Picture Phones Common, 22 Years after Introduction,” *Arizona Republic*, April 8, 1986; T.R. Reid and Michael Schrage, “Luma Videophone Offers Wealth of Possibilities,” *Albuquerque Journal*, May 19, 1986.

\$399 while the more expensive ones were priced upwards of \$1,000) would prevent them yet again from making video telephony a universal reality.¹⁰⁸

Although numerous reports expressed some hesitancy about these new devices (skeptical that anyone would pay so much money for something that did not offer motion-video transmission), in a column for the *New York Times*,¹⁰⁹ Howard J. Blumenthal argued instead that VisiTel's lack of motion-video transmission was actually an asset. Reflecting on the initial release of the Picturephone in 1964, he recounts how after seeing it demonstrated at a school trip to the New York World's fair, Maria, a girl "on whom" he "had a serious crush," did not like the device, worrying "she'd have to get herself all dressed up before she answered the phone."¹¹⁰ This concern, which Blumenthal asserts was also shared by his parents, is no longer a worry with VisiTel's more limited visual powers. "Contrary to common belief, the camera doesn't follow you as you move around the room. It sends one still picture at a time to the person to whom you are making the call. That person, in return, chooses when to send you a picture." While these constraints might seem limiting, Blumenthal argues that the device still "provides all the so-called personal touch you need," without the threat of unsanctioned, uncontrolled exposure.

As these still-frame videophones attempted to make headway in the market—albeit with very little success—AT&T reentered the business, believing they could finally secure the public's approbation and launch a widely used video telephone. In 1992 they released the

¹⁰⁸ Frank Vizard, "'Earthlings' Still Wait for Video Phones," *Detroit News*, January 18, 1988, sec. C, Collection No. 5: Ameritech Corporation Record Group No. 5: Predecessor and Subsidiary Companies, Michigan Bell Telephone Co. Box 171, Folder Telephones--Picturephone, 1970-1995 [3 of 3], AT&T Archives and History Center; "Do Callers Really Want to Reach out and See Someone?," *Business Week*, January 11, 1988, Collection No. 5: Ameritech Corporation Record Group No. 5: Predecessor and Subsidiary Companies, Michigan Bell Telephone Co. Box 171, Folder Telephones--Picturephone, 1970-1995 [3 of 3], AT&T Archives and History Center; C; Eugene Jr. Emery, "Picturephones More than a Glimpse Away," *Great Falls Tribune*, February 25, 1990, sec. C; "Video Telephones Still Face a Skeptical Public," *Miami News*, August 10, 1988; "Firms Hope to Solve Picturephone Problems," *Florida Today*, July 15, 1985; Colin Covert, "Video Phone Calls Finally Get through," *Detroit Free Press*, April 22, 1986.

¹⁰⁹ This column was subsequently reprinted in other news publications

¹¹⁰ Howard J. Blumenthal, "Getting the Picture about Visual Phones," *Journal News*, May 14, 1988, sec. C, 3.

VideoPhone 2500. This device cost \$1,499 and could, like its competition, transmit audiovisual telephone calls over traditional telephone lines, but also offered color and full motion video.¹¹¹ Unlike the Picturephone, the video screen occupied a far less prominent position in AT&T's newest attempt at video telephony. The Picturephone, like its predecessor the ikonophone, worked to simulate face-to-face communication. It had a relatively large screen (something that was increased with the release of the Picturephone II) and a microphone, which made a telephone receiver unnecessary. Indeed AT&T even instructed photographers not to include images of traditional telephones in promotional photos of the device, highlighting its capacity for virtual face-to-face interaction.¹¹² In contrast, the VideoPhone 2500's 3-inch video screen was a fold out feature, attached to one side of a large push button telephone unit. The video signal, compressed so it could be transmitted through the existing telephone system, was low quality so the motion video sometimes looked like a series of still frames transmitted one after another, at least according to one reporter.¹¹³ Like with the Picturephone, AT&T strove to generate public interest in the new device by installing it in public places (airports, train stations,

¹¹¹ Anthony Ramirez, "Consumer Videophone By A.T.&T.," *New York Times*, January 7, 1992, sec. C, Collection No. 5: Ameritech Corporation Record Group No. 5: Predecessor and Subsidiary Companies, Michigan Bell Telephone Co. Box 171, Folder Telephones--Picturephone, 1970-1995 [3 of 3], AT&T Archives and History Center; "Sound, Sight Video Phone Connects Images," *Detroit Free Press*, January 7, 1991, sec. A, Collection No. 5: Ameritech Corporation Record Group No. 5: Predecessor and Subsidiary Companies, Michigan Bell Telephone Co. Box 171, Folder Telephones--Picturephone, 1970-1995 [3 of 3], AT&T Archives and History Center; Bart Ziegler, "Callers Can Reach out and See Someone," *Detroit News*, January 3, 1992, sec. A, Collection No. 5: Ameritech Corporation Record Group No. 5: Predecessor and Subsidiary Companies, Michigan Bell Telephone Co. Box 171, Folder Telephones--Picturephone, 1970-1995 [3 of 3], AT&T Archives and History Center; John J. Keller, "AT&T Plans to Unveil a Videophone For the Home, Industry Analysts Say," *Wall Street Journal*, January 3, 1992, sec. C, Collection No. 5: Ameritech Corporation Record Group No. 5: Predecessor and Subsidiary Companies, Michigan Bell Telephone Co. Box 171, Folder Telephones--Picturephone, 1970-1995 [3 of 3], AT&T Archives and History Center.

¹¹² Public Relations & Publications Divisions, "Picture Pointers: Do's and Don't's for Picturephone Photos" (Bell Telephone Laboratories, n.d.), Collection No. 2: SBC Communications Inc. Record Group No. 5: Predecessor and Subsidiary Companies Southwestern Bell Telephone Co. Box 127, Folder Telephones, Picturephone, 1956-1981 (1 of 3), AT&T Archives and History Center.

¹¹³ Ramirez, "Consumer Videophone By A.T.&T."

etc.) envisioning that while businesses would likely be the device's first costumers, it might eventually reach widespread public use.

Not only did AT&T's promotional tactics resemble that which launched the Picturephone, the news discourse which surrounded VideoPhone's release also carried echoes of the 1960s. Here again, journalists cited the device as delivering on that long-held promise of audiovisual telephonic communication, offered hopeful assessments of families engaging in new forms of enriching contact and closeness, wondered if the price would again prove too steep, and speculated about its dangerous powers to invade private life.¹¹⁴ Alongside reports on the VideoPhone 2500's technical features and potential profitability, columnists also offered cautions. They speculated that it would fail like the Picturephone or that if it were successful, its disadvantages might outweigh its rewards. In his commentary in the *Wall Street Journal*, A. Michael Noll argued:

The old picturephone failed because people simply didn't want it in their businesses or homes. AT&T's market research showed that, and so did the product introduction. A picturephone added little to phone conversations and sometimes even got in the way; the acoustic intimacy of a phone call was shattered by the visual imagery. Appearance became an issue. And users had to remain in place to stay on camera. Have people changed so much that these are no longer drawbacks? I doubt it.¹¹⁵

For Noll, VideoPhone did not represent the telephone of tomorrow but an unwanted idea and an inevitable failure that AT&T seemed unable to abandon.

¹¹⁴ Emma Bowbeck, "AT&T VideoPhone Could Unwire Some Family Relationships," *Detroit Free Press*, January 27, 1992, sec. D, 10, Collection No. 5: Ameritech Corporation Record Group No. 5: Predecessor and Subsidiary Companies, Michigan Bell Telephone Co. Box 171, Folder Telephones--Picturephone, 1970-1995 [3 of 3], AT&T Archives and History Center; Wendy Warran Keebler, "Facing Up to the Videophone," *Detroit Free Press*, January 21, 1992, sec. C, 1,4, Collection No. 5: Ameritech Corporation Record Group No. 5: Predecessor and Subsidiary Companies, Michigan Bell Telephone Co. Box 171, Folder Telephones--Picturephone, 1970-1995 [3 of 3], AT&T Archives and History Center; A. Michael Noll, "Videophone: A Flop That Won't Die," *Wall Street Journal*, January 12, 1992, sec. F, 13, Collection No. 5: Ameritech Corporation Record Group No. 5: Predecessor and Subsidiary Companies, Michigan Bell Telephone Co. Box 171, Folder Telephones--Picturephone, 1970-1995 [3 of 3], AT&T Archives and History Center.

¹¹⁵ Noll, "Videophone: A Flop That Won't Die," 13.

Though less assured of the VideoPhone 2500's certain demise, Wendy Warren Keebler of the *Detroit Free Press* wrote a similarly pessimistic assessment of the new device. In her speculative account of a world dominated by video telephony, she listed the potential consequences if the service reached complete market saturation. According to Keebler, every advantage seemed to carry with it an equally potent disadvantage: "Grandparents in California could see and hear beloved grandchildren in New York. That's good... But you couldn't roll your eyes when your mother started in on how much she wants another grandchild. That's bad."¹¹⁶ And even beyond such everyday exposures, Keebler also worried what other threats might be lurking behind the device. "Obscene video calls; Dial-a-Porn-Video 900 numbers; children home alone, viewing or being viewed by strangers. Well you get the picture." More than simply revealing unwanted truths, video telephony held more sinister powers. By letting images and individuals enter unsanctioned into the home, the VideoPhone threaten destroy the harmony and innocence of its occupants.

Like the Picturephone, the VideoPhone was declared a commercial failure a few years after its release; seemingly another example of AT&T trying to get the public excited about a technology they did not want or at least were unwilling to pay for. Yet video telephony did not go away. Rather than being completely abandoned, it migrated again to Skype, FaceTime, Google Hangouts, and other digital terrains—where it found success as software. Thus, even as each early iteration of the device 'failed,' its failure is far less total than one might assume. Even though the Picturephone and the VideoPhone never reached a wide base of consumers, the investment and belief in video telephony endured. Just as older visions of the device declined, new iterations emerged, carrying with them the hope shared by so many Bell engineers that their

¹¹⁶ Keebler, "Facing Up to the Videophone," 1, 4.

device would finally deliver on the promise of bringing complete audiovisual mediations of face-to-face contact and communication to the world.

Conclusion

Taken together, AT&T's promotional tactics, industrial rhetoric, news reports, and magazine articles, while differing in both genre and intent, mobilize heterogeneous fantasies of audiovisual telephony, constructing a complex fantasy of America's future. Although the Picturephone was for all intents and purposes a failure, the dream of video telephony and two-way TV endured. Even as AT&T were shutting down their public Picturephone services in the mid-1970s, videoconferencing systems were on the rise, other video calling systems were released throughout the 1980s and 1990s (eventually moving only in the 2000s with development of Skype and Facetime), and the dream of multimedia data transmission came to define the history of computers. As such, the Picturephone, the first commercially available American video calling system cannot be discounted as a failure or a technological oddity. It represents an important conjunction of televisuality and telephony, an attempt to make TV technology into a tool for intimate, interactive communication. Moreover, the discourses which surrounded its release, failure, and offspring provide important foundations not only for understanding video telephony's enduring legacies, but for unpacking the utopian claims, dystopian threats, gendered dynamics, and ambivalent politics that haunt both the device itself and the technologies to which it is connected.

Despite the claims that the video telephone was revolutionary, so prominent in the promotional and popular constructions of the Picturephone, a closer analysis of this rhetoric seems to undercut much of the drama and depth of the changes supposedly provoked by this

technological convergence of the telephone and the TV set. Rather than represent a radical transformation of social life, the discourses that surrounded the Picturephone actually imagined the device as a kind of continuation of the status quo, an extension of preexistent telephonic practices and televisual ideals. AT&T's marketing department and electronics reporters did not imagine the Picturephone as rupturing established norms and practices. They envisioned it sliding seamlessly into everyday life, ready to defend the family and assist corporate America. In positive accounts of the new device, the Picturephone was envisioned as a means of connecting grandchildren with grandparents, husbands with wives, salesmen with customers, and executives with clients. It was imagined as the answer to the distance and separation experienced by families in the postwar era. As the family moved (at least ideologically) from its long history as an extensive assemblage to a closed nuclear unit, cloistered away in a new suburban development, the Picturephone arrived ready, not to transform family structures, but to reinforce them. It provided a technological 'solution' to the problems and isolations of suburban domesticity. Offering a simulation of connection, the Picturephone represented a virtual method of interacting with distant family members and a means of eliminating business transportation.

Even those more pessimistic views of the new technology put forward by cynical journalists conceived the Picturephone's dystopian possibilities in connection to preexisting social norms and structures. The fear of video telephony's essential intrusiveness exacerbates the gendered demands of domestic management and female self-presentation. Moreover, its very threat lies in its capacity to expose the hollowness and artificiality of these social expectations. The anxiety generated by the Picturephone's seeming inevitable display of something unwanted or untoward suggests that that illusion of domestic perfection is acknowledged to be just that—an illusion. As this discourse makes clear, not only do men and especially women fail to live up

to their aesthetic and domestic demands, but these shortcomings are in some sense acknowledged by everyone. The threat (and the thrill) of the Picturephone lies in exposing these inevitable domestic failings. By eradicating the privacy of the private sphere, the Picturephone demanded new forms of gendered personal and domestic labor. Thus, it does not represent a radical transformation of social and cultural norms, but reinforces them, exacerbating the gendered, classed, and racialized anxieties that defined white, middle class American life.

As such, my study of the Picturephone and the televisual redefinition it embodied falls in line with previous scholarship on new media and discourses of the domestic future. These works, which include Fiona Allon's "An Ontology of Everyday Control, David Heckman's *A small world: smart houses and the dream of the perfect day*, David Morley's *Media, Modernity and Technology: The Geography of the New*, as well as much of Spigel's scholarship, argue that the future-oriented discourse that dominates the promotion and representation of new technologies designed to intervene in and transform the domestic life, rarely embody a truly progressive vision of the future.¹¹⁷ Instead, such devices often rely on nostalgic fantasies of "yesterday's future" that perpetuate conservative ideas of home, family, and nation.¹¹⁸ Whether by depicting women as the chief agents of domestic labor, imagining technology as a substitute for a nostalgic vision of the housewife, perpetuating eurocentric and orientalist technological dichotomies, or reinforcing neoliberal domestic ideologies, such works argue that new technologies—and the

¹¹⁷ Fiona Allon, "An Ontology of Everyday Control: Space, Media Flows and 'smart' Living in the Absolute Present," in *MediaSpace: Place, Scale, and Culture in a Media Age*, ed. Nick Couldry and Anna McCarthy, Comedia (New York, NY: Routledge, 2004), 253–74; Davin Heckman, *A Small World: Smart Houses and the Dream of the Perfect Day* (Durham, NC: Duke University Press, 2008); David Morley, *Media, Modernity and Technology: The Geography of the New* (New York, NY: Routledge, 2007), <http://site.ebrary.com/id/10152279>; Lynn Spigel, "Yesterday's Future, Tomorrow's Home," 29–49; Lynn Spigel, "Designing the Smart House: Posthuman Domesticity and Conspicuous Production," *European Journal of Cultural Studies* 8, no. 4 (November 1, 2005): 403–26, <https://doi.org/10.1177/1367549405057826>; Lynn Spigel, "Object Lessons for the Media Home: From Storage Wall to Invisible Design," *Public Culture* 24, no. 3 68 (September 21, 2012): 535–76, <https://doi.org/10.1215/08992363-1630681>.

¹¹⁸ Spigel, "Yesterday's Future, Tomorrow's Home," 29–49."

discourses that surround them—often envision a future in which notions of ‘progress’ embody nostalgic longings and a conservative politics that reinforce normative and even regressive visions of home and family.

Thus, like much of the rhetoric that surrounded other domestic technologies, the discourses that circulated around the release of the Picturephone were neither utopian nor revolutionary despite their claims to the contrary. Instead of radically transforming the world and altering hierarchies of class, race, and gender, video telephony reinforced long-standing, conservative ideas. By promising to connect individuals together, providing them with simulated face-to-face contact and innovative modes of virtual travel that would enhance intimacy and solve social problems, video telephony increased the tyranny of the visual, aided corporate power, perpetuated sexist norms, and enforced class and racial hierarchies. Negative accounts of the new device still envisioned a future defined by nuclear families, whiteness, and traditional gender roles, even as they questioned the Picturephone’s utopian potential and explored the anxieties of domestic idealism. As such, ‘the telephone of tomorrow’ did not so much represent a utopian transformation but a practical and technological expansion of those gendered, raced, and classed ideologies that defined America throughout the Cold War.

CHAPTER 3

Bringing the World To Your Fingertips: Participation, Tactility, and Interactive Cable

“Right now, Columbus... you have only 4 windows on the world. Through these few windows come a limited choice of programs, most of it provided by the networks. Most of it interrupted by commercials. You see, mostly, what the networks want you to see... and when they want you to see it. But... that’s Television. And it’s very limiting. Qube... frees you from the limitations of Television. Touch the button. And see the world Qube brings to your fingertips.”

—“Touch the Button,” Qube Promotion Pamphlet, cir. 1978

In 1977, Warner Communications launched Qube: a two-way cable TV system that promised to radically transform television, combatting the longstanding limitations of the commercial broadcast industry and producing a new kind of active and participatory televisual experience. Promoted with the tagline “Touch the Button. Qube brings the world to your fingertips,”¹ Qube united increased channel capacity with push-button technology to create a mode of cable-enhanced television that seemed to redefine the very nature of the medium, rendering it active, tactile, and increasingly practical. Not only did QUBE provide subscribers with thirty-channels, on which locally produced TV shows, children’s entertainment, and educational and cultural programming featured alongside more traditional commercial television, the system’s specialized consoles allowed for new kinds of televisual interactions. By pressing the various buttons on their consoles, QUBE subscribers could respond to polls, purchase pay-per-view movies, play games, suggest music videos, take televisual courses, scroll through classified ads and commercial catalogues, and even on one occasion, decide the plot of a fiction drama. While QUBE was by no means the only cable system, nor even the only two-way cable

¹ Warner Cable, “Touch the Button” (Warner Communications, cir 1978), Box: CC79 QUBE PUBL + Videos, Barco Library.

system, these new televisual features rendered it one of the most revolutionary. QUBE strove to change how television audiences used their home TV sets. With QUBE consoles in hand, viewers responded to the information and individuals on screen. They played games, rented movies, sought out televisual services that could assist in the operations of domestic life, and as such, were transformed from viewers into users.

In this chapter, I examine the attempt to transform the TV set into an active tool of democratic participation and an instrument of domestic management through the development of two-way cable services and to a lesser extent, teletext and videotex systems. I trace the emergence of this vision through cable's 'Blue Sky'² rhetoric of the 1960s and early 1970s, and especially in the advertising, trade discourse, news reports, and technical operations of systems like QUBE in the late 1970s and early 1980s. In mapping these histories, I show how cable worked to change the meaning and operations of television. I explore how it strove to transform the TV set from the seemingly passive mass medium of the commercial broadcast industry into an increasingly participatory, interactive, and computational instrument ready to assist in the everyday demands of domestic life. Paying particular attention to the participatory entertainment, education, and information programming and the services facilitated by these televisual technologies, I argue that cable, and particularly two-way cable, strove to redefine televisual engagement. In soliciting audience participation, it recast viewers as *users*. It promoted an enhanced television experience through which TV sets could orchestrate new forms of interpersonal connection, assist in the demands of domestic labor, and encourage tactile modes of televisual interaction. Two-way cable (alongside teletext and videotex) worked to transform television into a practical and participatory medium. It became a tool that would continue to

² Cable's 'Blue Sky' rhetoric generally refers to the utopian fervor with which the cable industry was discussed in the 1960s and early 1970s.

provide news and family entertainment, while simultaneously helping manage the home, democratize TV viewing, and satisfy the desire for computational services. In so doing, it not only worked to redefine television, but also produced modes of interactivity that now define many of the televisual and computational conditions of the digital age.³

From Community Antenna to Revolutionary Wire

Before discussing the discourses and operations of interactive cable, teletext, and videotex, it is important to understand the ways in which cable's early operations and the fantasies of its Blue Sky era influenced its subsequent developments. When cable television first appeared in the American media market in the 1940s and early 1950s, it was not envisioned as a technology capable of radically transforming commercial television. According to cable historian Megan Mullen, in its earliest days, cable was deployed as means of enhancing broadcast TV, a way of amplifying its transmission and extending its reach.⁴ Known as Community Antenna Television (or CATV), its primary aim was to deliver television to areas too remote to receive broadcast signals or only receive them very poorly. CATV providers would place antennas in elevated locations and run cables directly to subscribers' houses, providing them with clear access to local television stations. During this period, CATV was viewed with relative indifference from the broadcast industry; its almost exclusively rural audience and status as a

³ I do not wish to assert any direct evolution from two-way cable and the internet. Rather, the technologies, practices, and discourses discussed in this chapter mobilize visions of participation and interactivity that are often attributed exclusively to digital media. And as such, I believe that charting such a history can not only contribute to a better understanding of television in the 1960s, 1970s, and 1980s, but also help us understand the technologies, practices, and discourses that define the contemporary moment.

⁴ Megan Mullen, *The Rise of Cable Programming in the United States: Revolution or Evolution?* (Austin, TX: University of Texas Press, 2003), 29.

televisual enhancement making it seem an addition rather than an alternative to broadcast television, too marginal to be considered a threat.⁵

However, throughout the 1950s and early 1960s, the CATV industry began to change. Over the course of this decade, CATV companies began to replace their antennas with microwave relays. These new technologies allowed providers to transmit signals over much larger distances. Now, instead of merely rendering local broadcast TV accessible to communities, CATV could transmit programming from a large geographic area, giving audiences access to stations far beyond their local affiliates. As cable subscribers could now choose between many different channels, CATV began to not only serve remote rural markets, but any market, including suburban and urban ones, in which audiences wanted access to stations from cities and towns too far to be reached through traditional broadcast signals. As such, local broadcasters grew increasingly concerned with the growth of CATV. By providing individuals with more television options, broadcasters feared that the industry would threaten the existing TV system, undercutting the profitability of local stations. In response to this growing anxiety, broadcast companies began to pressure the Federal Communications Commission to regulate cable. Networks began to take individual CATV companies to court, the grounds for which rested on the fact that all the TV programming transmitted via cable was subject to copyright.⁶

Even with these legal battles and uncertain regulatory climate, the CATV business continued to grow. The FCC took a long time to establish final and binding regulations for the industry. While there was no clear policy, cable companies worked to establish themselves, servicing an increasing number of American households and cultivating greater notice from

⁵ Mullen, *The Rise of Cable Programming in the United States*, 29-63; Patrick Parsons, *Blue Skies: A History of Cable Television* (Philadelphia, PA: Temple University Press, 2008), 77-121.

⁶ Mullen, *The Rise of Cable Programming in the United States*, 29-63; Parsons, *Blue Skies*, 122-169.

financial industries. Throughout the 1950s and 1960s, another alternative mode of televisual transmission was also gaining force alongside CATV, challenging the traditional broadcast model. The pay-TV “industry was founded on a belief that viewers would be willing to pay directly for more desirable programming.”⁷ Unlike so-called “free”—i.e. advertiser-supported—television, pay-TV would charge viewers for specific ‘premium’ programming, often movies, sports events, concerts, or theatrical performances, offering them to viewers ‘on demand.’ Pay-TV systems were available as early as 1949 on an experimental basis. Much of these early operations, like Zenith’s “Phonevision” and Skiatron Electronics and Television Corporation’s “Subscriber-Vision,” transmitted their pay-TV programs over broadcast airways and required subscribers to use telephone lines or IBM punch cards to request their specialized programming.⁸ However, there was interest in the possibility of merging pay-TV and CATV.

In 1953, International Telemeter Corporation premiered their CATV-pay-TV system in Palm Springs. It brought its subscribers Los Angeles area broadcast channels, as well as a series of films, sports, and event programming that individuals could purchase as desired through coin-operated boxes fastened to their TV sets. While all of these systems were short-lived, partly due to the immense pressure exerted on the FCC from pay-TV’s opponents (mostly broadcasters, networks, and movie theatre owners), and partly due to the difficulty in the securing the rights to exhibit first-run films on television, the idea of pay-TV via cable persisted. As the 1960s progressed and CATV companies worked to expand into larger markets, they saw pay-TV as one way to redefine their identity. By filling up their unused channels with premium, pay-per-view content as well as transmitting a wide range of different local stations, CATV providers strove to redefine their services. No longer mere extensions of the everyday home TV antenna, they

⁷ Mullen, *The Rise of Cable Programming in the United States*, 47.

⁸ *Ibid*, 47-48.

conceptualized cable as an active medium, which could do more than any previous system of television distribution.⁹

By the end of the 1960s, CATV had rebranded itself. After securing a legal victory in 1968, which allowed cable companies the right to transmit copyrighted programming without suffering judicial recourse, the industry was given the legal strength to enter into competition with broadcast TV. No longer the benign Community Antenna Television of the previous decades, ‘cable’ was a revolutionary new medium which would transform everyday life. As cable historians like Patrick Parsons and Thomas Streeter have argued, this transformation of CATV into cable was more than a simple name change; it represented a significant discursive and conceptual shift in the industry, marking the rise of what scholars, policymakers, and critics have called ‘Blue Sky’ rhetoric. Far from conceptualizing the medium as merely an enhanced method of transmitting broadcast signals, industry professionals, regulators, journalists, and commentators insisted that it represented a new and revolutionary technological vision. They saw it as a singular wire that would provide “television programming on demand, teleconferencing, electronic banking, shopping and health care assistance; an electronic town square dedicated to democratic discourse, the advancement of local and national governance; instant news, information, and educational opportunity.”¹⁰

This utopian vision of cable’s potential was not merely the product of cable operators. It took hold in the late 1960s as the industry pushed into larger urban markets, capturing the imagination of government officials and members of the public. As such, discussions of cable’s communicative power appeared in a variety of locations, from popular magazines to corporate research to policy reports, spoken by a variety of different individuals from all over the political

⁹ Mullen, *The Rise of Cable Programming in the United States*, 49-59; Parsons, *Blue Skies*, 188-194.

¹⁰ Parsons, *Blue Skies*, 232.

spectrum. According to Streeter, a strange assemblage of bodies, including “media activists,” liberals, cable and television lobbyists, defense intellectuals, and “Republican technocrats” contributed to cable’s discursive terrain. These different groups, while holding diverging political interests and offering unique visions of cable’s communicative and social importance, were “united around a shared sense of awe and excitement; maybe the new technologies were good, maybe they were bad, but in any case they inspired a sense of optimism and opportunity.”¹¹ They each saw cable as an important technological frontier that had the power, not only to transform television, but to revolutionize communication and change how people lived.

For many activists, critics, and policymakers, cable’s promise lay largely in its increased channel capacity and ability for two-way communication. Perhaps one of the most vigorous moments of Blue Sky discourse (at least one of the most vigorous expressed by someone outside of the industry) came from Ralph Lee Smith in his article “The Wired Nation,” which was first published in 1970 as a special edition of *The Nation* and subsequently expanded into a book. In his article, Smith outlined cable’s transformative potential. He expounded on the technology’s many positive and democratizing effects and offered words of caution and policy suggestions to help avoid possible pitfalls. According to Smith:

As cable systems are installed in major U. S. cities and metropolitan areas, the stage is being set for a communications revolution—a revolution that some experts call ‘The Wired Nation.’ In addition to the telephone and to the radio and television programs now available, there can come into homes and into business places audio, video and facsimile transmissions that will provide newspapers, mail service, banking and shopping facilities, data from libraries and other storage centers, school curricula and other forms of information too numerous to specify. In short, every home and office will contain a communications center of a breadth and flexibility to influence every aspect of private and community life.¹²

¹¹ Thomas Streeter, “Blue Skies and Strange Bedfellows: The Discourse of Cable Television,” in *The Revolution Wasn’t Televised: Sixties Television and Social Conflict*, ed. Lynn Spigel and Michael Curtin (New York, NY: Routledge, 1997), 222.

¹² Ralph Lee Smith, “The Wired Nation,” *The Nation*, May 17, 1970, 582.

Smith argued that cable had the potential to provide a singular, unified communications system, which would truly operate in the public interest. If proper legislative measures were passed, specifically those regulating cable as a common carrier *and* a public resource, he argued that cable would transform television into a diverse and flexible medium. It could undermine the dominance of the major TV networks, whose commercial logics and market imperatives have long determined the operations of the medium, and produce a communication system designed to meet the needs of the American public.

Unlike traditional, commercial broadcast television, with its narrow range of channels and finite programming, cable was not limited to the cultivation of a mass audience. With the proliferation of available signals, cable could provide TV viewers with a much wider range of channels, directed at small, selective audiences. Cable's proponents believed this capacity for niche programming would enable more people to produce their own television shows, and consequently, help the medium express a wider range of perspectives and foster diverse audiences. Activists and policy makers praised cable's capacity to support local programming and service communities whose concerns were often under-represented (or poorly represented) on traditional commercial broadcast TV.¹³ They envisioned a new kind of television. One through which Americans could turn on their TV sets and find an infinite array of programs, from televised classes to local high school football games to multilingual shows. With cable, television would no longer be confined by the limits of broadcast networks; it would be

¹³ Mullen, *The Rise of Cable Programming in the United States*, 64-83; Parsons, *Blue Skies*, 238-257; Thomas Streeter, "Blue Skies and Strange Bedfellows," 221-42.

demassified and diversified, and thus, ‘rescued’ from its overly commercial and homogenizing tendencies.¹⁴

In addition to increasing the number of TV channels, cable’s other ‘revolutionary’ dimension, distinguishing it from traditional broadcast television, was its capacity for two-way communication. The dream of interactive TV did not, of course, begin with the advent of cable; as outlined in the previous chapters, the fantasy of two-way televisual communication has been an essential part of television since its inception, and was at this very moment being given material form in Bell Laboratories’ Picturephone. However, even as the telephone industry was in the midst of taking over the desire for interactive TV, cable enthusiasts were reluctant to give this fantasy up entirely. They envisioned a new kind of interactive television, one which cable was uniquely suited to create. Unlike the two-way televisual services provided by the Picturephone, interactive cable used the average home TV console and did not typically offer individuals any kind of videophone service.¹⁵ Instead, cable, which could transmit information to *and* from individuals’ home television sets along a series of coaxial cables, hoped to provide subscribers with access to data retrieval services, electronic mail, instant voting, and home shopping. By harnessing two-way technology, cable promised to make the TV set the true electronic center of the home. In connecting television to a multifaceted interactive communication network, it strove to expand and transform information access, entertainment

¹⁴ This vision of cable’s potential echoed much of the critical discourse surrounding the development of prerecorded videotapes, which—according to Max Dawson—were praised for their potential to bring art and cultural programs to the TV set. Video, by allowing people to watch non-broadcast programs on their home consoles, promised to elevate the medium out of the wasteland and save it from its reputation as a purveyor of bad taste and trashy entertainment. Max Dawson, “Home Video and the ‘TV Problem’: Cultural Critics and Technological Change,” *Technology and Culture* 48, no. 3 (July 30, 2007): 524–49, <https://doi.org/10.1353/tech.2007.0103>.

¹⁵ Although the cable industry was generally not interested in videotelephony, there were some exceptions. For instance, an experimental two-way video conferencing system was set up in Reading, Pennsylvania as part of a National Science Foundation study on the operations and potential uses of two-way cable. For more information see: Charles N. Brownstein, “Two-Way Cable Television Applied to Non-Entertainment Services: The National Science Foundation Experiments,” in *Two-Way Cable Television: Experiences with Pilot Projects in North America, Japan, and Europe*, ed. Wolfgang Kaiser, Hans Marko, and Eberhard Witte (Berlin, DE: Springer-Verlag, 1977), 17–24.

options, leisure activities, business practices, and household management techniques of American families.¹⁶

These optimistic, even utopian, Blue Sky visions of cable television had an impact on American communications policy. During the late 1960s and early 1970s, a series of policies were adopted by the FCC to regulate the cable industry. In 1969, the FCC released a *Report and Order* that outlined their policy plan for the cable industry. Although the language in this report remained a little vague, it emphasized the need for cable to break free from its longstanding reliance on the retransmission of broadcast content and support the public interest through the transmission of locally originated programming.¹⁷ In February 1972, after a long struggle between the cable industry, broadcasters, and interested third party lobbyists, the Commission worked to clarify its initial suggestions, with the passing of the *Cable Television Report and Order*. This policy spearheaded by the Charles T. Whitehead, a Nixon appointee and head of the newly formed Office of Telecommunications Policy, seemed to pave the way forward for cable. According to the Commission, any cable company wishing to open up a franchise needed to possess “at least twenty channels and two-way capacity.”¹⁸ Moreover, any cable system with more than 3,500 subscribers needed to provide at least one public access channel while those systems in the largest one hundred markets were required to offer a minimum of three channels for government, public, and educational access. Thus by 1972, some of cable’s Blue Sky vision was actually integrated into the policy that surrounded it. For proponents of this system, America

¹⁶ Rogers Worthington, “Goods, Services to Flow through Cable Television’s Taps,” *Chicago Tribune*, May 27, 1980, sec. D; Rogers Worthington, “Cable: Envisioning a Cultural Revolution,” *Chicago Tribune*, May 28, 1980, sec. B; “Two-Way Cable TV Coming,” *Atlanta Constitution*, October 21, 1978, sec. T; “Two-Way Cable TV Brings Futuristic Television Closer—in Ohio, at Least,” *Baltimore Sun*, August 31, 1977, sec. B.

¹⁷ Mullen, *The Rise of Cable Programming in the United States*, 74-79.

¹⁸ Parsons, *Blue Skies*, 265.

seemed like it was on the brink of a communications revolution of which cable was to play a major part.

Despite the overall optimism that defined this discourse, cable was not universally embraced. While the majority of electronics reporters and cultural commentators described cable with a kind of utopian fervor, certain writers remained anxious about its effects.¹⁹ Some, like Smith, worried that unless proper regulatory controls were imposed, cable could just replicate television. Concerned as they were almost exclusively with profit, most companies simply provided more channels on which to show the same vacuous commercial content. As such, Smith mused that the industry, in spite of all its promise, seemed poised to “put the ‘mass’ into this medium.”²⁰

In contrast, others worried that cable could actually be *too* revolutionary. Witnessing the growth of X-rated cable channels and the presence of Black Panther party members and other leftist activists on cable TV, writers like Kevin P. Phillips of the *Muncie Evening Press* expressed the fear—a fear that was in part rooted in racism—that cable could very well function to create “a huge, new low-price porn audience” and “spread political radicalism.” As such, Phillips insisted: “Washington ought to stop handing out money for community cable studies and spend more time getting confused Federal policies in order.”²¹ Rather than fulfill the promise of elevating the television industry, providing better quality programming and useful, interactive services that would rescue TV from its long standing reputation as a vast wasteland, people

¹⁹ Kevin P. Phillips, “Pornography, Politics, Prying--All Are Dangers in Cable TV,” *Muncie Evening Press*, April 19, 1973; Les Rich, “Cable TV: Much Potential, Little Money,” *Des Moines Tribune*, July 5, 1973; “Opponents of Cable TV Air Their Case Tonight,” *Kokomo Morning Times*, September 24, 1964.

²⁰ Smith, “The Wired Nation,” 588.

²¹ Phillips, “Pornography, Politics, Prying,” 4.

worried that cable threatened to exacerbate the TV problem, increasing the number of bad shows available or fostering programming that supposedly endangered the public interest.²²

The fear that cable would fail to live up to its lofty expectations was not without merit. Even with its local origination, public access, and two-way requirements, the *Cable Television Report and Order* carried contradictions. According to Mullen, at the same time as the new rules “aimed toward improving localism in cable programming...they also allowed cable operators to carry more of the broadcast signals they felt would subsidize local programming operations.”²³ In their attempt to provide the cable industry with additional revenue streams to meet the new required demands, they ended up producing the grounds for cable companies to increase their reliance on broadcast programming. So, as Mullen contends: “In one sense these rules reflected the discourses of the Blue Sky years as well as the Commission’s mandate to act in the public interest. But in another sense, they reflected the [Nixon] government’s increasingly lenient stance toward big business.”²⁴

Over the course of the 1970s, the balance between these two regulatory dimensions moved increasingly towards the latter, as the limits on distant signal importation and leapfrogging, as well as the demands on local origination were slowly repealed. Although two-way requirements persisted, it did not follow that cable companies needed to develop interactive programming as the capacity for two-way was enough to fulfill the regulatory requirement. Moreover, throughout the 1980s, the cable industry became a central pillar in the growing media

²² The fear that the cable industry would fail to deliver on its promise to improve television intensified as accusations of corruption within the industry grew increasingly prominent. Throughout the 1960s and early 1970s, as competition over securing cable franchises became especially fierce, charges of bribery and corruption were leveled at certain cable companies. These charges came to a head in 1971 when Irving B. Kahn, former chairman of the cable company Teleprompter was imprisoned for bribing a member the Johnstown, PA City Council, as well as for perjury. For more see: Parsons, *Blue Skies*, 330-340.

²³ Mullen, *The Rise of Cable Programming in the United States*, 76.

²⁴ *Ibid*, 77.

conglomerates enabled by a growing wave of deregulation and “structural convergence” enabled by the Reagan Whitehouse. As Jennifer Holt contends: “The unchecked corporate power that spread across industrial lines created a media environment that was beneficial to private not public interests.”²⁵ As such, the more utopian aspects of Blue Sky discourse, which saw cable merging economic profit with social good, began to run counter to the growing wave of deregulation and neoliberalism that defined the public policy initiatives and corporate agendas of the 1980s. While having their brief victory in FCC cable policy, the promises that grew out of Blue Sky discourse did not sustain their impact on federal regulation. Indeed, when two-way cable did appear in the late 1970s and 1980s, it did so less as a benevolent social gesture but because it contributed to a specific corporate agenda that at least in the case of Warner matched its industrial ambitions.

Participation, Community, and the Promise of QUBE

Even as federal regulation began to loosen its demands on the cable industry, other legislative bodies still held onto their vision of a community-centric, participatory cable system. In particular, local governments, so essential in deciding the fate of cable franchises, did not give up on cable’s seemingly radical potential enshrined in the utopian rhetoric of previous years. In deciding the cable companies to which to award contracts, municipalities often asked for a wide range of different services. There were demands for local programming, two-way capability, informational services, and even requests that went far beyond the purview of the industry, such as the building of a new library or planting 20,000 trees.²⁶ As such, cable companies continued to

²⁵ Jennifer Holt, *Empires of Entertainment: Media Industries and the Politics of Deregulation, 1980-1996* (New Brunswick, NJ: Rutgers University Press, 2011), 4.

²⁶ Tom Southwick, “Gustave Hauser 1999 Oral and Video History,” The Cable Center Oral History Project, August 3, 1999, <http://www.cablecenter.org/h-listings/gustave-hauser.html>.

respond to the vision of cable's potential that persisted to capture the imagination of the public and consequently of local government. Even if their efforts were more cosmetic than anything else (e.g. ensuring their systems had two-way capability but not designing any interactive programming or services), certain companies strove to fulfill the dreams communicated in Blue Sky discourse in ways which matched their own visions of cable's future. They worked to create cable systems that would truly transform televisual experience, rendering it locally desirable, community building, interactive, and of course, lucrative.

Although multiple cable companies sought to produce such innovative cable systems, by far the most significant and extensive of these was QUBE. Launched in 1977 by Warner Communications²⁷ in Columbus, Ohio, QUBE seemed in many ways like the embodiment of Blue Sky cable. Not only did the system offer subscribers over thirty different channels which included locally produced community and educational programming, it provided consumers a chance to participate more directly in their TV experience. As part of their cable package, QUBE viewers were given a small, electronic keypad (referred to by the company as the "QUBE console") which when connected to the TV set, would help viewers navigate through their available channels, purchase special pay-per-view programs, play games, vote, learn more information about an advertised product, or respond to any other participatory aspects of QUBE's content. It was this unique piece of technology, and the kinds of interactive practices it afforded, that distinguished QUBE from other cable systems. In responding to their television

²⁷ Warner Communications represented one of the major cable providers in the United States. Moreover, the company, which also owned Warner Brother studio, Warner Music, DC Comics, and Atari, was exemplary of the kind of media conglomerate that marked the entertainment industry in the 1980s analyzed by Holtz. Indeed, in 1980 Warner merged with American Express, and 1989 it merged again with Time Inc. in the largest media mergers of the decade. For more see: Holt, *Empires of Entertainment*.

sets directly with their keypads, QUBE viewers were transformed into users: their televisual experience allowing for, even demanding, active, tactile, participation with the medium.

Notions of participatory television did not start with QUBE. Although TV had long held a reputation for passivity, this vision of the medium was not the only perception of its effects. The idea that television was actually a medium defined by participation emerged in McLuhan's writings.²⁸ For McLuhan, technological change offered a radical transformative power, capable of rearranging social structures, dominant ideas, and human sensation. Writing as he was in the 1960s, in the midst of the Cold War, civil rights movements, countercultural expressions, and emerging electronic media, McLuhan was particularly interested in what he saw as a radical moment of transformation in American society. For McLuhan, technology, particularly electronic technology, represented a central cause behind this dramatic transformation. Unlike previous decades defined by mechanical technologies whose operations functioned to fragment individuals, separating thought from feeling, action from reaction, the electronic media that had begun to dominate American society by the middle of the twentieth century was ushering in a new era of integration and participation. "In the electric age, when our central nervous system is technologically extended to involve us in the whole of mankind and to incorporate the whole of mankind in us, we necessarily participate, in depth, in the consequences of our every action."²⁹

For McLuhan, television was essential to this electronic age, ushering in new experiences of participation and depth in the technological and material properties of its electronic image. According to McLuhan, television is a 'cool' medium par excellence. Its low resolution and mosaic form produce a multi-sensory viewing experience which demands a great degree of

²⁸ Marshall McLuhan, *Understanding Media: The Extensions of Man*, REV edition (Cambridge, MA: The MIT Press, 1994).

²⁹ McLuhan, *Understanding Media*, 4.

participation and in-depth engagement. Although on the surface television and cinema appear to have a lot in common, the material differences between these two media radically alter the perceptual and social apparatuses they help structure. Unlike the 'hot' medium of cinema, the television screen is a *mosaic*. It does not consist of a series of high definition photographs, moving in rapid succession to simulate movement. Rather its inherently electronic composition means that the televisual image is composed of dots of light and dark which appear and disappear in constant movement. Thus, "The TV image requires each instant that we 'close' the spaces in the mesh by a convulsive sensuous participation that is profoundly kinetic and tactile because tactility is the interplay of the senses, rather than the isolated contact of skin and object."³⁰ When viewing a television program, individuals use more than their eyes; they engage their entire bodies, watching, listening, and feeling for an extended period of time.

According to McLuhan, this new mode of mediation has caused significant panics, especially in a world structured by the conditions and expectations of print. "As a cool medium TV has, some feel, introduced a kind of *rigor mortis* into the body politic."³¹ The in-depth modes of engagement and cool participation are incomprehensible to those still invested in the hot modes of political and social debate that permeate the newspaper. The simultaneous investment and lack of intensity essential to television viewing seem perplexing and counter-intuitive. "For good or ill, the TV image has exerted a unifying synesthetic force on the sense-life of these intensely literate populations, such as they have lacked for centuries."³² Thus, McLuhan contends that television offers a new sensory experience and mode of being, which challenges the linearity and fragmentation that has so long dominated society. With new electronic media,

³⁰ McLuhan, *Understanding Media*, 314.

³¹ *Ibid*, 309.

³² *Ibid*, 315.

the possibility of wholeness, harmony, community, and emotion return as governing forces in the psyche and social lives of individuals in the Western world, offering both utopian possibilities and dystopian fears.

In the late 1960s and 1970s, artists and activists began to use McLuhan's reflections on the participatory nature of the televisual image as the basis of their media practice. They embraced McLuhan's claims, entranced by his vision of the new electronically mediated world as a wholistic and retribalized global village, capable of overcoming the divisions and linearity of 'old,' traditional postwar modernity. Yet unlike McLuhan, they were increasingly dissatisfied with commercial broadcast TV. For them, the only way to truly produce electronic media capable of ushering in the kinds of cultural changes espoused by McLuhan was to make their own television—a television which would align with the politics and identities of the counterculture, privileging action, immediacy, honesty, and participation.³³ These artists and activists witnessed the growth of cable and became intrigued by its potential to transform TV. With cable's increased channel capacity and the legislative demands for local origination and public access, the barriers to televisual distribution appeared greatly reduced. Now that at least in theory anyone could put on a TV show, it seemed like television was on the brink of a radical transformation. In addition, the release of the Sony DV-2400 Video Rover in 1967 also contributed to the faith that truly participatory television was just around the corner. With portable video, TV equipment was now lighter, mobile, and cheap enough to make video production accessible to community groups and art collectives. By taping images of faraway places and hard to reach views, the portapak made the production of spontaneous, immediate, authentic, and on-the-ground TV more possible than

³³ Deirdre Boyle, *Subject to Change: Guerrilla Television Revisited*, 1 edition (New York: Oxford University Press, 1997); Stephanie Tripp, "From TVTV to YouTube: A Genealogy of Participatory Practices in Video," *Journal of Film and Video* 64, no. 1–2 (2012): 5–16, <https://doi.org/10.5406/jfilmvideo.64.1-2.0005>.

ever before.³⁴ Together, video and cable seemed to hold, at least for those involved with independent media production, the possibility of remaking television—turning it from an out-of-touch arm of the establishment into a hip countercultural force, capable of saving “Media-America.”³⁵ Within these technological and industrial frameworks, the alternative video movement developed, promising to transform TV into a radical medium whose participatory nature and countercultural politics would transform American life, rendering it more open, equal, honest, and connected.³⁶

While the alternative video movement represents one important dimension in the history of participatory television, QUBE embodies a different conception of this notion, one which I believe persists at least to some extent into the contemporary convergence of television with digital media. Unlike the countercultural and activist television practitioners of the late 1960s and 1970s, who conceptualized ‘participation’ largely in terms of television production, QUBE constructed a participatory TV system focused on the point of reception. This mode of reception-based participation, though articulated in a distinct way with QUBE, also has a long history. Since television’s emergence, audience members have been incorporated into television programming. They have performed as members of a studio audience, written or called-in to a TV program, discovered on-air they are surprise recipients of prizes, or appeared as the at-home analogues of game show contestants. According to Marsha Cassidy, in the 1950s these “audience participation programs” (many of which were broadcast during the day and hailed female viewers) functioned to help manage advertisers’ fears that the housewife, often envisioned as a

³⁴ Kevin Howley, *Community Media: People, Places, and Communication Technologies* (Cambridge University Press, 2005), 39-82.

³⁵ Michael Shamberg, *Guerrilla Television* (New York, NY: Holt, Rinehart and Winston, 1972), 2.

³⁶ For more on the history of the Guerrilla Television and Community Video movements, see: Boyle, *Subject to Change*.

distracted viewer who watched television while she performed domestic labor, was not paying close enough attention to television commercials.³⁷ Programs like *Strike It Rich* (1947-1950 radio; 1951-1957 television) and *It Could Be You* (1961-1963 television) often used audience engagement techniques established initially on radio broadcasts—and indeed, *Strike It Rich* began as a radio program. They integrated studio audience and home audience participation with constant appeals that viewers keep their attention fixed on their television sets so not to miss their opportunity to participate.³⁸ In addition to the contest programs analyzed by Cassidy, talk shows also regularly involved audience participation, having studio audiences voice their opinions or soliciting responses from viewers through call-in segments.³⁹ By the late 1970s, when QUBE's participatory features were being heralded by Warner as the future of cable, the production and reception-based visions of audience participation began to merge in public access cable programs. Shows like *TV Party* (1978-1982) and *The Live Show!* (1979-1984), though produced outside the realm of commercial broadcast television, also engaged with home viewers through various call-in sessions, often involving the hosts getting insulted by irate members of the audience on live TV.⁴⁰

Given this history, it must be understood that QUBE's mode of engaging television audiences was not entirely new, but drew instead on a long-established broadcasting practice that often saw participation as essential to television's commercial imperatives. What did however

³⁷ Marsha Cassidy, "Sob Stories, Merriment, and Surprises: The 1950s Audience Participation Show on Network Television and Women's Daytime Reception," *Velvet Light Trap* 42 (1998): 48–61.

³⁸ For instance, *Strike It Rich* allowed home audiences to participate in the program by having celebrities compete in a quiz show for a specific home viewer and by letting home viewers call-in to make financial contributions to aid down on their luck studio contestants. *It Could Be You* brought home viewers into the program by announcing the addresses of audience members throughout the program, surprising them with gifts at their front door.

³⁹ For me see: Bernard Timberg, *Television Talk: A History of the TV Talk Show*, 1st ed., Texas Film and Media Studies Series (Austin: University of Texas Press, 2002).

⁴⁰ For more see: Joan Hawkins, *Downtown Film and TV Culture: 1975–2001* (Intellect Books, 2015); Kristen Galvin, "TV Party: Downtown New York Scenes Live on Your TV Screen," *Journal of Popular Music Studies* 25, no. 3 (September 2013): 326–48, <https://doi.org/10.1111/jpms.12035>.

distinguish QUBE from its predecessors was the technological way in which participation was conceptualized. Although there were some programs in which local Columbus residences did participate as part of a studio audience, QUBE's participatory functions were not rooted in call-in segments or onscreen appearances. Instead, QUBE audiences generally engaged with programming by pressing buttons on their consoles—a move which was in many ways more restrictive than the forms of vocal and bodily performance enabled by older modes of televisual engagement. Here participation was not created by having members of the public create QUBE programming (even though QUBE did include many locally produced and community-centric shows, none of these were public access), or even by having audiences voice their opinions in their own words. It worked instead to render the experience of TV watching interactive. It reduced interactivity to the act of pressing buttons and the selection of preset responses that were transmitted to Warner and then incorporated into the program as statistical data.

Like previous versions of the audience participation show, QUBE's interactivity worked to manage audience attention and gain important information. However, it also relinquished the more complex dynamics of two-way conversation for a streamlined vision of tactile, technologically advanced push-button feedback. As such, it also functioned in some ways to reify McLuhan's more phenomenological and complex conception of television as simultaneously participatory and tactile. With QUBE, viewers did not merely perceptually complete the low-resolution TV mosaic—a multi-sensory process that exceeds and subverts the terrain of the visual. They literally and physically completed the TV image with their touch. By pressing the buttons on their specialized QUBE consoles, they responded to and interacted with TV programming. Through a system of push-button feedback, they closed the space between viewer and screen. They produced a new kind of televisual engagement that was not only, in the

words of McLuhan, perceptually “kinetic and tactile” and rooted in the “interplay of the senses,” but explicitly and repeatedly capable of integrating the “contact of skin and object” into the experience of participatory TV.⁴¹

QUBE’s unique capacity for tactile participation was a central feature in both the development of QUBE programming and the design of its specialized console. QUBE offered three different types of programming, each of which was accessed by pressing a different button on the console. By pushing the “T” button, subscribers could access QUBE’s “television” content. Although all programming seen on a TV set could presumably be called “television,” it was only the retransmitted local, regional, and national broadcast stations that were given this designation. In contrast, QUBE’s locally produced programs could be accessed by selecting the “C,” or “community,” button. These so-called “community” channels, which included the QUBE-produced *Columbus Alive*, as well as religious, arts, education, and information programming were thus distinguished from the system’s “television” channels on the basis of their localism and supposed commitment to serving community interests. By choosing the “P” button, subscribers could access QUBE’s “premium” (i.e. pay-per-view) programming.⁴² The premium channels included a variety of on-demand films, performances, entertainment specials, sports events, and soft-core pornography. If a subscriber opted to watch one of QUBE’s premium programs, a fee, typically ranging from \$1.50 to \$3.50, would be added onto the subscriber’s next bill, thus making the purchase of paid programming instantaneous.⁴³ To prevent the purchase of unwanted programs, subscribers could opt to have their premium channels locked, or

⁴¹ McLuhan, *Understanding Media*, 314.

⁴² John Hicks, “Two-Way Cable-TV Makes Debut, Introduced By Warner Division,” *Direct Marketing*, December 1977; Warner Amex, “A New Perspective On Cable Television” (Warner Amex Cable Communications, Cir 1980), Folder QUBE, Barco Library.

⁴³ Jackie Jadrnak, “Stan Rigged His Qube for Free; Other Viewers Pay and like It,” *Palladium-Item*, April 1, 1979, sec. A, 8.

simply prevent the adult film channel from being accessed. This was deemed prudent if viewers did not want to risk children accidentally seeing pornographic films.⁴⁴ Finally, QUBE also offered narrowcast programs. Using certain dedicated channels, they transmitted local town hall meetings to households in specific municipalities and offered televised college courses in conjunction with Ohio State University, which would be available exclusively to subscribers who had paid the required registration fee.⁴⁵

In addition to accessing these different program-types, the QUBE console also facilitated the system's two-way communication. Viewers interacted with QUBE programming by pressing the five numbered "response" located on the console's right side. During QUBE's original programming, viewers would be prompted to use their consoles to respond to something (e.g. a question, a performance, an item up for auction) onscreen. By pressing one of their "response" buttons, they could answer a multiple-choice question, cast a vote, place a bid, opt to receive more information about a particular product, etc. This mode of push-button call and response was the overarching structure of QUBE's claims to two-way communication. Here, participatory television became almost exclusively defined by the act of pressing buttons. Instead of changing televisual form or having audience members themselves create TV programs, practices which of course had defined participation for video activists and community cable enthusiasts, QUBE's participation lay in the far less radical act of real-time, pre-set audience response. Thus, it is important to remember that although QUBE's rhetoric constantly emphasized its capacity for interactivity and two-way communication, in practice, its participation (limited as it was to the terrain of reception) called back to the long history of audience participation in broadcast TV.

⁴⁴ Steve Hoffman, "Columbus' Cable QUBE Model of Urban Systems," *Cincinnati Enquirer*, October 23, 1977, sec. F, 2.

⁴⁵ Jonathan Black, "Columbus, Ohio, Tries The Ultimate Turn-On," *St. Louis Post-Dispatch*, August 6, 1978, sec. J, 16; "Warner Tackles Technological Giant in Change to Two-Way," *TVC*, April 1978, Barco Library.

And as such, QUBE programming was still bound to many of the norms and largely one-way communicative patterns of traditional television.



Figure 3.1 QUBE Console, Barco Library, Denver, CO

In general, the programming which made extensive use of the QUBE's interactive dimensions appeared most commonly on the "Community" channels. The shows transmitted under this label were largely produced by Warner, often created in QUBE's Columbus studio, and thus, became a showcase for the system's unique interactive properties. As such, QUBE strove not only to integrate participation into nearly all of its Community programming, but also to

promote these channels as much as they could, signaling their difference from all other forms of TV. Indeed, the console's very design seemed to emphasize the importance of QUBE's Community programs. By placing these channels in the middle of the console, Warner worked to construct them both conceptually and materially as the centerpiece of QUBE's operation—the very heart of what made the system unique. In addition, QUBE's monthly program guide which was delivered to subscribers as part of their cable package, worked to promote both its Premium and its Community channels.⁴⁶ Alongside the daily listings of all the programs available through the system, the guide included full-page descriptions of the kinds of programming offered on these QUBE-exclusive channels. They advertised movies and special events available on pay-per-view, often appealing to viewers' apparent desire for agency over their TV sets, claiming that: "With Qube's Premium Channels You Can Now Custom Design A Viewing Schedule That is Most Convenient For You!"⁴⁷ And they promoted the unique kinds of televisual experiences enabled QUBE's Community channels, with headings like "Express yourself, win prizes, pick the stars of tomorrow, learn how to save money! All free on your C1 channel!" that highlighted the system's participatory dimensions.⁴⁸

QUBE's community programming itself was designed to make use of and draw attention to the system's special console. Since QUBE is no longer operational, it is impossible to truly get a complete picture of what it was like to watch QUBE and respond to the queries posed throughout the system's various programs. However, segments of QUBE shows have been preserved,

⁴⁶ "August on Qube" (Warner Communications, August 1978), BOX CC79 QUBE PUBL + Videos, Barco Library; "November on QUBE" (Warner Communications, November 1978), BOX CC79 QUBE PUBL + Videos, Barco Library; "January on QUBE" (Warner Communications, January 1978), BOX CC79 QUBE PUBL + Videos, Barco Library; "March on QUBE" (Warner Communications, March 1978), BOX CC79 QUBE PUBL + Videos, Barco Library; "May on QUBE" (Warner Communications, May 1978), BOX CC79 QUBE PUBL + Videos, Barco Library.

⁴⁷ "April on QUBE" (Warner Communications, April 1978), BOX CC79 QUBE PUBL + Videos, Barco Library.

⁴⁸ "June on QUBE" (Warner Communications, June 1978), BOX CC79 QUBE PUBL + Videos, Barco Library.

included in official archives, as well as collected by fans and distributed on YouTube. Much of the archived QUBE programming came from Community channels. This is perhaps not that surprising given that these shows were largely created especially for the cable system and thus are of interest to cable historians, industry archivists, and fans. While this might not give a complete picture of all the programming available on QUBE, it does provide an impression of the system's participatory dimensions. Indeed, interactivity was included in nearly all of the community programming I viewed. It was integrated into programs' structures, built into commercials, and repeatedly mentioned as the system's distinguishing feature.

In QUBE's inaugural cablecast, when the system was brand-new with numerous technical kinks left to be worked out, the programs' hosts still tried to show off QUBE's interactive properties. In *Flippo's Magic Circus*, a children's show hosted by Flippo the Clown (a local Columbus celebrity who had a long career on broadcast TV before moving onto the cable system as the host of several Community channel shows) and the first QUBE program ever transmitted, Flippo repeatedly states the significance and the novelty of the QUBE system. Enthusiastically addressing the *Magic Circus* studio audience, he proclaims: "Here we are on the first ever...QUBE transmission. This is it and you're all part of history! Lets hear it for history!"⁴⁹ With this exclamation, the children present in studio cheer loudly, before Flippo continues to introduce the show's premise. After this introduction, Flippo brings out the QUBE console, showing it to the camera, describing its functions, and stating that soon, viewers will be able to answer questions using their own consoles. Similarly, *Columbus Goes Bananaz*, a teen-oriented show that was part of the station's inaugural broadcast, featured local celebrities, amateur talent displays, comedic games, satirical sketches, and dance breaks over which phrases like "money is

⁴⁹ Jon QUBE, *QUBE PREMIERE 01*, accessed December 27, 2017, https://www.youtube.com/watch?time_continue=1&v=4oKzsRY4RA8.

the root of all evil” and “he who lives in glass house should dress in the basement” were displayed. Throughout the first episode, the show’s host, Mike Young, repeatedly emphasized the program’s participatory nature. Insisting on its difference from conventional TV, he announced:

Columbus Goes Bananaz is...gonna be your show... It’s gonna be an outlet for local talent...your opinions, special guests, and anything you want it to be...It’s not my show, it’s not the producers’ show, it’s your show. And it’s coming to you live. Now you can be sure it’s gonna be off the wall and it’s gonna be full of surprises because it is live and we’re part of the new two-way television shows. Those who are watching QUBE at home will be making history along with us... And we’re going to be become more and more interactive as the time goes on.⁵⁰

Throughout the episode, Young repeatedly gets the studio audience (consisting of teenagers and young adults, most of whom are shown sitting cross-legged on the floor) involved in the show’s operations. He asks four volunteers to participate in a banana cream pie eating contest and lets audience members ask the questions during his interview with national radio personality Wolfman Jack. By the end of the station’s inaugural programming block, this rhetoric of participatory innovation was followed up by asking viewers to try out their QUBE consoles and respond to a variety of questions and events on screen: voting on the winner of a talent contest and deciding what album would be included in a time capsule to best sum up 1977 Columbus, Ohio.⁵¹

QUBE’s focus on interactivity proceeded to structure its local programming throughout its tenure as a two-way cable system, becoming a central feature of program design. For instance, the show *Talent Search*, an amateur talent contest modeled after NBC’s *The Gong Show* that ran the entirety of QUBE’s operation, required that home viewers participate constantly. During an act, viewers were asked to vote “yes” or “no,” deciding whether or not to let performers continue

⁵⁰ QUBE, *QUBE PREMIERE 01*.

⁵¹ At forty-seven percent, the winning album was “Across the Field,” a record by the Ohio State marching band featuring their famous fight song.

their acts by pressing the response buttons on their QUBE consoles.⁵² These votes were tallied live by the QUBE headend computer and displayed on the bottom of the screen during individual performances, so viewers could watch the impact of their votes in real time. At the end of the program, the contestants who were allowed to stay on screen the longest number of seconds were deemed the winners and in the event of a tie, home viewers would select their favorites again through their consoles.

QUBE's game shows, *Screen Test*⁵³ (focused on film and television trivia) and *Power Play*⁵⁴ (dedicated to sports), combined studio contestants with at-home players in a gesture reminiscent of *Strike It Rich*. While two contestants competed head-to-head on the air, answering trivia questions in real time, audience members could also participate in the contest. At the beginning of each round, viewers could select which of the studio players to support, accruing points based on the success of their chosen player. In addition, after every 'live' round, the host would ask a written multiple-choice question. While the studio contestants wrote down their answers, in a gesture reminiscent of final *Jeopardy*, viewers would respond to the question themselves using their consoles. The points for these questions were decided based on what percentage of home viewers answered the question correctly: the fewer home viewers that guessed the right answer, the more the question was worth. In the end, both the winning studio contestant and the winning home player were awarded a prize, giving the impression that their victories were both equal and collaborative.⁵⁵

⁵² Jon QUBE, *QUBE PREMIERE 01*.

⁵³ Jon QUBE, *SCREEN TEST with Flippo @ QUBE*, accessed December 27, 2017, <https://www.youtube.com/watch?v=N2Fk3AbuyZQ>.

⁵⁴ *QUBE Interactive Composite Reel* (Columbus, OH, 1979).

⁵⁵ While the dominant structure of QUBE game shows was rooted in this collaboration between home viewer and studio contestant, in 1984 a different kind of game show, entitled *The Magic Touch*, premiered on the new QUBE satellite system. This program took away the studio contest and was exclusively geared towards home players who

Alongside *Talent Search*, *Screen Test*, and *Power Play*, QUBE worked to integrate interactivity into other programming, often using the console as a mechanism for instant feedback. Besides game shows, children's programming, and talent contests, most of QUBE's additional original programs used variations on the talk show format. Throughout these shows, audience members were repeatedly polled by the program's hosts, asking their feedback on what questions to ask particular guests or gaging their response to particular interviews and opinions. These questions were sometimes designed for humor; in one instance, a host asked the audience "Do you like me?" and then followed up by asking those who voted "No" the question "Why not?" At other times QUBE's instant polling capacity was used more seriously. For instance, on an episode of *Columbus Alive* recorded during the Iran hostage crisis, host Carol Stevenson interviewed experts on Iranian foreign policy. After her interview, she then asked the audience whether or not they agreed with the experts and believed that the Shah should be sent back to Iran in exchange for the America hostages.⁵⁶ Throughout these shows, hosts would sometimes have what seemed like preconceived questions, which were written out onscreen and typically offered more complex and nuanced multiple choice answers, while at other moments, the questions seemed spontaneous, something that arose strictly from the conversation of the moment. In these instances, the host would pose the relevant question verbally to the audience, often providing them with simple answers (yes/no, agree/disagree) from which to select, rendering them easy for the audience to remember. As such, even though much of QUBE's interactivity was preplanned, the simultaneous presence of spontaneous verbal questions made

would answer trivia questions on their consoles, earning points and competing with one another for prizes. An episode can be viewed on YouTube: <https://www.youtube.com/watch?v=t3hYf0zASvs>

⁵⁶ *QUBE Interactive Composite Reel* (Columbus, OH, 1979). The specific dates of these broadcasts are unavailable; however, as they are included in a 1979 composite reel, they had to have aired between QUBE's launch in December 1977 and the end of 1979.

the participation appear looser and more authentic, showing that the audience could be brought into the conversation at any point.

In addition to emphasizing participation and communication in their discourse, QUBE's original programs also worked to highlight the console's push-button capacity and connect touch with QUBE's innovative and interactive dimensions. Throughout all of QUBE's interactive programming, every time viewers were asked to use their keypads, the words "Touch Now" would flash at the bottom of the screen, prompting them to press buttons on their keypads and have their votes registered. Beyond this simple graphic, the word 'touch' was central to the rhetoric of QUBE's programming. The show's hosts rarely referred to their audience participation as pushing buttons or even voting, but described it almost exclusively as "touching in." This choice of words worked to construct the act of pressing a button as the crucial thing that would transform television from a one-way mass medium defined by watching into a two-way communicative tool defined by using. As such, the console seemed to embody QUBE's distinction from other televisual experiences, the marker of a new, active, and tactile mode of televisual engagement.

Taken together, the structure of the QUBE's community programming, functioned to create an impression that all Columbus viewers were joined together as active agents in their television presentations. They selected the winners of talent contests, got a say in the questions asked in interviews, were interviewed themselves, and were given a chance to participate in game shows. QUBE hosts addressed subscribers as if they were active collaborators in the televisual process, part of an imagined community based not in simultaneous TV viewing but in simultaneous the experience of touch. By pushing their response buttons at the same time and seeing the results of their efforts immediately onscreen, QUBE viewers were hailed together as participants united in

the act of “talking back” to their TV sets—even if the question of how participatory this style of programming truly is remains a subject for debate.⁵⁷

Tactility and Push-Button Democracy

The QUBE console represented the technology that formed the crux of QUBE’s interactivity and distinguished the system from its competitors. And as such, it was often a focal point of the system’s promotion; its pushbutton design became emblematic of its unique technological, tactile, and participatory dimensions. It appeared front and center in QUBE’s advertising images and promotional films,⁵⁸ often accompanied by taglines that emphasized its tactility, describing QUBE as “A Touching Experience”⁵⁹ or simply inviting the audience to “Touch the Button”⁶⁰ and experience all the wondrous things QUBE had to offer. As a promotional pamphlet literally entitled “Touch the Button” claims:

Touch the button and Qube brings you... theatre... first run films... and the great movies of yesterday. **Touch the button** and Qube brings you... games rich in entertainment and rewards... a kaleidoscope of sports... the news... and close-up views... of Columbus and the pulse of the rest of the world. **Touch the button** and Qube takes you... on shopping tours... to class for college credit courses... and... seats you beside today’s most inspirational leaders. **Touch the button** and Qube brings you... opera...ballet...symphony...and rock. Qube entertains you with stereo music...without commercials... 24 hours a day... **Touch the button** and enter the era of 2-way participation in the infinite...unfolding...never-ending worlds of Qube.⁶¹

The significance of QUBE’s push button design and insistence on touch was not only the subject of the Warner’s promotional campaign, but was also remarked upon in the popular press.

In a 1978 article in the *St. Louis Post-Dispatch*, reporter Jonathan Black noted that QUBE

⁵⁷ “Talking Back to Television: Cable System Brings an End to Passive Viewing,” *The Washington Post*, September 3, 1978, sec. C, 4.

⁵⁸ E.g. Warner Amex, *QUBE*, Web Video, Promotional Film, accessed December 6, 2016, https://www.youtube.com/watch?v=47k9g_PbwQE.

⁵⁹ “Flippo On QUBE,” *Columbus Dispatch*, December 1, 1977.

⁶⁰ Warner Cable, “Touch the Button.”

⁶¹ Warner Cable, “Touch the Button,” 1-2.

console's design was essential to the system's innovation. He argued that part of what makes traditional television so limiting is the ever-present dial used to change channels. According to Black, the device works to anchor "the mind...around the three prime network channels: CBS, NBC and ABC."⁶² The hand, trained to moved in set increments, automatically switches to these three channels, rendering the thought of expanding one's televisual horizons and trying out a different station feel strange and disconcerting. This habit is broken by QUBE. "There is no dial. In its place is the Chinese-menu mode of selection, a calculator-type box. Button-operated, all 30 channels enjoy equal 'weight' and so dispense with the familiar supremacy of network anchoring position." By rendering all channels equally accessible by the press of a button, Black argues that the QUBE console liberates viewers from the tyranny of the dial and materially encourages an open and expanded approach to television viewing.

⁶² Black, "Columbus, Ohio, Tries The Ultimate Turn-On," 16.



Figure 3.2 Mother and Son Watching Qube, Courtesy of the Barco Library, the Cable Center, Denver, CO

Even as the QUBE console and the forms of tactile experience it afforded marked its newness and difference from that which came before, the imagery which surrounded the system

still connected it to older ideals of domesticity, interconnection, and the family circle which shaped television discourse since its inception. An examination of the QUBE photograph collection—many of these images appeared in trade magazine articles and promotional pamphlets—reveals the prominence of this visual technique. In these photographs, the QUBE console is repeatedly located at the center of the frame. It is shown lying on the floor between a mother and a young child, while they sit in front of their fireplace, watching one of QUBE's educational programs (Figure 3.2).⁶³ It is placed in the hands of a mother responding to a QUBE poll about her family's consumption choices; her husband and children sit beside her, leaning towards the TV set or holding up a box of cereal, seemingly encouraged to do so by the program pictured on screen.⁶⁴ The console is shot from a high angle, again held by a mother but this time the obvious focus of the frame, far larger than its corresponding television screen around which her husband and son sit transfixed.⁶⁵ It is even depicted as the center of the family circle, the object around which an entire family—mother, father, children, and even dog—gather, while their TV set, still placed in the middle of the frame, appears slightly apart. It is connected to the family not through their gaze, but by the wire running from the cable box to the QUBE console.⁶⁶ In these images, the QUBE console not only takes its place within domestic space but functions at times to even overshadow the television set itself, supplanting its position in the family circle.

⁶³ Warner Cable, *Untitled*, cir 1981, cir 1981, Folder: Qube Seattle Photograph Collection, Barco Library.

⁶⁴ Warner Cable, *FDA Hearing on Warner Cable QUBE - 20*, 1977, 1977, Folder: Qube Seattle Photograph Collection, Barco Library; Warner Cable, *FDA Hearing on Warner Cable QUBE - 14*, 1977, 1977, Folder: Qube Seattle Photograph Collection, Barco Library; Warner Cable, *FDA Hearing on Warner Cable QUBE (with Cereal Box)*, 1977, 1977, Folder: Qube Seattle Photograph Collection, Barco Library.

⁶⁵ Warner Cable, *A Columbus Family with Warner Cable's 30-Channel QUBE Service*, cir 1980, cir 1980, Folder: QUBE Photos - From Gus Hauser, Barco Library.

⁶⁶ Warner Cable, "Touch the Button," 16.

This is taken even further in an advertisement that ran in the *Columbus Ohio Dispatch* promoting the system's launch on December 1, 1977 (Figure 3.3).⁶⁷ In this ad, a young boy sits on his grandfather's knee, pressing a button on a QUBE console. The boy, his face fixed in an expression of excited delight, looks down on the keypad, seemingly entranced by the technology, marveling at it as he pushes one of its response buttons. The grandfather holds up the keypad for his grandson watching him press the button, a similar expression of joy mirrored on his face. This scene of family connection and inter-generational closeness is completed by the tagline: "Touch the button and someday you'll tell your grandchildren about it." It thus suggests that one day in the future, a similar scene might arise, with the young boy, now an old man, showing this advanced TV technology to his grandchildren and regaling them with the story of how his grandfather had introduced him to QUBE many years before.

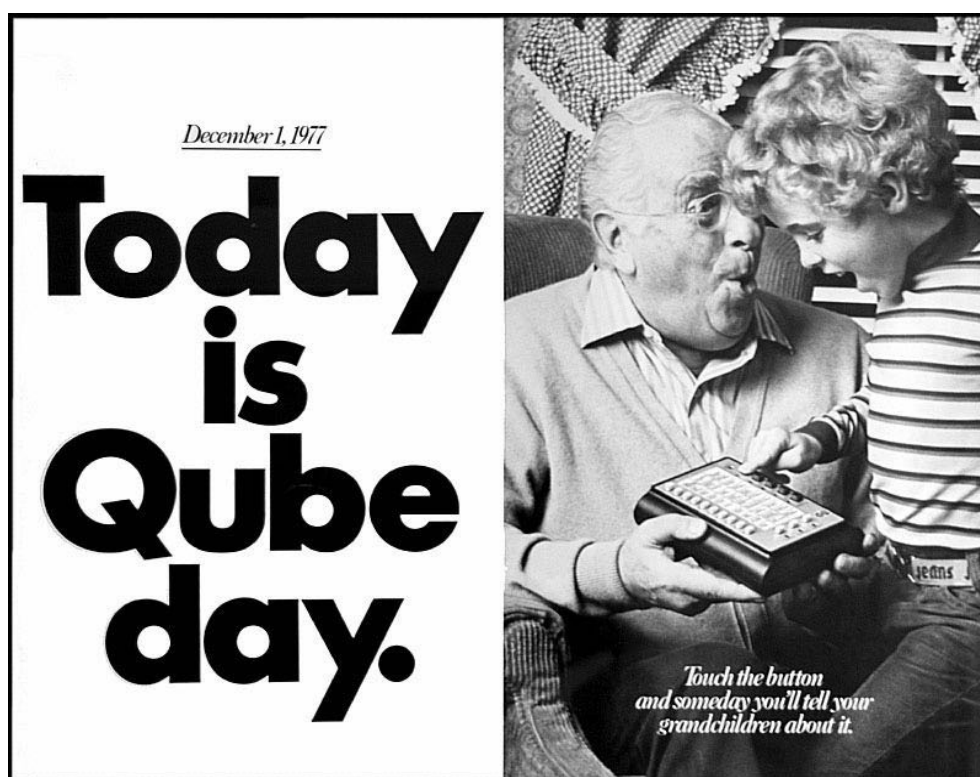


Figure 3.3 QUBE Advertisement, *Columbus Ohio Dispatch*, 1977

⁶⁷ "Today Is QUBE DAY," *Columbus Ohio Dispatch*, December 1, 1977.

This form of visual display of course was a prominent feature of television advertising, which extended beyond the sale of TV sets themselves and came to define the promotional rhetoric of video systems and Picturephones. Promotional images often presented television technology as the center of domestic life, a way of connecting family members together and creating new experiences of intimacy. Though in some ways echoing this visual technique, the QUBE advertisement distinguishes itself from this promotional tradition in one significant way: the TV screen itself is completely absent from the image. Unlike the advertisements for television consoles—or even those for video cassette players and Picturephones—in which the electronic screen figures prominently, positioned as the center of the family circle and constructed as the primary source of interpersonal interaction, this QUBE advertisement places the keypad as focal point of familial attachment and affective contact. Rather than being connected by the act of television viewing, the grandson and grandfather are brought together emotionally and physically by their tactile engagement with the QUBE console. By removing the TV set from the scene, and fixing the grandson's gaze on the keypad's buttons and the grandfather's on his grandson, the advertisement distances QUBE from television's negative associations. Rather than a stultifying medium, turning family members into passive, glassy-eyed couch potatoes so mesmerized by their TV screens they never actually interact or engage with one another, this advertisement presents QUBE as a new kind of television, one whose technological insistence on tactility and interactivity actively produce familial closeness and intergenerational connection through the act of using (rather than watching) the TV set.

This vision of QUBE also extended beyond the system's advertising, finding its way into a children's story, published in 1981 as part of *Rainbow Shower*, an educational book series

designed to teach vocabulary and reading comprehension.⁶⁸ The story, simply titled “QUBE TV,” follows Kiyō, a young Asian American girl from Columbus Ohio, while she tests out her QUBE equipped television and responds to the program’s prompts on her console. Unlike the “Today is QUBE Day” advertisement, “QUBE TV” does not present Kiyō’s televisual interaction within a scene of familial closeness. Instead, the story enfolds Kiyō into a different kind circle. With the push of a button, Kiyō is connected to the vast array of other QUBE users currently interacting with their TV sets in their own homes. Together, they decide what color eyes a televised drawing of a clown should possess or what word the children inside the QUBE studio should attempt to spell. This kind of connection is particularly emphasized by the book’s illustrations. While its words explicitly discuss Kiyō’s experience, the drawings link her play with that of other children, who are all answering the same questions on their respective consoles throughout Columbus.⁶⁹ While some of these images show children, much like Kiyō, alone in their living rooms, holding their consoles and watching their TV sets, other images depict groups of diverse children sitting together. Circled around a single console, they barely look at their TV set. They are focused instead on one another in their moment of tactile, televisual play. By bringing these different moments of televisual engagement together, “QUBE TV” presents the cable system as a tool for interpersonal connection and interactive play. Whether in a group or by themselves, the modes of connection and participation instigated by the keypad turn television

⁶⁸ Howard Lavine, “QUBE TV,” in *Rainbow Shower*, ed. Joanna Cairns, Elizabeth Galloway, and Robert J. Tierney (Glenview, IL: Scott, Foresman Reading, 1985), 173–80.

⁶⁹ This vision of children actively engaging with QUBE programming calls back the popular children’s show *Winky Dink and You* (1953-1957) which promoted itself as interactive. The program recommended that children purchase a ‘Winky Dink kit’ (sold for 50 cents), consisting of erasable crayons, a cloth, and a tinted transparent plastic ‘window’ which could be placed over the TV screen. Throughout the program, home viewers were encouraged to complete various activities by drawing on the plastic sheet cover their TV screen. The program’s promotional rhetoric constructed this mode of TV viewing as something simultaneously active and collective, an act which could counteract television’s seemingly damaging effects and unite children in an act of televisual play. For more see: Lynn Spigel, “Seducing the Innocent: Childhood and Television in Postwar America,” in *Welcome to the Dreamhouse: Popular Media and Postwar Suburbs*, Console-Ing Passions (Durham, NC: Duke University Press, 2001), 185–218.

into an interpersonal interface. It can close the distance between Columbus households, so that all children, regardless of spatial separation or racial difference, can play together.

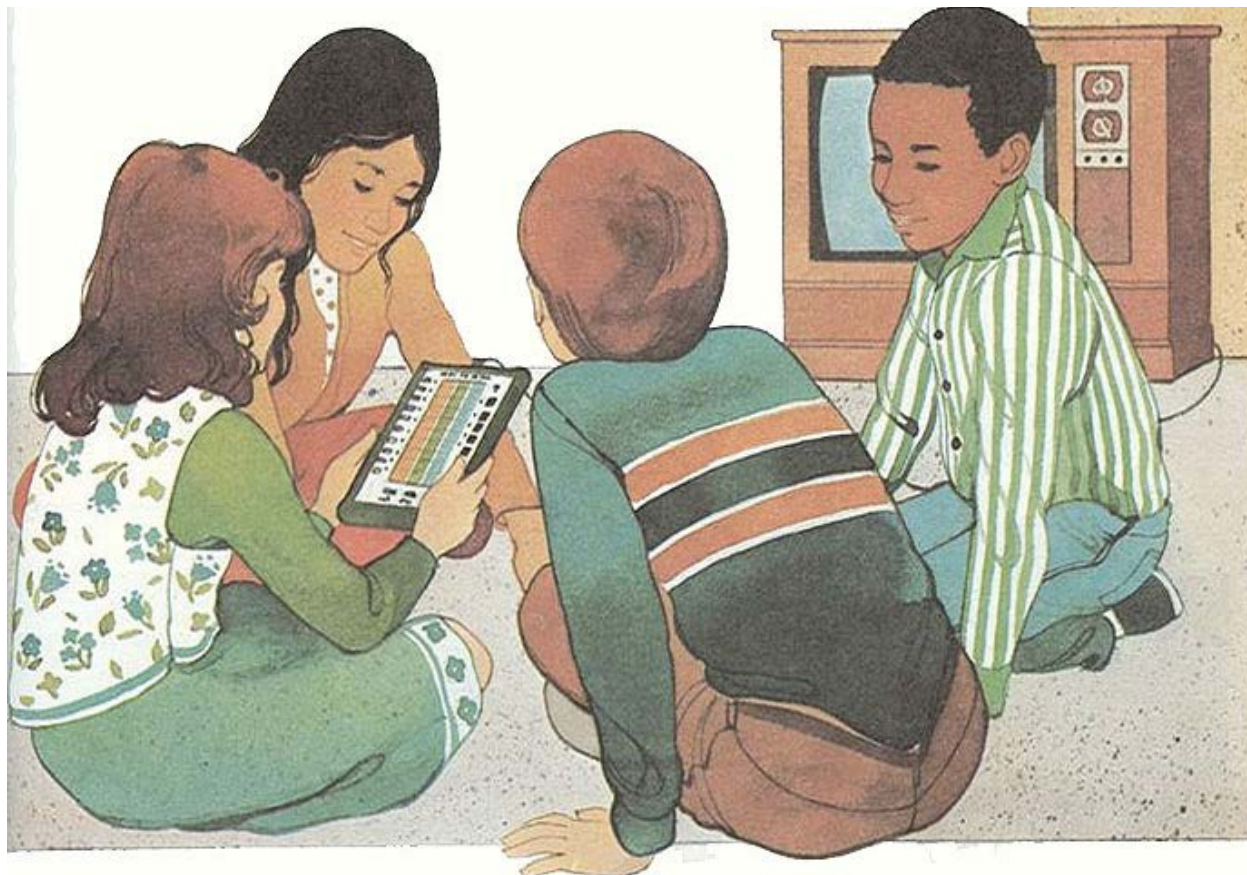


Figure 3.4 Children playing with QUBE console, Detail from “QUBE TV,” 1981

While QUBE’s promotional rhetoric, whether expressed in advertising images or the illustrations of “QUBE TV,” echoed the discourse of its Community programming and highlighted the system’s capacity to forge interpersonal connections as essential to its interactive properties, other consequences of QUBE’s participatory dimensions became a subject of debate in cable trade publications and the popular press. In particular, QUBE’s potential to solicit viewers’ opinions came to be of interest to those invested in the television’s democratic possibilities. On a local level, QUBE was used to provide municipal politicians information about the views of their constituents. On a few occasions, town hall meetings and community

forums were narrowcast to specific subscribers. At-home viewers were posed questions and had their responses recorded and delivered to council members in real-time. As such, they were promised a similar level of voice as those individuals who attended the meeting in person. Alongside narrowcasting, local politicians also used QUBE to solicit viewers' opinions on controversial policies and propositions. For instance, Tom Moody, the Mayor of Columbus, appeared on *Columbus Alive* to ask whether viewers' would be willing to pay a tax increase for improved snow removal service. After hearing the audience's response (most of whom were unwilling have their taxes raised), Moody agreed with their opinions and then praised QUBE's democratic potential:

This device Qube has, the two-way communication is just a fantastic thing to find out what people really think. All of us who hold political office are but in hold by individuals...but you never really know what most of the people are thinking. You only know what certain individuals think and this was a very quick way to get some very sound thinking from the public.⁷⁰

Beyond the local, QUBE's potential to change the political landscape became a subject of debate in the summer of 1979 when NBC decided to broadcast QUBE subscribers' responses to a speech by President Jimmy Carter. They presented the QUBE responses as a form of instant poll, a sample of public opinion.⁷¹ With this decision, the views of Columbus subscribers—who were asked whether the speech left them “optimistic,” “pessimistic,” or “confused” about the future and if they felt confident in the president's capacity to “lead the nation”—became a subject of national attention. This new prominence on QUBE viewer opinions elicited divisive responses. Although QUBE executives were (unsurprisingly) praising the power of such instant feedback, other commentators remained skeptical. In her column discussing Carter's speech, Ellen Goodman remarked that even as the president's words begged for a sustained discussion of

⁷⁰ *QUBE Interactive Composite Reel*.

⁷¹ “America Tunes in as Qube Viewers Analyze Carter Speech,” *TVC*, August 1, 1979, Barco Library.

progress, “The commentary that followed shut the doors he had set ajar. The TV coverage was as simplistic as the ‘instant poll’ from QUBE’s feedback sets in Columbus, Ohio.”⁷²

Politicians were similarly unimpressed. According to an article on cable’s impact on politics in the trade publication *TVC*, many dismissed the QUBE poll as “gimmickry,” “unscientific,” and “misleading,” even as the magazine (potentially reluctant to criticize an industry in which it was a part) insisted that: “If elected representatives are afraid to face the potential of...Qube, then it is only because they do not trust their own abilities to lead and to persuade. If members of Congress regard such innovations as little more than pedestals for grandstanding, they do so at their own peril.”⁷³

The debate about the significance of QUBE’s participatory dimensions extended beyond the support of the cable industry, the fears of politicians, or the hesitancy of newspaper columnists. Video artists and alternative television practitioners, many of whom had a tangible investment in or in certain instances, a skepticism of McLuhanesque participation, eyed QUBE with curiosity. At the same time, QUBE’s producers were also interested in video art and commissioned artists and experimental TV producers to create several programs that made use of QUBE’s interactive features. Among those participants were Fred Barzyk and David Atwood, producers at WBGH (a UHF public television station in Boston) who also were involved in video art production, Jaime Davidovich, creator and host of SoHo TV’s *The Live Show!*,⁷⁴ and

⁷² Ellen Goodman, “Lost Faith In Progress Is Demon of America,” *Tennessean*, July 24, 1979.

⁷³ Arthur Hill, “TVC Washington aside: Comes the Dawn,” *TVC*, August 15, 1979, Barco Library.

⁷⁴ *The Live Show!* was an artist-run public access show produced out of Manhattan. Along with programs like Glenn O’Brien’s *TV Party* and Coca Crysal’s *If I Can’t Dance, You Can Keep Your Revolution*, *The Live Show!* was part of an experimental TV (or rather “un-TV”) movement that characterized Mahattan cable in the late 1970s and 1980s. For more information see: Leah Churner, “Un-TV,” Moving Image Source, February 10, 2011, <http://www.movingimagesource.us/articles/un-tv-20110210>; Galvin, “TV Party,” 326–48; Hawkins, *Downtown Film and TV Culture*.

video artist Peter D'Agostino.⁷⁵ Their proposed QUBE programs each attempted to push the system past its reliance on extracting the personal views from their audiences and use the QUBE system to intervene in televisual form.

Barzyk and Atwood's program, a narrative television episode entitled, "Lulu Smith: The Chicken Who Ate Columbus," allowed QUBE subscribers to vote on the episode's narrative events, creating a kind of 'choose your own adventure' television. The show follows the titular Smith as she grows up, depicting key moments in her life, from the discovery of her talent for singing as a toddler to her experiences with her family's financial struggles as a child to her romantic entanglements as an adult woman. QUBE viewers decided almost every element of Smith's narrative. By voting repeatedly throughout the show and selecting specific plot events or character traits from a predetermined list, the audience was responsible for everything from the program's name to Smith's need for character development to her eventual romantic success. While the artificial and constructed nature of Smith's narrative was exposed at least in part by the process through which QUBE viewers retained clear control over the program's narrative, these dimensions were further emphasized in the narrative itself. Not only was Lulu's story repeatedly crosscut with a self-reflexive counter-plot that followed the show's producers' in their attempt to write their script, the program ended with Smith standing in an empty TV studio and being struck with the rather unsettling realization that her life was not 'real' but a televisual construction.⁷⁶

In a similar project, Jaime Davidovich's program attempted to give viewers control over television production, this time letting them determine the show's cinematography, rather than its

⁷⁵ Kris Paulsen, *Here/There: Telepresence, Touch, and Art at the Interface* (Cambridge, MA: MIT Press, 2017), 134-135.

⁷⁶ "The Chicken Who Ate Columbus, The {Lulu Smith}," The Paley Center for Media, accessed December 21, 2017, <https://www.paleycenter.org/collection/item/?q=ed&p=96&item=T85:0981>.

narrative.⁷⁷ “QUBE Project,” which aired on the system in 1980, was structured like a talk show. Davidovich sat at a table across from regular QUBE host Carol Stevenson. Between them, a variety of unremarkable domestic objects were arranged (a vase of flowers, lose leaf papers, wine glasses, small toys, etc.) across the table, the most prominent of which was a TV set, positioned directly between them. Davidovich begins the program, stating that he would like viewers to ‘direct’ the television show, while he and Stevenson “sit here, enjoy our wine, and watch what people are doing to us.” A seemingly apprehensive Stevenson consents to the plan, and remarks: “This is truly the most interactive show I’ve ever participated in,” noting how different it is from the usual QUBE “questions that help pinpoint our audience.” Davidovich then begins to explain the intent of the project. He argues that it in order for viewers to truly understand video art, they need to become active participants in its construction. Following this introduction, Davidovich and Stevenson explain how this will work. Audience members can call into the program, callers will then be given the opportunity to tell the camera operators how they want the camera to move: whether they want it to tilt or pan, zoom in or out. They will be assisted in their efforts by home viewers who will choose which camera will carry out the caller’s directions by using their QUBE consoles, pressing button number “1” (for camera one) or button number “2” (for camera two).⁷⁸

Once Davidovich and Stevenson have Bob Vanderbilt, their first caller-director, on the line, the shot cuts to show the black and white monitor displays for camera one (framed on a static close-up of Davidovich) and camera two (showing a wide shot of both Davidovich and Stevenson), above a color image that matches camera two’s display. Once Vanderbilt has settled

⁷⁷ The episode I describe is only one of the series that Davidovich produced in partnership with QUBE. It is the only one currently accessible. It can be see here: Jaime Davidovich, *QUBE PROJECT BIS*, accessed December 26, 2017, <https://www.youtube.com/watch?v=bym7p6wxuLI&t=1s>.

⁷⁸ Davidovich, *QUBE PROJECT BIS*.

into directing the camera, Stevenson tells the audience that it is time to participate and a graphic displaying the number of people pressing button 1 and button 2 appears at the bottom of the screen. Vanderbilt continues to direct, eventually zooming in on the small toys just in front of the TV monitor at the center of the screen as the bars continue to fluctuate perpetuating changes in the primary camera. After several minutes, Davidovich and Stevenson say goodbye to Vanderbilt and another caller, Tom, takes over as director. Tom, explicitly invested in making video art, tells the camera operator to zoom in on the TV monitor itself. He asks the camera to go as close as it can to the screen and make small movements to “see what kind of video feedback effects we can get.” After seeing the modes of electronic distortion produced by of his directorial commands, Tom enthusiastically proclaims that this is the “best thing” he’s “seen on QUBE yet.”



Figure 3.5 Jaime Davidovich, “QUBE Project,” 1980, Screen Grab

During these moments of audience direction, Davidovich and Stevenson attempt to have a conversation. Stevenson tries to ask Davidovich about the large scar on the bottom of his cheek, but their words are barely decipherable behind the constant narration of the caller-director's instructions. Even more distracting, their conversation is clearly not the focus of the cinematography, as the toys, the TV, Stevenson's hands, and so forth, become the center of the camera's attention, violating long established two-shot and shot-reverse-shot conventions. Indeed, Davidovich and Stevenson themselves cannot retain focus on their conversation, becoming increasingly transfixed with and engaged by the effects of the caller's direction on the TV screen beside them. Eventually they seem to abandon all pretense of formalized 'talk' and respond directly to the caller-director's decisions and queries. In place of the kinds of conversation typical of a television talk show, Davidovich and Stevenson become fully engrossed in watching and describing the process of television production happening live around them.

As such, art historian Kris Paulsen argues that Davidovich's QUBE program played with and in some sense subverted an essential dimension of television ontology, and in the process produced a televisual cybernetics.⁷⁹ Drawing on Stanley Clavell's contention that television's "material basis" is a "current simultaneous event reception," she contends:

If television has the potential of being live and connecting viewers to live events (which punctuate the routine, regularized banality of regular, recorded programming), QUBE—especially in its artistic incarnations—put this property on display as a form of functionality. Viewers touching the buttons on their clunky remote controls intervened in the current of event reception, to make it, even it in a minor way, a current of event production.⁸⁰

⁷⁹ As a whole, my reading of Davidovich's "QUBE Project" follows Paulsen's analysis. For more see: Paulsen, *Here/There*, 134-138.

⁸⁰ *Ibid.* 138.

Here hosts, camera operators, caller-directors, and audience members as well as the moments of production and reception came together. Forming an instant and mutable feedback loop, the show emerges as an expression of a cybernetic fantasy in the collaborative practices of television communication. Thus, in this program, the limits of QUBE's participation are simultaneously exposed and overcome, at least temporarily. By letting viewers call-in, drawing on that model of audience participation which both predated QUBE and was a central feature of *The Live Show!*, Davidovich's QUBE Project allowed audience interaction to move beyond preset response and determine the show's aesthetic production. And as such, it helped forge a new kind of two-way, cybernetic communication that intervened directly in televisual form.

Davidovich's "QUBE Project" offered a relatively optimistic, or at least not pessimistic, reading of the system's potential to create a participatory and agential television experience (while still revealing the relative limitations of most interactive QUBE programming). In contrast, Peter d'Agostino's "Proposal for QUBE" viewed two-way cable with far less enthusiasm. This project, whose original 1978 airdate was canceled and never rebooked, took a much bleaker view of QUBE's participation. Originally, d'Agostino wanted to use the system to give viewers the opportunity to edit their own television program. He planned to screen a series of five segments, each of which was organized around a different formal element, "A text, a newspaper, a photograph, a film, and a video performance," and aimed to merge theoretical questions with more mundane concerns.⁸¹ After watching a selection of these segments, viewers would be asked vote on which order to place them—their selections generating one hundred and twenty possible combinations. While the program never aired, d'Agostino did eventually present the piece as a video art installation in Ohio State University's Sullivant Gallery in 1978 and

⁸¹ Peter D'Agostino, *Teleguide: Including Proposal for QUBE* (distributed by NFS Press, 1980).

published a small booklet, *Teleguide: Including Proposal for QUBE*, in 1980, which described his proposed QUBE project and reflected upon its politics.

D'Agostino's project was designed to reveal QUBE's ultimately hollow vision of democratic participation. He was critical of what he saw as the confined and false sense of control viewers were given by QUBE's structure; he did not believe that merely pressing buttons and responding to multiple choice questions while watching TV represented real, meaningful two-way communication. D'Agostino's project thus worked to expose and interrogate the limits of QUBE's operations and the falseness of its rhetoric. As he contends in his proposal: "I wanted to confront two central issues relative to communication and information systems—namely, feedback and ideology."⁸² One way in which he strived to interrogate these questions and challenge QUBE's claims to two-way communication was through his "Quotes from QUBE" and "Quotes to QUBE" installation that was displayed alongside the segmented tape originally prepared for QUBE transmission. The "Quotes from QUBE," written with black lettering and displayed on a white background, consisted of the enthusiastic, sometimes utopian claims that surrounded the system after its initial launch. In contrast, the "Quotes to QUBE," this time written in white and placed on a black background, were taken from science fiction literature or academic critique and offered a much more skeptical, even explicitly dystopian, view of television technology. Thus, d'Agostino took this quote from a 1977 *Detroit Free Press* article: "Television was the very first step in home viewing and QUBE is the next step, the giant step in television's sophisticated evolution," says QUBE President Lawrence B. Hilford. Hilford said the

⁸² D'Agostino, *Teleguide*.

name QUBE doesn't stand for anything, but was chosen because it suggests 'something that is distinctive and futuristic without being scary,'"⁸³ and placed alongside this quote from *1984*:

The telescreen received and transmitted simultaneously. Any sound that Winston made, above the level of a very low whisper, would be picked up by it; moreover, so long as he remains within the field of vision which the metal plaque commanded, he could be seen as well as heard. There was of course no way of knowing whether you were being watched at any given moment... You had to live—did live, from habit that became instinct—in the assumption that every sound you made was overheard, and, except in darkness, every movement scrutinized.⁸⁴

Appearing side-by-side, these quotations formed a dialectic; they expressed two opposing visions of televisual possibility which d'Agostino sought to thrust onto those experiencing his work. For him, far from representing true communication, whose free, two-way structure produced authentic democratic participation, QUBE was merely television, a mass medium whose limited capacity for feedback was always in the service of ideology.

Thus, not unlike the debate between intimacy and spectacle that arose around the video camera, the varying views surrounding QUBE's capacity to provide authentic, two-way communication remained embedded in a longstanding skepticism of commercial broadcast television. Whether in emphasizing the system's tactility by having the console supplant the TV set's position in the family circle, or altering the form of the TV talk show by allowing new degrees of audience control, or dismissing QUBE's feedback as shallow, or condemning its participation as an illusory and ideological, QUBE's positive and negative qualities were repeatedly defined by their proximity to or distance from dominant televisual practice. The discourse that surrounded QUBE was, like video before it, defined by its desire to separate itself from commercial broadcast TV and create something new that would challenge the medium's tendency towards massification, low-brow commercialism, and passivity.

⁸³ "Can't Stand the Show? TV Gadget Lets Viewers Rule" as quoted in D'Agostino, *Teleguide*.

⁸⁴ George Orwell as quoted in D'Agostino, *Teleguide*.

Televisual Utility, Home Shopping, and the Informational Mediation of Domestic Life

QUBE's efforts to transform television into a medium of two-way communication through the development of interactive programming and a marketing campaign that highlighted its capacity for intimate, tactile participation was not the only way in which companies strove to distinguish cable from broadcast TV. In the 1970s and 1980s, many systems, including QUBE, introduced channels, programs, and services that strove to make television practical, capable of assisting in the everyday labors of its viewers. In general, these intended pragmatic features concentrated on providing at-a-glance information (weather forecasts, stock quotes, and news headlines), on-demand data retrieval (which offered users a searchable database of recipes, news reports, financial information, etc.), home banking, and home shopping services.⁸⁵ These diverse operations required different degrees of interactivity. They sometimes consisted merely of a static page of textual information, displaying weather reports or classified ads; at other times they involved complex push-button systems that allowed for the instant purchase of goods or payment of bills. Moreover, they often relied on new televisual-text technologies, such as teletext and videotex,⁸⁶ which emerged throughout the 1970s and 1980s alongside the growth of cable. Cable's practical operations varied in their complexity and their cost, demanding different degrees of audience interaction and technological engagement. By providing subscribers with useful information and bringing in services aimed at simplifying domestic life and labor, cable companies introduced new ways of using the TV set that worked to transform the device from

⁸⁵ In addition to information, data, banking, and shopping services, certain cable providers also offered home security systems operated through a household's cable connection. While this was undoubtedly a mode of cable service with an obvious 'useful' intent, I am bracketing its discussion in this chapter, as it will form a central part of the following chapter.

⁸⁶ Videotex was also sometimes referred to by different names. While the in the United States, the system was sometimes called "videotext," in the U.K., it was often labeled "viewdata."

the domain of commercial entertainment into a tool capable of assisting in the operations of the home and the management of everyday life.

The discourse that surrounded teletext, videotex, and cable repeatedly emphasized their practical communicative dimensions, offering a vision of their potential that carried shades of Blue Sky enthusiasm well into the 1980s.⁸⁷ Alongside discussions of cable's capacity to bring new levels of participation and serve local interest, industry publications and news reports referenced the technology's ability to enable television to provide alternative, informational services. Articles repeatedly made claims that distinguished cable from TV, arguing: "Cable is not television. It's a great big communications pipe. And what comes out that pipe is whatever you decide to put down it... It could be communications, entertainment, or information." Just because "so far all we've sent down it is entertainment," does not mean that the system is restricted to it.⁸⁸

In fact, cable has a long history of using the TV set for the transmission of practical information. In the 1960s, cable companies, many of whom were hard pressed to find sufficient programming to fill up their channels, regularly dedicated one station to displaying textual information. At its most basic, this channel would consist of a single page of information, typically displaying the time or the weather forecast. Slightly more advanced systems might also contain multiple pages of information (showing news headlines, stock quotes, listings for

⁸⁷ Vikki Henderson, "Interactive Services: Are MSOs Convinced?," *TVC*, July 15, 1981, Barco Library; Arthur Hill, "Looking Down the Pipeline: What's in the Future for Cable?," *TVC*, December 15, 1979, Barco Library; Arthur Hill, "Cable and Videotex: A Leap of Faith," *TVC*, July 1, 1982, Barco Library; Arthur Hill, "Cable and the Future—The Home Talks Back," *TVC*, January 1, 1980, Barco Library; Institute for the Future, "Questionnaire Teletext and Videotex in the United States 1985-2000" (Institute for the Future, May 6, 1981), Folder: Box 1 Ff 37; Technology Assessment of Teletext & Videotext, Barco Library; John Tydeman et al., "Technology Assessment of Teletext and Videotex - Draft," Phase 1 Report: Background Information and Findings on Teletext and Videotext" (Institute for the Future, May 6, 1981), Folder: Box 1 Ff 37; Technology Assessment of Teletext & Videotext, Barco Library; Worthington, "Goods, Services to Flow through Cable Television's Taps"; Worthington, "Cable: Envisioning a Cultural Revolution."

⁸⁸ Tom Hamish as quoted in Worthington, "Goods, Services to Flow through Cable Television's Taps," 1.

upcoming community events, or classified advertisements) that would be cycled through periodically.⁸⁹ Such stations formed a central part of almost every cable system. On a practical level, these channels functioned to provide at-a-glance information that would presumably be of use to subscribers. Rather than wait for a newscast or a weather report, viewers could now turn to a dedicated textual channel and see all of this information instantly, letting the TV set serve as a clock, thermometer, community bulletin, and local newspaper.

Alongside these audience benefits however, informational cable channels also had significant advantages for the companies that produced them. They were very cheap to create, requiring only a small staff and little studio space, and as such, became one of the central means through which cable companies filled up their unused channels and eventually sought to fulfill their local origination requirements. As Mullen demonstrates, in the late 1960s, “Cable operators...had access to time and weather channels, as well as text-only news services such as AP, UPI, Reuters, and the local news bulletins used by several suburban systems.”⁹⁰ As such, throughout the 1970s, when the pressure for original community programming increased, cable service providers, already used to offering such services, opted to create their own practical programs. Instead of buying video equipment, renting large studio spaces, hiring producers, or increasing public access, numerous companies opted to use their resources to make cheap, informational programming. As such, they often resisted or at least supplemented demands for public access, local production, and two-way participation with the provision of useful information, often insisting on its practical necessity and community appeal.⁹¹

⁸⁹ Mullen, *The Rise of Cable Programming in the United States*, 43-44.

⁹⁰ *Ibid*, 79.

⁹¹ Arthur Hill, “Looking Down the Pipeline”; Jill Marks, “New Business Development: Well Beyond Entertainment,” *TVC*, June 1, 1982, Barco Library; Connie Warren, “Cashing In On Classifieds: The Community Bulletin Board Has Gone beyond Birthday Announcements and Little League Scores. How Much Can Be Made of

By the late 1970s and 1980s, cable's proponents, well versed in the technology's history of providing informational programming, saw the potential of expanding cable's practical utility. With the development of two-way cable systems and the possible convergence of television with data transmission and computer systems, cable enthusiasts believed that the industry could begin to provide interactive services that could render the medium an increasingly practical instrument of American life. As Rob Brugener, president of Cable Ad Associates insists: "Cable has the opportunity to make the television set a tool for solving problems... If cable is capable of generating a shoppers' service channel, or if cable can do a better job of providing the viewer with product information, it could become as utilitarian as the telephone."⁹² For cable companies, the importance of securing cable's place in the emerging information industry became especially essential as the growth of home computing and AT&T's increasing capacity for data transmission seemed poised to eclipse cable's importance. In response to this threat, many industry insiders insisted that cable was a natural ally in this growing demand for information and data services. "The industry has done more than any of its competitors in text services to change the perception of television from a medium purely for entertainment to a source of information." Unlike home computers or telephone companies, cable has long ensured "the...subscriber doesn't have just a television set in his living room... He has a box which is an information device."⁹³ Thus, instead of restricting itself to entertainment programming, or even to the production local and public access shows, many members of the cable industry hoped to merge their technology with emerging computer processes and provide advanced services that

This Service?," *Cable Television Business*, May 1, 1983, Barco Library; Gary Witt, "The Handwriting on the Screen," *Cablevision*, January 31, 1983, Barco Library.

⁹² Brugener as quoted in Arthur Hill, "Looking Down the Pipeline," 54.

⁹³ Hill, "Cable and Videotex," 54.

would ensure that cable-enhanced television endured as an essential instrument of the information age.

Just as the discourse surrounding cable marked it as important to the future of communications, the rhetoric that emerged around teletext and videotex also had a forward-looking, almost utopian bent. Teletext and videotex were terms given to two similar, though distinct, modes of television transmission. Building off existing broadcast and cable services, they used the unoccupied scanning lines in between frames of television content to transmit textual and visual information (typically stored in a central data center) to individuals' home TV sets.⁹⁴ With the purchase of a special decoder, viewers could turn to their designated teletext or videotex channels and access a wide range of information and data. Teletext, the simplest and cheapest of these systems, promised to enhance TV viewing. It offered its users electronic news, classified ads, stock reports, and closed-captioning, which consumers could access by tuning their TV sets to the right channel and selecting predetermined pages of information. In contrast, videotex, though significantly more expensive, offered subscribers two-way communication. Using telephone and in some cases cable lines, which connected a TV set outfitted with a specialized microchip (thus rendering it a kind of television-computer hybrid) to a centralized data bank, subscribers could answer quizzes, check their bank statements, search libraries, make purchases, and in some instances send electronic messages. Thus, along with cable, teletext and (especially) videotex were often embraced as utopian harbingers of a communications

⁹⁴ Hilde Van den Bulck and Hallvard Moe, "Teletext in Europe: An Introductory Guide to the Book," in *Teletext in Europe: From the Analog to the Digital Era*, ed. Hilde Van den Bulck and Hallvard Moe (Göteborg, SE: Nordicom, 2016), 9–12.

revolution. They promised to turn the TV set into a consumer interface, providing individuals access to a wide range of goods, services, and data from the comfort of their own living rooms.⁹⁵

Throughout the late 1970s and early 1980s, a range of different companies, from cable operators to television networks to news publishers, began to launch teletext and videotex trial services. The teletext systems were generally tested by broadcasters, like CBS, as well as some community organizations, such as NYU's Alternate Media Center. Though more elaborate than the kinds of textual information previously transmitted via cable, offering viewers significantly more pages of information, these teletext systems were still by and large one-way affairs, thus rendering them simultaneously more affordable and less revolutionary. As such, it was the new videotex systems that seemed to hold the most radical promise for televisual transformation. Through trial-systems like Times Mirror's "Gateway," Belo Corporation's "BISON" (Belo Information System On-Line Network), Cox Cable's "Indax," and Warner's venture with "CompuServe," subscribers were given access to a wide range of at-home, interactive, informational, computational, and consumer services. Using their videotex-enabled TV sets, they could search databases, look up news stories, pay bills, and even order clothes or household products.⁹⁶ These systems, most of which were only operational for a few months to a few years, relied on a series of central computers, which housed specific databases, whose information could be called up by subscribers and transmitted to viewers home TV sets, using either

⁹⁵ It should be noted that although I am discussing teletext and videotex in the American context. However, the United States was not where these technologies had the richest histories. Teletext and videotex services emerged in many European countries throughout the 1970s and remained operational for many years—there were some systems that were only shut down in the 2000s. While some private companies did have their own teletext and videotex operations, most systems were run by different public institutions (typically national public broadcasters and the post office). As such, these systems were largely designed with an explicit attempt to serve the public interest operating as a kind of supplement to the services already provided by the sponsoring institution. For an extended discussion of teletext and videotex in Europe, see: Hilde Van den Bulck and Hallvard Moe, eds., *Teletext in Europe*.

⁹⁶ Hill, "Cable and Videotex"; David Stoller, "Videotex/Teletext Update: Testing the Waters," *Cablevision*, April 18, 1983, Barco Library; Tydeman et al., "Technology Assessment of Teletext and Videotex – Draft."

telephone lines, cable wires, or some mix of the two depending on the specifics of the system. Alongside these TV-based services, there were also videotex systems like The Source that instead of communicating with a cable box or specialized television console, bypassed the TV entirely, interfacing instead with specialized terminals and home computers.⁹⁷

Witnessing the growth of such systems, certain members of the cable industry saw developing videotex services as ‘do or die.’ In an interview with *TVC*, CEO of Warner Cable and founder of QUBE, Gus Hauser argued: “Unless cable operators get involved in two-way interactive services, such services will be taken up by AT&T or others.”⁹⁸ For Hauser, the provision of searchable information, home banking, and impulse purchasing must be considered as an important part of any two-way communication system (along with interactive entertainment programming) and as such, must be embraced by cable if the industry wants to succeed and challenge the growing threat of AT&T. In a similar move, Gary Arlen, president of Arlen Communications and videotex enthusiast, argued that even as telephone-based data transmission was growing in prominence: “Cable is an ideal outlet for videotex.”⁹⁹

Technologically, cable already required the installation of special attachments to the TV set and thus could easily add a videotex decoder and computerized keypad to their installation process. In addition, cable systems (particularly interactive cable systems) had already established methods for information storage and recall. As such, equipping such systems for videotex service would be a matter of adding to a pre-existing network, rather than building a completely new infrastructure. Finally, with cable’s long history of information service provision, these more

⁹⁷ Hill, “Looking Down the Pipeline”; Stoller, “Videotex/Teletext Update”; Bill Sullivan, “Specialized Uses Can Make Teletext Services Viable Now,” *TVC*, April 1, 1981, Barco Library; John Tydeman et al., “Technology Assessment of Teletext and Videotex – Draft.”

⁹⁸ Henderson, “Interactive Services,” 38.

⁹⁹ Gary Arlen as quoted in Hill, “Cable and Videotex,” 53.

complex, interactive, and computational modes of data transmission seemed like natural next-steps in cable's development.¹⁰⁰ Certain companies viewed these developments with caution, claiming "a successful two-way system" cannot be built "on a foundation of banking and shopping," since these services on their own did not create the necessary subscriber demand and thus must be supplemented with "entertainment" as "the cornerstone of...interactive programming."¹⁰¹ However, the cable industry remained committed to the necessity of two-way data transmission and home consumer services. In their effort to carve out a place for cable, they saw these emerging systems and informational tools as essential in establishing cable as a vital communication medium, which could extend the functions of television and satisfy domestic computational desires.

Of all the various informational and at-home consumer services tested by cable and videotex companies, it was home shopping that received some of the most sustained and multifaceted attention. The idea that the television set could be used to view goods and make purchases, replacing or at least supplementing the need for in-person shopping trips, took hold of those involved in the industry. Home shopping became a central part of computer and videotex experiments, two-way participatory cable systems, and even less elaborate one-way cable programming. Although many of the early videotex and interactive cable home shopping services did not last long, technical shortcomings and installation costs rendering them difficult to sustain, the dream of home-shopping represented an important initiative in the effort to subject television to the service of domestic life. One-way home shopping cable programs (a subset of the services launched during this period) endured past the 1980s, becoming a popular and

¹⁰⁰ Hill, "Cable and Videotex," 54.

¹⁰¹ David M. Woodrow as quoted in Tom Kerver, "Resurgence: Cox Cable's Index Takes a Different Shape," *Cable Television Business*, January 1, 1984, Barco Library, 7.

profitable staple of cable TV. Moreover, the eventual prominence of online shopping, taken to new heights with the success of companies like Amazon, reveals an enduring legacy of electronic home purchasing. Far from being an ill-fated experiment or even a quirky type of cable show, television's foray into home shopping represented an important attempt to mediate home management and a response to shifting ideals of domestic life.

Home shopping obviously has a history that extends far beyond cable television. Mail order catalogues started appearing in the United States throughout the late nineteenth century, as companies, most notably Sears Roebuck, began to sell a wide range of everyday products from clothing, to food, to luxury goods through the mail. Much like CATV, mail-order shopping services were initially targeted to rural consumers, whose remote spatial location rendered in-person shopping trips especially difficult. These companies would send customers a catalogue in which they could view a wide range of merchandise available for purchase, and opt to buy various products by writing to (and eventually calling) the company, who would then deliver their ordered goods through the mail.¹⁰² Over time, as technologies advanced, mail-order companies began to integrate these developments into their services, offering faster delivery times and more efficient ways of placing orders. As early as the 1950s, home shopping became a central part of television programs. It infiltrated TV not only through advertisements, but also in shows like NBC's *Home* (1954-1957), which promoted the household products of its sponsors through televised displays of homemaking and a state-of-the-art kitchen set. Thus, when cable television and videotex emerged, expanding the modes of communication and kinds of technologies available, the possibility for a convergence between home shopping and interactive

¹⁰² For more on the history of mail-order catalogues and home shopping see: Robin Cherry, *Catalog: The Illustrated History of Mail-Order Shopping* (New York, NY: Princeton Architectural Press, 2008), <http://ebookcentral.proquest.com/lib/northwestern/detail.action?docID=3387405>; Richard Coopey, Sean O'Connell, and Dilwyn Porter, *Mail Order Retailing in Britain: A Business and Social History* (OUP Oxford, 2005).

TV was not merely exciting. It seemed almost natural, a significant next step in both televisual service and consumer convenience.

The most popular intersection between cable and at-home shopping emerged in the 1980s through the launch of a series of cable channels dedicated to the display and sale of commercial products, most notably the Home Shopping Network and Quality Value Convenience. These channels built off television's long-standing commercial norms and functioned as a mode of entertainment. Like the home-shopping programs that preceded them, HSN and QVC used visual display and direct address to connect would-be shoppers with the available products. According to Mimi White, part of what made this mode of television appealing stems from its explicit invocation of therapeutic discourse, particularly in its call-in segments. After a caller made a purchase, she (for HSN largely directed to women) would be invited to talk on the air and give a testimonial—a confession—about her shopping experience.¹⁰³ Addressed personally by the hosts, she reflected upon why she chose to buy a particular object. She discussed its value, described where it would go in her home, mentioned if it is part of a larger set she was collecting, and clarified whether or not it was to be a gift. In talking about the personal motivations behind her purchases, the shopper-viewer shared stories about her life. As such, her financial transactions also necessarily became forms of social interaction.

By the act of purchase, callers were invited to participate in a therapeutic community of confessional exchange where buying was simultaneously inscribed with economic rationality and interpersonal connection. According to White: “All of this combines in an overall impression that women do most of the buying in the household because they are the active center of social-familial networks of exchange, constantly looking out for the appropriate things to give to the

¹⁰³ Mimi White, *Tele-Advising: Therapeutic Discourse in American Television* (UNC Press Books, 1992), 82-109.

right people within the family circle—a circle whose definition seems largely shaped by consumption via Home Shopping Channel.”¹⁰⁴ Through HSN, the female viewer-shopper became part of a vast community of home-shoppers actively and industriously engaged in strategic acts of consumption that would be to the immeasurable benefit to her friends and her family.

Unlike the one-way cable shopping networks, which turned watching TV into a gendered act of affective consumption, the videotext at-home shopping systems of the 1970s and 1980s focused their domestic appeal on efficiency and interactivity. Many of these early shopping services involved a partnership between a communications company, often a cable operator, publisher, or telephone company, and a retailer or distributor with a history of mail order selling or a desire to break into the industry. One of the first companies to enter the emerging field of electronic home shopping was Comp-U-Card. Founded by Walter Forbes (who would eventually be convicted of securities fraud) in 1973, Comp-U-Card functioned as a kind of liaison between retailers and home consumers. Consumers could access a database listing the products available for purchase from different retailers through the Comp-U-Card system. Viewers could then browse the database, select their desired items, and purchase them through their home computers, videotex systems, or (for those without access to these new technologies) telephones.¹⁰⁵

Shortly after Comp-U-Card had established itself at the forefront of home shopping, other companies began to enter the field. Cox Cable tested their Indax service in 1981, offering affluent subscribers in San Diego access to an interactive home-shopping system delivered

¹⁰⁴ White, *Tele-Advising*, 107-108.

¹⁰⁵ Although Comp-U-Card did not provide videotex terminals themselves, several cable companies, including Warner, partnered with them when launching their own videotex, home-shopping experiments.

entirely through cable. In the mid-1980s, Times-Mirror and Knight-Ridder each offered trials of their videotex home-shopping services that provided push-button purchasing through the phone line.¹⁰⁶ By the end of the decade, JC Penney and Sears Roebuck were both branching into the field—with JC Penney offering a cable-based videotex service in partnership with Cablesare and Sears developing a computerized catalogue service with the help of both IBM and CBS.¹⁰⁷ Each of these systems worked to simplify shopping, striving to modernize the long established practice of mail order purchasing and supplant forms of in-person shopping.

One of the major challenges faced by these initial televisual, interactive home-shopping systems was how to present the various products available for purchase. Videotex, designed as it was for the presentation of textual information, offered limited capacity for graphic display. As such, these home shopping systems used very little of television's capacity for visual presentation. Instead of displaying a product in full-motion video or even as a still image, for the most part videotex relied exclusively on textual descriptions.¹⁰⁸ Viewers who wanted to buy a new frying pan or a t-shirt could select the brand, the size, and (depending on the item) the color, but they could not see an image of what they were purchasing ahead of time. As such, commentators reflecting on the potential of videotex shopping argued that although "Videotex...is not the way to buy a diamond ring...it will be ideal for selling other things that people already know and trust, things like Levi's or Ralph Lauren Polo Shirts...People buying

¹⁰⁶ Hill, "Cable and Videotex"; Kerver, "Resurgence"; Tom Kerver, "Another Spectator Sport?," *Cable Television Business*, May 15, 1984; Jennifer Lin, "New Business Lets Consumers Shop by Computer," *Hartford Courant*, January 3, 1984, sec. C; Jill Marks, "New Business Development"; Caroline E. Mayer, "Shopping Is Television's New Hit Program," *Journal News*, February 24, 1987, sec. E; Chuck Moozakis, "What Subscribers Want From Videotex," *Cable Television Business*, November 15, 1982, Barco Library; Chuck Moozakis, "Home Shopping: Where's the Delivery Boy?," *Cable Television Business*, June 15, 1983, Barco Library; Stoller, "Videotex/Teletext Update"; John Tydeman et al., "Technology Assessment of Teletext and Videotex – Draft."

¹⁰⁷ Mayer, "Shopping Is Television's New Hit Program"; Sylvia Porter, "Home Shopping Is Coming Your Way," *Montana Standard*, October 21, 1986; "Videotex Shopping Expands Slowly," *St. Cloud Times*, January 20, 1989, sec. B.

¹⁰⁸ Porter, "Home Shopping Is Coming Your Way"; Kerver, "Resurgence"; Kathleen Day, "Videotex Expected to Force Marketing Strategies to Shift," *Los Angeles Times*, April 22, 1984, sec. C.

these things don't need the hassle and bother of driving to a crowded shopping center and waiting in line."¹⁰⁹ Since visual information was limited, videotex home shopping required that consumers know what they wanted to purchase in advance. Thus it was framed as a technology that while not replacing all shopping, would supplant those more mundane, everyday trips, for which avoiding crowds and heavy traffic might be especially desirable.

An exception to the limited graphic display typical of interactive home shopping came from QUBE's forays into television purchasing. In the early 1980s, Warner Cable joined with CompuServe (a company that emerged out of Comp-U-Card) to test experimental shopping and data services as part of their QUBE system. While little information is available about the actual operations of this trial, a promotional video from 1981 reveals what QUBE's home shopping system was supposed to look like. The video showcases a variety of QUBE's new useful services (data retrieval, reservations, home banking, security, and of course home shopping), demonstrates how they are intended to operate, and often repeats the slogan: "QUBE is ready to offer you the services of tomorrow, today."¹¹⁰ Unlike many other interactive videotex systems, QUBE's database interface is operated through interactive cable. As such, it had the capacity to provide viewers with a much greater degree of visual complexity, while still being navigated through the QUBE console—a device more complex than the average TV turner or touchtone telephone but simpler than the full keyboard used by certain videotex systems. QUBE's would-be viewer-shoppers press different buttons along their console to scroll through the items available for sale, receive more information about a selected product, or make a purchase. Unlike other videotex systems, the items are not merely described textually but shown visually.

Throughout the video demonstration, when a user selects any of the items available in the QUBE

¹⁰⁹ Day, "Videotex Expected to Force Marketing Strategies to Shift," 4.

¹¹⁰ *QUBE Cable Services of Tomorrow*, Laser Disc, 1981.

catalog, she is shown a short video describing and demonstrating the product. If she would like more information, she is prompted again to touch one of the keys on the keypad and shown another video clip that describes the product's "special features." If a user decides to purchase the product, she is taken to an electronic order form, on which she can enter her "personal authorization number," confirm her payment, and receive the product in the mail within ten days. Although the extent of QUBE's home shopping services remains unclear, it is presumable that were such a system fully operational, it might hold the potential to overcome some of videotex's graphic shortcomings, and thus open up a form of televisual window shopping and impulse buying thought impossible with a purely textual interface.

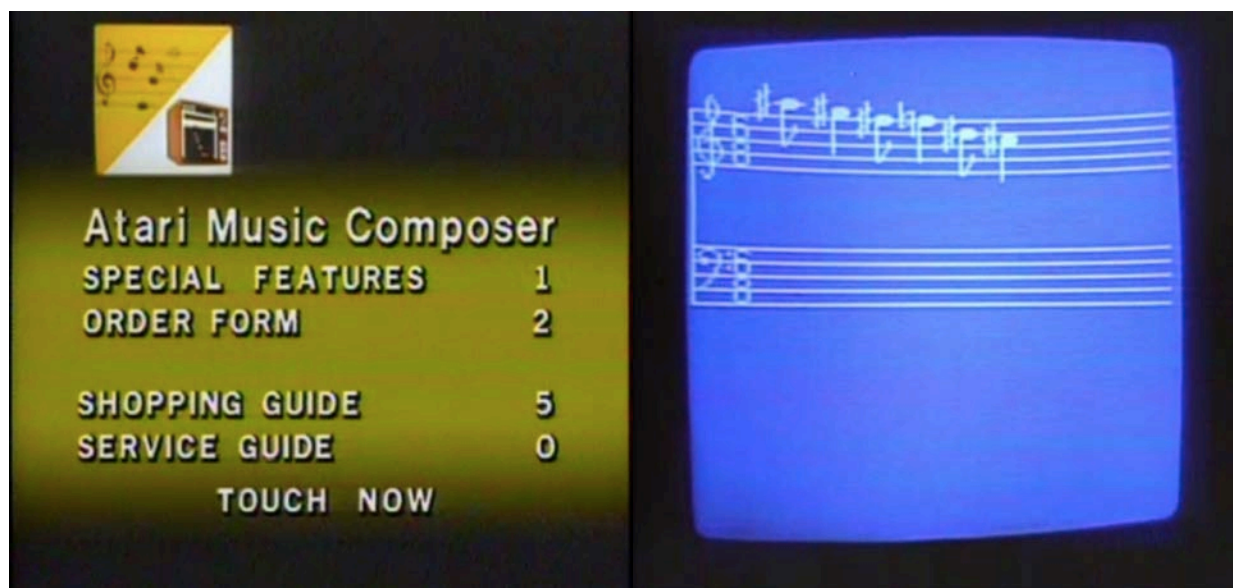


Figure 3.6 Home Shopping via QUBE, *QUBE Cable Services of Tomorrow*, 1981, Screen Grabs

In reporting on the development of cable and videotex home shopping systems, numerous newspaper and trade magazine articles commented on the ease and practicality of these services. "Imagine being able to shop in major a department store without leaving your living room," Sylvia Porter begins her 1986 syndicated column on J. C. Penney's proposed videotex shopping system. "All you would need is a touch-tone telephone and cable television to browse and/or buy

anything from a trip to Tahiti to a pair of size 9 leather moccasins.”¹¹¹ Similarly, Kathleen

Day of the *Los Angeles Times* begins her report on the growth of videotex with this vignette:

Instead of driving all over town when he has errands to run, Al Kolsky parks himself on the living room couch in front of the TV and pushes buttons on a remote-control computer keyboard in his lap. Birthday cards, gourmet food, books, toasters, silk ties, airline flight times, names of plumbers—these and many more goods and services flash on the TV screen before the Miami resident’s eyes. To arrange home delivery, he needs only to press a few keys.¹¹²

In these opening narratives, videotex home shopping emerges as the pinnacle of ease and modern electronic efficiency. Installed in their living rooms and sitting in front of their TV sets, subscribers were offered access to a new streamlined consumer experience. Rather than leaving their homes, or even making a telephone call or placing an order by mail, viewers could make purchases. Now with the press of few buttons, television audiences could use their TV sets to buy almost anything, saving them the frustration and difficulty of leaving the house and commuting to a wide range of different stores.

Indeed, at-home shopping seemed like the ideal tool with which to intervene and aid in contemporary domestic life, in which having all adult members of a household work outside the home was beginning to be an established norm. Throughout the postwar era, even as the image of the smiling, feminine housewife was fixed in the popular imagination, women were entering the workforce at ever increasing numbers. They were drawn to work for different reasons; sometimes returning as a means of finding new kinds of fulfillment and sometimes because divorce or increased cost of living made employment vital to ensuring family and personal welfare. Aided in part by the range of electronic appliances becoming increasingly available, women left their role of homemaker and began to divide their labor between the marketplace and

¹¹¹ Porter, “Home Shopping Is Coming Your Way,” 7.

¹¹² Day, “Videotex Expected to Force Marketing Strategies to Shift,” 1.

domestic life.¹¹³ This entrance into the paid workforce did not however, mean that women's home labor was lessened. Indeed, as Arlie Hochschild argues in her seminal study of working families: "Just as there is a wage gap between men and women in the workplace, there is a 'leisure gap' between them at home. Most women work one shift at the office or factory and a 'second shift' at home."¹¹⁴ Consequently, while a new fantasy of domestic femininity emerged in the cultural imagination, in actuality, women often struggled; they were anxious and stressed, torn between the demands of their paid job and those of their families.¹¹⁵ As such, just as the reality of 1950s domesticity did not match the ideological fantasy of the smiling, immaculately dressed housewife, perfectly satisfied in her domestic duties, so too did the lived experience of working mothers of the 1980s fail to live up to the vision of the hyper-organized, hyper-successful supermom, capable of meticulously balancing all her responsibilities, and experiencing professional and personal fulfillment simultaneously.

It was into this new domestic terrain that videotex shopping sought to intervene. With both husbands and wives spending more time out of the house and the difficult realities of 'the second shift' bubbling under the surface of the idealized image of the working mother, electronics reporters and industry commentators saw home-shopping as a central aid to this changing landscape of domestic labor. Never mentioning the gendered dynamics of housework and family care, they remarked that the increasingly busy conditions of contemporary life would make any time-saving measure desirable. In an article discussing cable's somewhat hesitant attempts to enter the home shopping business, Tom Kerver, of *Cable Television Business* contends: "With

¹¹³ Ruth Schwartz Cowan, *More Work for Mother: The Ironies of Household Technology from the Open Hearth to the Microwave* (New York, NY: Basic Books, 1983), 201-216.

¹¹⁴ Arlie Hochschild and Anne Machung, *The Second Shift: Working Families and the Revolution at Home*, Revised ed. edition (New York, N.Y: Penguin Books, 2012), 4.

¹¹⁵ It should be noted that longstanding patriarchal structures have meant that women have been the primary participants in this 'second shift,' Hochschild observed that in those instances where men also took on a large part of these domestic labors, they also reported similar anxieties and struggles to their female counterparts.

time at an ever increasing minimum for today's always busy professional man and woman, the convenience of home (or office) shopping has appeal."¹¹⁶ Similarly, in an interview with the *Journal News*, Maxwell Sroge, a long-time advocate for the home shopping industry, reflected on the potential success of TV-shopping. He argued: "At seven out of 10 American households, there are no adults home during the day to do the shopping. When they get home, they are too tired to do the shopping. That's why the catalog business is growing. Television now adds an exciting dimension to the catalog concept."¹¹⁷ For these commentators, television home shopping did not merely represent a potential profitable business and an improvement on the older catalogue system. It embodied a mode of convenience that would benefit everyday individuals, removing some domestic duties and saving people valuable time. Thus, just as the electric fridge and gas stove were constructed as essential labor saving devices, integral to easing the drudgery of the housewife's work,¹¹⁸ the videotex and cable-enhanced TV set was positioned as a tool that would aid modern, dual-income families as they attempted to balance their domestic labors with their paid employment.

Through their advanced consumer and information services, videotex, especially when combined with two-way cable, turned the TV set into the linchpin of an impending communication revolution. Unlike one-way cable and teletext, which were in many ways confined by the limits of traditional television technology, designed to access pre-determined packages of information and only send messages in a single direction, videotex promised so

¹¹⁶ Kerver, "Another Spectator Sport?," 64.

¹¹⁷ Maxwell Sroge as quoted in Mayer, "Shopping Is Television's New Hit Program," 4.

¹¹⁸ However as Cowan demonstrates, in actuality such devices functioned less to assuage the burden of feminine domestic labor than to limit the number of necessary domestic laborers and raise the standards of household cleanliness. These new technologies worked to free husbands and children from their previous duties and eliminate the need for servants, thus transferring all housework to the homemaker. Although eventually these technologies did assist women to work outside the home without sacrificing their family's standard of living, they did not eradicate domestic labor and were thus a catalyst in the creation of that 'second shift' documented by Hochschild. For more see: Cowan, *More Work for Mother*.

much more. By adding computer technology to television sets and building a vast two-way communication system that interfaced with both pre-existing cable and telephonic infrastructure, videotex promised to catalyze “a national computer network, become one of the tools of social change, reshaping several professions and trades, and eventually, starving the traditional office and killing the traditional mall.”¹¹⁹ Scholars and commentators argued (in a move reminiscent of the rhetoric that surrounded the Picturephone) that if individuals could search for whatever information they wanted, access vast libraries, communicate with a central databank, make purchases through their TV sets, and receive advice on taxes, home repair, or cooking, individuals would no longer need to leave their homes nearly as much—a convenience rendered desirable if not necessary by the conditions of modern domestic life. By connecting the home TV set to a vast interactive communication network, teletext and especially videotex promised to transform everyday domestic life, bringing the goods, services, information, and interactions of the outside world into domestic space at the press of a button.

Conclusion

By the mid-1980s, the long held faith that two-way cable television and interactive videotex services represented the future of American communication had passed its prime. Just as experimental videotex systems were being shut down, in 1984 Warner Cable decided to stop QUBE, which had been losing money ever since its launch.¹²⁰ Cable continued as a prominent

¹¹⁹ Peter Large, “Throw Away the Books Viewdata’s Coming,” *The Guardian*, January 10, 1978, 14.

¹²⁰ There are varying views about why QUBE was shut down. Some attribute it to the system’s failure to generate revenue, especially given its cost. Others, like Gus Hauser and QUBE’s programming director Scott Kurnit contend that Warner’s decision to shut down QUBE was less about its status as a “failure” (for QUBE was always an experiment, never expected to make money right away), than a consequence of the Atari crash of 1983. After suffering these losses, Warner could no longer afford to keep any expensive, experimental operations open, even if they had wanted to. For more see: Victor Livingston, “Warner Amex cuts back,” *Cable Television Business*, January 30, 1984, Barco Library; Steve Nelson, “Scott Kurnit 1999 Oral and Video History,” The Cable Center Oral History

part of American television and channels like Nickelodeon and Music Television, which first emerged on QUBE, became fundamental features of the industry as it developed. However, cable's promise to transform the TV set into an interactive, two-way medium had disappeared. Rather than change television for the better and usher in a revolutionary new era of networked communication, by the end of the 1980s, cable had become an established part of commercial television. No longer defined as simple and benign CATV or democratic and revolutionary Blue Sky cable, cable television of the 1990s and 2000s provided Americans with more and more channels of one-way commercial entertainment. The dream of cybernetic connection and the communication revolution turned away from the TV set and towards the computer.

However, the significance of interactive cable, teletext, and videotex should not be dismissed. Even if QUBE's push-button participation did little to fundamentally change televisual form or reconfigure the structures of its industrial make-up, it represented an important shift in the conception of participatory TV. Instead of defining participation in terms of television production, QUBE—drawing on the legacies of the audience participation in radio and television broadcasting—redefined it in terms of television reception. In pressing buttons and responding to the events on screen, QUBE viewers engaged in a moment of tactile connection and momentary interaction while also providing Warner Communications and its advertisers more information about their interests, tastes, and consumer habits. Moreover, just as teletext and videotex's data retrieval, communication, and consumer services remained marginal in the United States (although it should be noted that they flourished elsewhere), they still popularized an important vision of technological domestic management. They solicited new kinds of televisual

Project, August 1999, <http://www.cablecenter.org/k-l-listings/scott-kurnit.html>; Sally Russell, "Introspection at Ohio Show," *Cable Television Business*, March 26, 1984, Barco Library; Sally Bedell Smith, "Two-Way Cable T.V. Falters," *The New York Times*, March 28, 1984, <http://www.nytimes.com/1984/03/28/arts/two-way-cable-tv-falters.html>; Southwick, "Gustave Hauser 1999 Oral and Video History."

convergence and helped foster an investment in an informational and computational home screen that would provide a wide range of data services, cut out unnecessary trips, and simplify household labor.

By interfacing with the TV set—that long established medium of the domestic everyday—and offering new ways of using it, two-way cable (along with teletext and videotext) mobilized practices that would also become essential to the home deployment of digital television, home computers, and the internet. It would be faulty to assert a direct causal relationship between the interactive cable and videotext systems of the 1970s and 1980s and the digital devices that would become central pillars of contemporary life in subsequent decades. However, many of the key features of these systems (two-way communication, tactile push-button interactivity, data retrieval, electronic banking, and home shopping) are essential elements of computer communication. Moreover, the modes of participation encouraged by these systems explicitly solicited information from their users—a gesture which has become central much of our interactions with digital media. By responding to QUBE polls or making videotex purchases, viewers willingly gave companies access to their opinions and consumer tastes in exchange for more information, new conveniences, and heightened televisual experiences.

In their appeals to agency, efficiency, and interaction, as well as their corresponding modes of data-collection, audience monitoring, and viewer management, these early participatory TV systems expressed discourses and established practices that have come to define digital television in the last thirty years. Indeed, although their technological operations and industrial backdrop differ, if we look closely at the Digital Video Recorder, Interactive Television, and Netflix, we

can see echoes of the two-way cable and videotext systems which preceded them.¹²¹ Thus, in addition to offering the kinds of services and modes of interaction which would become staples of computerized communication, two-way cable and videotex modeled the kind of immaterial labor that has come to dominate contemporary practices of digital media. Even as these systems' actual histories remain marginal, their broader cultural legacies persist into the contemporary moment, haunting the history of television convergence and the experience of the digital in domestic life.

¹²¹ There have been many important scholarly of these developments. E.g. Mark Andrejevic, "The Work of Being Watched: Interactive Media and the Exploitation of Self-Disclosure," *Critical Studies in Media Communication* 19, no. 2 (2002): 230–248, <https://doi.org/10.1080/07393180216561>; Mark Andrejevic, *Infoglut: How Too Much Information Is Changing the Way We Think and Know* (New York, NY: Routledge, 2013); William Boddy, "Interactive Television and Advertising Form in Contemporary U.S. Television," in *Television After TV: Essays on a Medium in Transition*, ed. Lynn Spigel and Jan Olsson (Duke University Press, 2004), 113–32; William Boddy, *New Media and Popular Imagination: Launching Radio, Television, and Digital Media in the United States* (Oxford ; New York: Oxford University Press, 2004); Max Dawson, "Rationalizing Television in the USA: Neoliberalism, the Attention Economy and the Digital Video Recorder," *Screen* 55, no. 2 (2014): 221–237, <https://doi.org/10.1093/screen/hju011>; Kevin McDonald and Daniel Smith-Rowsey, eds., *The Netflix Effect: Technology and Entertainment in the 21st Century* (New York, NY: Bloomsbury Academic, 2016). While most don't explicitly discuss QUBE or videotex, they are occasionally mentioned in passing as precursors to these digital developments.

CHAPTER 4

Television Goes on Guard Duty: Televisual Surveillance and the Protection of Domestic Life

“Closed-circuit television has invaded the home, too. The Watchdog System, patented by Bell Television, Inc., has cameras at each building entrance and receivers in every apartment. When a caller rings for entrance, the tenant merely tunes in his set. Martin Sugar, president of Bell, claims that the system is a great crime deterrent—and at least one tenant claims that watching the lobby now rivals the Late Show for evening entertainment.”

—Robert M. Lipsyte, “TV Goes C-C,” *New York Times*, April 7, 1963

In 1949, just a few years into television’s introduction to the American commercial market, George Orwell published *1984*, his seminal dystopian novel depicting a totalitarian future dominated by the omniscient and omnipotent Big Brother. In this book, which has become almost a cliché in popular discussions of surveillance and state power, television emerges as the object of political control par excellence. In *1984*, every individual lives under the constant threat of the “telescreen.” Installed in every home and every public building, it can never be turned off. A dystopian articulation of two-way television, the telescreen is integrated into the institutions and coercions of the state. It broadcasts and monitors simultaneously, picking up any sound “above the level of a whisper” and commanding that individuals willingly subject themselves to its constant gaze.¹ Through its presence, the citizens of Oceania live under the constant threat of state surveillance, knowing that Big Brother might be watching their every move. As the novel’s protagonist Winston Smith describes:

There was of course no way of knowing whether you were being watched at any given moment. How often, or on what system, the Thought Police plugged in on any individual wire was guesswork. It was even conceivable that they watched everybody all the time. But at any rate they could plug in your wire whenever they wanted to. You had to live—

¹ George Orwell, *Nineteen Eighty Four* (London, UK: Penguin UK, 2008), 5.

did live, from habit that became instinct—in the assumption that every sound you made was overheard, and, except in darkness, every movement scrutinized.

In the world of *1984*, television emerges as the dystopian instrument of state power. A medium of propaganda and a tool of surveillance, it intrudes into the spaces of the home and the routines of the day, its electronic eyes and ears virtually eliminating any hope of privacy.

According to Lynn Spigel, Orwell's dystopian conception of television is emblematic of a broader cultural anxiety that surrounded the medium in its moment of emergence. Indeed, the vision of the TV set as a 'window on the world' was accompanied by a fear that television could also operate as a window on the home. TV critics, journalists, magazine columnists, television writers, and novelists imagined television's potential to act as an electronic surveillance tool that might monitor domestic life. In women's magazines, this anxiety impacted aesthetic choices, as "the attempt to camouflage the technology as a piece of interior decor went hand in hand with the more specific attempt to 'screen out' television's visual field, to manage vision in the home so that people could see without being seen."²

In science fiction however, this fear materialized more directly. Alongside *1984*, Spigel analyzes "The Window," a 1952 episode of *Tales of Tomorrow*. In this episode, the anthology series' scheduled programming is seemingly interrupted, as scenes occurring in a Manhattan apartment (seen through a couple's open window) take over the station's broadcast signal. Throughout the episode, as the show's crew tries to regain control of its hijacked transmission, the domestic drama occurring through the window becomes increasingly sinister. It moves from merely showing scenes of a dysfunctional working-class marriage to exposing the premeditated

² Lynn Spigel, *Make Room for TV: Television and the Family Ideal in Postwar America* (Chicago, IL: University of Chicago Press, 1992), 118.

murder of the husband.³ In such narratives, Spigel argues that the TV set is transformed from a utopian ‘window’ into an “evil eye.” No longer merely providing exciting domestic entertainment or serving as a means of virtual travel, television seems capable of penetrating domestic space. It can monitor “the eroticized fantasy life of the citizen in his or her home,” and even embody a totalitarian “political nightmare,” in which privacy is all but non-existent and dominated by the ever-present gaze of the government.⁴

In 1953, four years after the publication of *1984*, RCA released the “TV Eye.” A small closed-circuit television (CCTV) camera and control unit, the TV Eye could plug into any home TV set, transforming it from the mere receiver of one-way broadcast transmissions into a modern, efficient tool of surveillance.⁵ Using this system, consumers were encouraged to sit in their living rooms, turn on their television sets, and watch the images transmitted by their TV Eye camera—which could be mounted on a tripod and placed in any location they wished to monitor. For RCA president David Sarnoff, the TV Eye (and similar closed-circuit television systems) represented the future of American domestic life.⁶ By extending the housewife’s vision, allowing her at a glance to monitor her children, her cooking, and her front door, closed-circuit TV promised to become an essential assistant to the everyday demands of the homemaker. It aimed to help modernize housework, streamline domestic care, and protect the family against any threat. Indeed, far from the “evil eye” envisioned in science fiction discourse, RCA’s “TV Eye” claimed surveillance in the service of the domestic life, something that would ensure the protection of the family and the efficient management of the household.

³ Orwell, *Nineteen Eighty Four*; Don Medford, *The Window*, Drama, Horror, Mystery, 1952, <https://archive.org/details/TalesOfTomorrow-LostPlanet>.

⁴ Spigel, *Make Room for TV*, 118-119.

⁵ “Tireless TV Eye,” *New York Herald Tribune*, July 19, 1953, sec. F.

⁶ David Sarnoff, “Closed Circuit TV for the Home,” in *Pioneering in Television: Prophecy and Fulfillment* (New York, NY: Department of Information Radio Corporation of America, 1956), 128.

In this chapter, I examine the use of television and its associated technologies for practices of domestic surveillance. Focusing on closed-circuit television and two-way cable, I explore how televisual surveillance was imagined both as a means of securing the home and as a tool in its everyday management. Although closed-circuit television did appear in the American market in the 1950s (as exemplified by devices like the TV Eye), such systems were primarily directed towards industrial audiences even when their advertising rhetoric made mention of their domestic potential. It was really not until the 1960s, 1970s, and 1980s that televisual surveillance practices proliferated in the American home. They established modes of monitoring that would only increase in prominence with the digitization of video media. Combined with a camera and an intercom, television was used to see visitors as they approached the front door. Hooked up to a CCTV system, it could serve as a baby monitor or a means of watching dinner cooking on the stove. When integrated with two-way cable, it became part of an automatic security system that through a series of sensors, could sound an alarm and contact emergency personnel. In each of these deployments, television became a central node in a complex surveillance system deployed in the service of domestic life. Here surveillance was not the purview of Big Brother, an agent of the state exerting his authoritarian control. Instead, these new televisual surveillance technologies operated within the home to help the family. They sought to protect household residents, simplify domestic labor, and eventually take over all forms of monitoring from the overworked and imperfect human gaze.

Yet, in so doing, these modes of televisual surveillance also carried with them fraught discourses and histories. The dystopian threat of totalitarianism cannot be fully bracketed off in the discourses that surrounded closed-circuit television and two-way cable security in the 1960s, 1970s, and 1980s. Moreover, the need for increased layers of home security, particularly as they

proliferated in the 1970s in the wake of an apparent growing urban crime wave, carry with them the history of segregation, redlining, and the racialization of space. As such, in this chapter I examine not only the positive assessments of televisual security, but also the anxieties and assumptions that these discourses proliferate. Indeed, far from neutral tools of protection and efficiency, televisual home surveillance systems were embedded in hierarchies of race, class, and gender. They worked to demarcate the spaces and bodies which make up the threatened from those which embody the threat. They added new modes of televisual operations that discipline the TV viewer. And they relied on norms and protocols that are also integral to contemporary surveillance practices. By examining the growth of CCTV and cable security in the home, this chapter examines how television surveillance came to insert itself into American domestic life, constructing boundaries, establishing practices, and normalizing surveillance in the name of efficiency, security, and the smooth operation of the home.

Closed-Circuit Television and the Extension of Human Sight

Before examining the specifics of closed-circuit television's surveillance and security operations in the home, it is important to understand the history, operations, and discourses that surrounded CCTV more generally. Just as cable television developed alongside the commercial broadcast industry, offering alternative means of televisual transmission and potentially radical new communicative powers, closed-circuit television also emerged as an alternative televisual trajectory. Paralleling broadcast TV, it was largely introduced to the American public in the 1940s and 1950s (although it should be noted that it also appeared in scientific, military, and

commercial operations throughout the 1930s)⁷ as companies like RCA and DuMont worked to create a commercial market for their CCTV systems just as they did with their home consoles. However, it was unlike its mainstream commercial counterpart, whose power of mass communication and the cultivation of public audiences were essential elements of its media industries and popular cultural identity. Closed-circuit television was not usually marketed to the everyday American consumer as an entertainment medium. Instead, CCTV was positioned as useful⁸ and industrial; a cousin of mainstream American television whose distinct technological operations lent it to decidedly more scientific and practical applications than its mass, commercial relative.

Closed-circuit television functions as a self-contained system. It does not broadcast its signals over the air, sending audiovisual information captured by a television camera across large geographic spaces to be picked up by TV antennas and displayed on home screens. Instead, closed-circuit television cameras are directly connected to TV sets, which have typically been equipped with specialized tubes, through a control unit and a series of coaxial cables. The camera transmits its captured images directly to the corresponding video monitor (or monitors), without broadcasting them more publicly. As such, CCTV creates a relatively isolated system of television production and exhibition—a *closed-circuit* of communication whose technical operations lend it to targeted acts of televisual display typically aimed at small audiences. Instead of acting as a mass medium, broadcasting its content to anyone with a TV antenna, closed-circuit

⁷ Jeanne Allen, "The Social Matrix of Television: Invention in the United States," in *Regarding Television: Critical Approaches--An Anthology*, ed. E. Ann Kaplan (Frederick, MD: University Publications of America, 1983), 109–17.

⁸ Here I used the word "useful" to signify its connection to "useful cinema," as well as the more general claims to utility I discuss in previous chapters. For unlike video cameras, the Picturephone or QUBE, closed-circuit television is deeply embedded in the practices of public institutions.

television transmits only to select screens. Therefore, it is generally configured for very specific purposes, transmitting select images and processes to a group of specialized viewers.

Much of the academic discourse surrounding closed-circuit television has focused on its role as a surveillance technology—something I also do in this project. Indeed, closed-circuit television has especially in recent years, become almost synonymous with surveillance. CCTV cameras, connected to monitoring systems of various scale and complexity (from the large urban policing networks of cities like London to the small relatively private systems operated in convenience stores or shopping centers) are a ubiquitous part of contemporary life. Surveillance studies scholars, such as Clive Norris, Gary Armstrong, and Inga Kroener have analyzed the current operations of closed-circuit television.⁹ They have traced the history of its proliferation since the 1990s, analyzed its relationship with capitalism and the urban environment, and unpacked the ways in which it has been constructed as a technology of security, even if in reality its capability of preventing crime remains suspect. For many scholars, the proliferation of CCTV signifies the rise of a new kind of social order—a “surveillance society”¹⁰ marked by new levels of visual and data-driven monitoring and a growing “culture of control.”¹¹ Today, closed-circuit television, especially when put in conjunction with digital and computational media, whose capacity to continuously gather detailed data about individuals has radically accelerated the pace and scale of surveillance, has become a fixture in the practices, spaces, and politics of everyday life. It is a central component of police procedures and citizen management. Working both as an

⁹ Inga Kroener, *CCTV: A Technology Under the Radar?* (Farnham, UK: Routledge, 2014); Clive Norris and Gary Armstrong, *The Maximum Surveillance Society: The Rise of CCTV* (New York, NY: Berg, 1999).

¹⁰ David Lyon, *Surveillance Society: Monitoring Everyday Life* (McGraw-Hill Education, 2001).

¹¹ David Garland, *The Culture of Control: Crime and Social Order in Contemporary Society* (Chicago, IL: University of Chicago Press, 2002).

aid to prevention and prosecution, it is envisioned as a means of security, a tool through which public and private locations are secured and behavior is shaped.

This reading of CCTV surveillance draws from a much longer history of surveillance scholarship. Surveillance has been conceived as one of the central processes of modernity and correspondingly, surveillance scholarship has its foundations in work that sought to grapple with such transformations. Its roots can be found in the writings of Karl Marx and Max Weber, whose respective analyses of capitalism and bureaucracy seek to unpack the fundamental shifts of the modern era. In *Capital*, Marx notes the ways in which surveillance is essential in the process of production through the practice of supervision. In capitalist production, certain workers are divided from their fellows and under the designation of foreman or overseer enact the despotism of capital, enforcing productivity and combatting potential disruptions.¹² Taking a different approach, Weber reveals the ways in which bureaucracy, with its administrative structures and practices of citizen management, has been bound up with systems of surveillance that subject individuals to rationalized processes of record-keeping, documentation, and monitoring.¹³ Together, Marx and Weber revealed the ways in which surveillance was implicated within the major political economic and sociological structures of modernity. Although surveillance itself was not the explicit focus of their analyses, their work revealed its significance to the cultivation and enactment of capital and state power.

¹² Karl Marx, *Capital: Volume 1: A Critique of Political Economy*, trans. Ben Fowkes, Reprint edition (London ; New York, NY: Penguin Classics, 1992), 455-491; In addition to Marx's direct discussion of surveillance in the process of manufacture, other scholars have taken Marx's theory of capital accumulation as a means of illuminating the moments in which surveillance regularly operates in the securing of capital. For more on the conjunction of Marx and surveillance studies see: Christian Fuchs, "Political Economy and Surveillance Theory," *Critical Sociology* 39, no. 5 (September 1, 2013): 671-87, <https://doi.org/10.1177/0896920511435710>.

¹³ Max Weber, *Economy and Society: An Outline of Interpretive Sociology* (Berkeley, CA: University of California Press, 1978), 956-1005; For more on Weber and surveillance see: Christopher Dandeker, *Surveillance, Power and Modernity: Bureaucracy and Discipline from 1700 to the Present Day*, Revised ed. edition (Cambridge, UK: Polity, 1994).

Building off the foundations established by Marx and Weber, Foucault turned his attention more explicitly to surveillance and the interrogation of power in the construction of modernity. In his 1975 publication, *Discipline and Punish: The Birth of the Prison*, Foucault traces the move from sovereign to disciplinary power, from the enactment of punishment to the practice of training and disciplinary self-management.¹⁴ Whereas a society marked by sovereign power privileges modes of public spectacle in which displays of violence over individual bodies serve to assert the social order, disciplinary societies operate by organizing and managing bodies, instilling in their subjects a kind of self-subjection. For Foucault, the embodiment of disciplinary power is found in Jeremy Bentham's design of the Panopticon, the circular prison Bentham believed would be the solution to the inhumane conditions of the dungeon. The Panopticon, while initially envisioned as a prison also represented a model for any kind of disciplinary institution, be it a hospital, school, asylum, or workshop. It consisted of two primary architectural features: a cylindrical building, in which a series of small rooms were located, and a watchtower, positioned at the center of this building. While the inmates were separated from one another (their rooms were divided by walls designed to inhibit all forms interaction), they remained in constant view of the watchtower, the occupants of which, in contrast, were concealed at all times.¹⁵

This architectural arrangement produced a situation in which those in the outer cells were subject to the possibility of constant surveillance from the individuals in the watchtower. Since the prisoners could never tell whether or not they were actually being watched, they needed to behave as if they were under scrutiny at all times. As the individuals in the watchtower remained hidden, the Panopticon could work regardless of who installed themselves as surveyors. The

¹⁴ Michel Foucault, *Discipline and punish: the birth of the prison* (New York, NY: Vintage Books, 1995).

¹⁵ *Ibid*, 195-228.

mere presence of the watchtower, the visibility of its inmates, and the implication of constant surveillance it embodied ensured the Panopticon's disciplinary operations. Indeed, for Foucault, it was this subversion of the relationship between the seer and the seen that produced its principle effect:

To induce in the inmate a state of conscious and permanent visibility that assures the automatic functioning of power. So to arrange things that the surveillance is permanent in its effects, even if it is discontinuous in its action; that the perfection of power should tend to render its actual exercise unnecessary; that this architectural apparatus should be a machine for creating and sustaining a power relation independent of the person who exercises it; in short, that the inmates should be caught up in a power situation of which they are themselves the bearers.¹⁶

Through this form of automatic distributed surveillance, individuals subjected their bodies to the demands of their institutional settings. Under the constant gaze of the watchtower, they disciplined their behaviors and habits. The power of the Panopticon functioned not through coercive force, but by its own internalization. As such, it was not merely corrective; it was also formative. It produced, through its disciplinary operations, modern docile bodies who are simultaneously subject to and subjects of power.

As a technological apparatus which operates by constant automatic surveillance, closed-circuit television could very well be seen as a mere instantiation of the Panopticon. However, while Foucault's notions can be useful when thinking about the operations of surveillance generally, especially as they have been endemic to the development of the modern subject and growth of disciplinary power, recently, surveillance studies scholars have warned against over-using his work. They critique what they see as a tendency to graft the Panopticon onto specific surveillance technologies and practices without thinking through the nuances of how these may or may not line up with Foucault's account. In particular, David Lyon argues that this reliance on

¹⁶ Foucault, *Discipline and punish*, 201.

the Panopticon “has yielded a rather one-sided account of surveillance that focuses heavily on the subtly coercive experience of living with the uncertainty of being seen.”¹⁷ For Lyon, this tendency to explain all surveillance by invoking the Panopticon sometimes even contradicts Foucault’s insistence on the diffusive conditions of modern power and ends up relegating surveillance to sovereign power. It sees CCTV or any other contemporary tool of monitoring as merely a controlling, coercive force of the state. When thinking through the applicability of the Panopticon as a model of surveillance, it is important to remember that it was more than just a technology of observation. It was a broader disciplinary apparatus in which forms of training, behavioral expectations, and forces of biopolitical control collided with surveillance to produce its effects. By merely taking the act of surveillance as an expression of Panopticism, Lyon warns that one can lose the important subtleties and specificities of both Foucault’s theory and the actual operations of individual surveillance practices.¹⁸ As such, while my project is informed by Foucault, it does not see closed-circuit television (or two-way cable) as a direct expression of the Panopticon. It conceptualizes CCTV as a distinct technological device whose operations and power shifts are based on its social location and discursive construction. For, as I will argue in this chapter, the disciplinary effects of domestic closed-circuit television enact themselves far more on the cameras operators—those constructed as the surveyors—than on the individuals they seek to monitor.

Although closed-circuit television’s role as a surveillance technology, and particularly a public surveillance technology is essential to its social significance, its histories, operations, and discursive construction cannot be reduced to this practice. In addition to monitoring, CCTV has

¹⁷ David Lyon, *Surveillance Studies: An Overview* (Cambridge, UK: Polity, 2007), 57.

¹⁸ For more on Lyon’s discussion of the Panopticon—its limits and its contributions—see: David Lyon, *Surveillance Studies: An Overview* (Cambridge, UK: Polity, 2007); David Lyon, *Theorizing Surveillance: The Panopticon and Beyond* (Cullompton, UK: Willan Publishing, 2006).

also been deployed in the service of manufacturing, sales,¹⁹ science, medicine, education, military reconnaissance, and at least initially, entertainment.²⁰ By allowing individuals to send audiovisual images privately, electronically capturing them in one location and then transmitting them to another via television, closed-circuit TV promised to extend, expand, and multiply “human vision,” offering businesses, educational facilities, and anyone else who had enough money to purchase a system of an electronically enhanced method of seeing and showing.²¹ As such, closed-circuit television thus represented a vast and exciting terrain of ‘useful’ television practices that promised to become integral to a wide range of commercial, government, educational, and industrial environments.

Indeed, according to Jeanne Allen, whose essay “The Social Matrix of Television: Invention in the United States” examines television’s emerging identity throughout the 1930s and 1940s, these various non-broadcast uses of TV technology were central to the medium

¹⁹ Anna McCarthy has analyzed the ways in which closed-circuit television was deployed in postwar department stores as part of their point-of-sale advertising schemes. Anna McCarthy, *Ambient Television: Visual Culture and Public Space*, Console-Ing Passions (Durham, NC: Duke University Press, 2001), 63-88.

²⁰ CCTV was not completely divorced from entertainment. As Michele Hilmes and Timothy White have examined in their histories of Hollywood’s attempt to grapple with broadcasting, in the 1950s, movies theaters began to install closed-circuit television in systems. Theater owners, witnessing the decline in movie attendance in the wake of television’s arrival in the American home, sought to harness the new medium to its advantage. In 1951, the Theater Television Network was formed to co-ordinate the transmission to live television events to movie theater audiences. The screened programs ranged from presidential addresses to opera performances, with sports often being the most popular events. Initially theater television seemed like a promising new industry. In 1952, the telecast of a boxing match between Jersey Joe Walcott and Rocky Marciano was shown by more than fifty theaters and brought in \$400,000 of revenue. However, this seeming success was short lived. By 1953, theater television was in decline and by 1954, it was all but over. The cost of transmission via AT&T’s coaxial cables rendered exhibition too expensive and the dream of a dedicated broadcast channel was denied by the FCC. Even though theater television never reached the heights of popularity initially envisioned by its proponents and closed-circuit television would largely be seen as something other than an entertainment medium, theater television represents an important alternative vision of CCTV, distinct from its dominant perception as a surveillance medium. For more see: Michele Hilmes, *Hollywood and Broadcasting: From Radio to Cable* (University of Illinois Press, 1999), 116-139; Timothy R. White, “Hollywood’s Attempt at Appropriating Television: The Case of Paramount Pictures,” in *Hollywood in the Age of Television*, ed. Tino Balio, 1 edition (New York, NY: Routledge, 2015), 145–64.

²¹ Radio Corporation of America, “TV Eye” (Radio Corporation of America, 1953).

throughout its early history.²² Through an analysis of popular, scientific, and technical magazines, Allen demonstrates how prior to its dominance as a broadcast medium, television was conceived as a means of public theatrical exhibition, a tool for advertising and sales demonstrations, a mode of monitoring employees and the process of production, a system of military reconnaissance, and a method of two-way communication largely deployed by amateurs (the last of which I note in chapter two). These modes of conceptualizing television were defined by competing interests who saw the medium as an improvement upon the pre-existing technologies of radio and cinema, ideally suited to solving a variety of social and industrial demands. Retailers sought to secure television licenses, seeing TV as a way to promote products and facilitate sales. Businesses conceived CCTV monitoring as a natural next step in Taylorist management techniques that had already benefited from cinema-assisted time motion studies. And the Air Force deployed televisual technologies to help guide missiles and aid in reconnaissance by installing “television camera[s]...close to gun sights and spying on enemy lines.”²³ Allen thus argues that all of these practices—which she sees as distinct but interrelated—functioned to support a vision of television as a one-way and industrial medium, often at the expense of amateur efforts at two-way TV communication. Thus, even as industrial television remained marginal when compared to the commercial broadcast TV industry of the postwar era, it was central both to television’s initial emergence and to the medium’s eventual dominant cultural formation.

According to Kit Hughes, whose dissertation examines the history of television’s role in industry and business, the industrial functions of closed-circuit television, referred to as

²² Jeanne Allen, “The Social Matrix of Television: Invention in the United States,” in *Regarding Television: Critical Approaches--An Anthology*, ed. E. Ann Kaplan (Frederick, MD: University Publications of America, 1983), 109–17.

²³ *Ibid.*, 113.

Industrial Television (or ITV) by its proponents, persisted as an alternative televisual trajectory throughout the 1950s.²⁴ Although CCTV did operate as a surveillance technology during the postwar era, it was primarily deployed for other purposes, conceived as a central means of increasing the efficiency and capabilities of human labor. With closed-circuit equipment, cameras could be placed in locations too dangerous or at least too uncomfortable for workers to access easily. CCTV cameras were positioned inside furnaces and wind tunnels, on top of buildings, and in the middle of machines, so that workers could now access modes of seeing which would be impossible for the human eye.²⁵ In addition, closed-circuit television's capacity to expand human sight offered new ways of making the workplace more efficient. With a series of cameras monitoring a factory floor or an assembly line, supervisors could see the entire manufacturing process at glance. Empowered with this enhanced view, they could perfect the production process, increasing or decreasing the speed of a conveyor belt based on worker rhythm or spotting any errors as they occurred.

Moreover, the installation of a series of networked cameras was also promoted as a means of reducing the number of workers necessary.²⁶ Without CCTV, a large distributed workforce where specific individuals were in charge of surveying a particular space or industrial process was often required. Closed-circuit television centralized vision, streamlined communication, and thus, limited the number of necessary employees. Indeed, for CCTV's proponents (often members of the electronics industry with a vested interest in its promotion), television, with its automatic attention, mechanical gaze, and relative indestructibility, represented an important means of solving the problems endemic to human labor. By giving industry an electronic means

²⁴ Kit Hughes, *Corporate Channels: How American Business and Industry Made Television Useful* (ProQuest Dissertations Publishing, 2015), <http://search.proquest.com/docview/1916477454/>, 191-272.

²⁵ *Ibid*, 216-235.

²⁶ *Ibid*, 240-252.

of expanding, extending, and multiplying the vision of the average worker, CCTV enthusiasts insisted that it improved, even perfected the human eye. Thus, closed-circuit television, was more than simply a mode of disciplining of securing public space and catching potential criminals. “ITV provided an opportunity for engineers, public critics, and a wide range of industrial and commercial interests to explore the ideal relationship between the mechanized and mediated factory and the human worker; the size, shape, and location of the ideal workspace and even the physical capacities of the ideal worker.”²⁷

My own study of closed-circuit television brings aspects of Allen and Hughes’ analyses of ITV in conversation with those more traditional examinations of CCTV as surveillance. However, unlike Allen, Hughes, and scholars like Norris, Armstrong and Kroener, my focus is not on the public or even the private commercial uses of closed-circuit television. Although supporting industry, securing public institutions, and monitoring city streets are some of the most prominent ways in which CCTV technology has been used, they are by no means the only sites of its deployment. Domestic spaces have also been subject to increasing levels of televisual surveillance. Houses and apartments have sought to secure their borders with layers of televisual protection. Guards and doormen for luxury residences have supplemented their labor with the installation of security cameras that could monitor building exteriors as well as the semi-public, semi-private interior spaces, like hallways and laundry rooms. Homeowners and apartment dwellers have been conceptualized as their own guards, policing the entrance to their domains with the vision granted by closed-circuit cameras. CCTV has also appeared outside of the realm of security. Women—the home’s primary domestic laborers—were imagined deploying closed-circuit cameras to help them complete housework and familial care, their vision and bodies

²⁷ Hughes, *Corporate Channels*, 271.

subject to televisual remodeling just like any other industrial worker. There are many dimensions to the history of closed-circuit television and CCTV surveillance, and it is to these private, domestic uses which I now turn, unpacking their place in the home, their potential as tools of domestic protection and household efficiency, and their connection of other adjacent modes of televisual surveillance.

Closed-Circuit Television and Managing the Dream House

When CCTV was first made available for public purchase with Bell Television and DuMont releasing systems alongside RCA, these companies looked to all manner of people and places to use their new televisual equipment. Although the family was not the foremost institution when it came to purchasing power, it was far from unimportant to CCTV's promoters. Even if the family was not, nor ever imagined to be the primary consumer of closed-circuit television, it held a great deal of ideological and discursive weight. If CCTV was to become an important everyday technology essential to American life and industry, then its positioning in the family as a non-threatening, practical, and even protective technology, something that would support and help domestic life, could contribute to its widespread acceptance.²⁸ As such, the release of CCTV systems in the 1950s and 1960s inspired many speculative discussions and even explicit promotions of closed-circuit television's possible roles in the American home. Advertisements, articles, television engineers, and designers of futuristic model homes imagined fathers and most particularly mothers sitting in their CCTV-enhanced livings rooms, turning on

²⁸ Indeed, this promotional strategy has, of course, been an essential aspect of the discourses surrounding a wide variety of other technologies. In this project, I have already examined its operations in the promotion of early video recording systems and the Picturephone in the 1960s.

their television sets, and watching the images transmitted by their TV camera.²⁹ Installed in front of their TV sets, mothers could now watch the front door, the stove, or the children's rooms. They became commanders of a vast surveillance system that afforded a new electronic mastery over their domestic domains. By extending the housewife's vision, closed-circuit television promised to become the homemaker's most "reliable electronic servant," modernizing housework, easing the housewife's burden, and protecting the family against any threat—whether emerging from without or from within the home.³⁰

Essential to the discourses that surrounded the introduction of closed-circuit television in the American home was the broader connection between domesticity and security essential to the construction of American life in the postwar era. Home CCTV systems and the home security industry more generally did not emerge in a vacuum. They were imbricated with broader domestic ideologies and social anxieties of the Cold War, as anti-communist agendas, racist housing policies, growing suburbanization, changing urban demographics, and the cultural status of 'the dream house' came to shape American practices and ideologies of home and family. As Elaine Tyler May argues, domesticity or rather, an idealized vision of white, middle-class, suburban domesticity became synonymous with security. Confronted with the ongoing threat of the Soviet Union, the suburban nuclear family was conceived as culturally and politically essential to preserving and protecting American life. According to May, popular rhetoric repeatedly held up "a home filled with children" as the best "security against the...forces of

²⁹ E.g. Elinor Lee, "Housewife's Utopia Is Nearer Than She May Be Expecting," *Washington Post*, August 7, 1966, sec. F; David Meier, "Your Happy Home In The Year 2000," *Baltimore Sun*, November 19, 1961, sec. E; Jack Smith, "Electronic Home--a Shocking Peep Into the Future," *Los Angeles Times*, September 2, 1966, sec. C; Vladimir Zworykin, "Television in the 1960s," *The New Scientist*, February 25, 1960, Vladimir K. Zworykin Papers, Hagley Museum and Library; "What You Can Expect in a Home of the Future," *Boston Globe*, July 21, 1963, sec. A; "21st L.A. Home Show Looking to the Future," *Los Angeles Times*, August 14, 1966, sec. L.

³⁰ Radio Corporation of America, "TV Eye."

disruption and alienation.”³¹ It was a means of containing desires and behaviors condemned by many officials and experts as deviant or damaging. Pre-martial sex, homosexuality, and female careerism were all construed in popular, psychological, and government discourse as dangerous forces. They threatened to weaken American society, leaving it vulnerable to Soviet attack and communist infiltration.

To protect America, family life needed to be secured, and it was women who, by and large, were expected to perform such work. In the popular rhetoric of the 1950s and early 1960s, women’s patriotic duty lay in dedicating themselves to their homes and their families; by keeping their houses clean, their husbands happy, and their pantry’s stocked, women were not only laboring for their families, but for their country, enacting their own form of domestic security. Although such gendered labor was promoted as a general expectation of any postwar home, the ultimate vision of home as domestic protection was most frequently associated with suburban life. According to May, in the 1950s “the suburban home” emerged as the site of ideal domesticity. It was “the locale of the good life, the evidence of democratic abundance.”³² Moving to the suburbs, buying a house, and furnishing it with the latest electronic appliances became a symbol of American excellence, a sign of superiority, and strike against the Soviet Union. During this period, consumption became a kind of virtue or civic duty, as “family-centered spending reassured Americans that affluence would strengthen the American way of life.”³³ Stoves, refrigerators, radios, television sets, and automobiles were all considered important indicators of modernity and capitalist progress, capable of improving life and fostering family unity. As such, the suburbs became a source of national pride and a symbol of familial

³¹ Elaine Tyler May, *Homeward Bound: American Families in the Cold War Era*, 20 Rev Upd edition (New York, NY: Basic Books, 2008), 26.

³² *Ibid*, 153.

³³ *Ibid*, 158.

bliss. Through targeted consumption and gendered labor, they came, in the popular imagination, to embody “protection against labor [and sexual] unrest, which might lead to class warfare and communism.”³⁴

Closed-circuit television was introduced to the American public within this broader context of the imbrication between domesticity, security, consumer expectation, and suburban idealization. Just as the suburban home and the nuclear family were envisioned as a means of protecting American hegemony, CCTV represented a means of protecting that very force of national security. It was imagined as both a method of helping the housewife perform her patriotic duty of domestic labor and a tool in the fortification of the home itself, a way of securing its boundaries and guarding its inhabitants. Although there is very little evidence to show that CCTV cameras were installed in suburban homes with any regularity, throughout the 1950s and especially in the 1960s, closed-circuit television became a central feature in discourses about the future of American domestic life. It was described as the embodiment of the “comfort and convenience of electrical living” and a communications revolution in the modern American “dream house.”³⁵ Positioning CCTV as the housewife’s “most reliable electronic servant,” industry professionals and electronics journalists suggested using the technology for home security and domestic labor. They described its eventual prominence in high-tech modern living as inevitable—a central feature of the safe, electronic home and a vital assistant to the technically savvy, efficient housewife.³⁶

An early advertisement for RCA’s TV Eye that appeared in the *New York Herald Tribune* and *Popular Science* emphasized the technology’s capacity to intervene in domestic labor.

³⁴ May, *Homeward Bound*, 161.

³⁵ Anne Douglas, “Electrical Living in a Festival Home,” *Chicago Daily Tribune*, May 18, 1955, sec. B, 9.

³⁶ Radio Corporation of America, “TV Eye.”

Although the ad's copy described the device's applications generally, suggesting its potential to extend and expand the gaze of its operator in a whole manner of settings (primarily outside the home), the largest image focused explicitly on its potential in the domestic interior. This image depicted a young child standing in her crib. A TV camera mounted on a tripod loomed over her, monitoring her every move. The caption read, "First home television camera, RCA's 'TV Eye,' connects to any TV set—lets you watch children in the nursery or at play."³⁷ Noting the TV Eye's novelty as the first television camera to be designed for home use, RCA envisioned its domestic deployment not for the production of homemade television programming but as a means of extending the maternal gaze. Unlike similar advertisements for home video cameras, children are conceptualized as the ideal subjects of closed-circuit television not for the construction of intimate keepsakes but rather for the rationalization of care and the efficient management of household.

This vision the CCTV-enhanced domesticity put forward by RCA's promotional campaign became even more pronounced when electronics executives and technology reporters conceptualized housework and home security working simultaneously through closed-circuit television. In discussing the company's advances in CCTV, RCA president David Sarnoff saw these two functions operating side-by-side when the technology became a central force in suburban home: "When the cost of the camera attachments is sufficiently low to permit their use in the average home they may make the television receiver truly the control center of the home. The snap of a switch will turn the receiver from the broadcast program to the cooking on the kitchen range. The housewife will not only hear but see the caller at the door before she opens

³⁷ "Tireless TV Eye."

it.”³⁸ Similarly, in a 1954 *New York Herald Tribune* article, journalist Leslie Lieber describes the ease with which one could deploy CCTV in the home, stating that by “zeroing it in on the front door, housewives can decide by a mere flick on the TV set whether to be ‘at home’ or not.”³⁹ A *New York Times* report, entitled “Hand TV May Help Mother Eye Baby” suggests that “A simple television camera—no larger than a hand movie camera—[could] in the near future...permit a housewife to scan the nursery, kitchen, backyard and see a caller at the door...A simple switch changes the home video outfit from a regular off-the-air program reception to ‘closed circuit’ operation.”⁴⁰



Figure 4.1 RCA “Tireless TV Eye” Advertisement, *Popular Science*, 1953

In these discussions, closed-circuit television acted upon the traditional TV set, bringing it a newfound utility. By connecting one’s television console to a control unit and closed-circuit

³⁸ Sarnoff, “Closed Circuit TV for the Home,” 128.

³⁹ Leslie Lieber, “Homemade TV,” *New York Herald Tribune*, August 22, 1954, sec. SM, 19.

⁴⁰ “Hand TV May Help Mother Eye Baby,” *New York Times*, March 27, 1953.

camera, television could be transformed with the mere flick of a button from a medium of commercial entertainment to one of domestic management. Through CCTV, every room could be networked together, surveilled with a camera, and monitored on a centralized TV set. Although the high price of closed-circuit systems (the TV Eye cost \$1000⁴¹) meant that a set up with even one camera was outside the realm of possibility for the vast majority of consumers, most of the articles and promotional materials that discussed CCTV in the home envisioned a multi-camera system. Such systems would allow their users not merely to extend their vision but fragment it. In these narratives, the housewife, using her TV set as the central force of her home management, could seamlessly move from watching soap operas to monitoring her children to guarding the front door in a gesture that changed the nature of her housework and emphasized television's centrality in the home, making it a tool both of domestic leisure and of domestic labor.

This vision of closed-circuit television as a means of creating a high-tech, networked home was especially common in articles about the "House of Tomorrow." Indeed, CCTV appeared both in speculative accounts of the future of American domestic life and in model and exhibition homes; it was installed in such emblems of space-age living as the Monsanto House of the Future, which was exhibited in Disneyland's 'Tomorrowland' from 1957 to 1967.⁴² Throughout these discussions, it was typically the housewife, whose occupation often places her at home alone, who was again pictured as CCTV's chief operator. Echoing industry insiders like Sarnoff, these reports imagined her using her closed circuit-system to simultaneously survey the

⁴¹ Walter H. Buchsbaum, "Industrial TV," *Radio & Television News*, October 1955.

⁴² Monsanto Chemical Company Plastics Division, *The Monsanto House of the Future*, 1957, https://www.youtube.com/watch?v=sk2YBA_oa1A.

perimeters of her house and its interior operations, warning if an individual was approaching her front door or if her children were breaking any rules.⁴³

In 1953, Walter Bussewitz of the *Washington Post* emphasized CCTV's centrality to the home of the future, suggesting that: "Your home will have a closed-circuit television control center, which will enable you to see who is at the door, what is going on in the nursery, and how the cooking is progressing."⁴⁴ In the 1960s, even though closed-circuit television was no longer brand new, similar visions of domestic CCTV proliferated in speculations of tomorrow's domesticity. It appeared as an important feature in "Your Happy Home in the Year 2000" described by the *Baltimore Sun*'s David Meier.⁴⁵ It was construed as an essential part of the "Housewife's Utopia," which, according to the *Washington Post*'s Elinor Lee, "is nearer than she may be expecting."⁴⁶ Even more explicitly, it entered an article about the future of television in the 1960s written by RCA engineer and executive Vladimir K. Zworykin, who insisted that: "Closed-circuit television systems...with a number of cameras, [which] permit surveillance of the nursery, the kitchen, the play areas, and the approaches to the house...will simplify housekeeping and relieve the housewife of anxiety."⁴⁷

In these articles, the housewife was envisioned as the technology's primary user, the master of a new kind of televisual domestic space. By networking the home with a complex closed-circuit television system, the housewife became one vitally important node in its operation. It was her gaze that controlled the camera, her decision to look or not look at the TV monitor, and

⁴³ Walter Bussewitz, "Science Still at Work on The Home of Tomorrow," *Washington Post*, April 5, 1953, sec. R; Douglas, "Electrical Living in a Festival Home"; Lee, "Housewife's Utopia Is Nearer Than She May Be Expecting"; Meier, "Your Happy Home In The Year 2000"; Smith, "Electronic Home"; "What You Can Expect in a Home of the Future"; "21st L.A. Home Show Looking to the Future"; "Great Things Seen In House of Future," *Washington Post*, January 16, 1965, sec. E.

⁴⁴ Bussewitz, "Science Still at Work on The Home of Tomorrow," 4.

⁴⁵ Meier, "Your Happy Home In The Year 2000," 1.

⁴⁶ Lee, "Housewife's Utopia Is Nearer Than She May Be Expecting," 18.

⁴⁷ Zworykin, "Television in the 1960s," 456.

her labor that united household management and home security. As such, closed-circuit television, though promising to streamline and simplify domestic labor, also gives it a new dimension. In addition to cleaning, cooking, and looking after her family's material and emotional needs, the housewife now is in charge of policing the boundary of the home. Alongside securing American interests through the production of domestic stability, the CCTV-enhanced housewife also secures the home itself. She is imbued with the power of electronically extended vision and uses this power to decide who is or is not a threat.

Moreover, by creating a new kind of useful mode of deploying television, closed-circuit TV's imagined role in domestic life also functioned to discipline the housewife, ensuring her interactions with television were made in the service of household safety and domestic labor. As Spigel has illustrated, television's introduction into the American home was marked by debate and contradiction. "Utopian statements that idealized the new medium as an ultimate expression of technological and social progress were met by equally dystopian discourses that warned of television's devastating effects on family relationships and the efficient functioning of the household."⁴⁸ Networks and TV manufacturers strove to promote the medium as the savior of domestic drudgery, an unobtrusive entertainer that could accompany the housewife while she worked, making her household labor fly by as she enjoyed a variety of daytime programming. At the same time however, popular media often eyed this new televisually-distracted housewife with suspicion, if not outright scorn. According to Spigel, "The TV-addict housewife became a stock character...particularly in texts aimed at a general audience where the mode of address was characterized by an implicit male narrator who clearly blamed women—not television—for the

⁴⁸ Spigel, *Make Room for TV*, 3.

untidy house.”⁴⁹ Closed-circuit television, by transforming the home TV console from a site of entertainment into a tool of domestic labor, offered one means of dealing with the ‘problem’ of television and housework. In bringing at least some of the housewife’s responsibilities onto the TV set itself, closed-circuit television promised to streamline domestic labor and rechannel the housewife’s ‘TV-addict’ tendencies into an explicitly productive viewing practice. It worked to discipline her gaze and offering an extreme example of what Spigel describes as the “the spatial condensation of labor and viewing.”⁵⁰ Thus in the house of tomorrow, the housewife would not be lured into neglecting her domestic duties by a daytime soap opera or variety show. Instead, equipped with her new closed-circuit television system, her TV set would repeatedly reassert itself as a site of domestic productivity, the “control center of the home,” through which she could extend and multiply her gaze, simultaneously keeping her eyes on her children, her cooking, and her front door.⁵¹

Despite this prominent vision of women as CCTV’s chief operators (and the somewhat loaded gender politics it embodies), certain accounts of closed-circuit television’s domestic applications complicate this reading. In “At Home, 2001,” a 1967 Walter Cronkite report on various visions of the future of domestic life, men rather than women were pictured as closed-circuit television’s chief operators. This program, which interviewed urban planners and architects, critiqued suburban tract housing, and offered a tour of a high-tech model home, CCTV functioned to visually unify the futuristic home. With cameras installed in each room, it is the husband, situated in his home office (which is also equipped with a teletext reader and a Picturephone), who is envisioned using his CCTV system. Sitting at a desk in front of an

⁴⁹ Spigel, *Make Room for TV*, 87.

⁵⁰ *Ibid*, 89.

⁵¹ Sarnoff, “Closed Circuit TV for the Home,” 128.

assemblage of screens, he is given an almost omniscient view of his domestic domain. With the simple press of a button, he can “keep in touch with other rooms in the house,” turning his seemingly panoptic gaze instantly to the bedroom, the kitchen, and the living room.⁵²

Similarly, in a 1966 account of his visit to the Los Angeles Home Show, *Los Angeles Times* reporter Jack Smith teases out some of the gender dynamics of the CCTV-enhanced home. Describing his walk through the Show’s “All-Electronic Home of Tomorrow” with his wife, he provides a somewhat satirical account of life in this futuristic dwelling. After entering the exhibition:

We wandered into the kitchen. A miniature TV showed people approaching the front door. ‘You can see the Fuller Brush man coming,’ a guide said... While the roast is cooking, the housewife may entertain herself electronically. She can watch for the Fuller Brush man on TV, or open cans with her built-in electric can opener, or open and close every window in the house by pushing a button, or turn on the TV camera in baby’s room and watch baby, making sure she hasn’t automatically shut a window on baby’s neck.⁵³

Following this sketch of the housewife’s engagement with the home’s electronic features, Smith moves on to imagine the husband. Located in what he describes as the “garage-office-master control room,” the husband tinkers with various electronic marvels: “He toys with his dials, his short wave set, his citizen’s band set and his own closed circuit TV, on which he can watch his wife watching her TV.” As the wife uses her household electronics to help in her domestic labors, the husband “being master...can supersede his wife’s operations, opening all the windows she has closed, switching off David Brinkley... [and] tap her line when she’s talking to the front door.” After returning home, Smith concludes his article by describing his discussion with his wife about updating their own home with some of the electronic marvels displayed at the Show. With a bit of a wink to the reader, he tells her: “I’d like to get you one of those closed

⁵² “At Home, 2001,” *The 21st Century* (CBS, 1967), <https://www.youtube.com/watch?v=vEtlfoS-toU>.

⁵³ Smith, “Electronic Home,” 1.

circuit TV sets, so you could see me when I drive up to the garage. Then you could come out and open the door. Save me a hell of a lot of time”; a comment, which he suggests, did not please his wife.⁵⁴ Thus, in this vision of futuristic domesticity, television was not merely conceptualized as an assistant in the demands of domestic labor and a central means of household management, but emerged as a medium through which domestic conflicts and gendered power dynamics could play out.

Even as the housewife is imagined most frequently as closed-circuit television’s chief operator, when the husband enters the scene he retains chief control—albeit a control that can be imagined satirically. Even as they communicate a vision of America’s domestic future, these articles continue to comply with conservative gender roles. Just as the husband becomes the panoptic supervisor of domestic space or the childlike tinkerer, the housewife is always envisioned using her closed-circuit television to protect the home and tend to its occupants. Thus, as much as everyday domestic life and labor were reimagined through the operations of closed-circuit television in the ‘House of Tomorrow,’ husbands and wives’ technological engagements remained entrenched in normative visions of gender and domesticity.⁵⁵ While the housewife exerted her mastery (a mastery which threatened to be superseded by her husband) over her technologically mediated home, she did so in the service of her primary role of mother and homemaker.

⁵⁴ Smith, “Electronic Home,” 1.

⁵⁵ Again perpetuating the longstanding tendencies of imagining futuristic domesticity documented in smart home scholarship. E.g. Fiona Allon, “An Ontology of Everyday Control: Space, Media Flows and ‘smart’ Living in the Absolute Present,” in *MediaSpace: Place, Scale, and Culture in a Media Age*, ed. Nick Couldry and Anna McCarthy, Comedia (New York, NY: Routledge, 2004), 253–74; Davin Heckman, *A Small World: Smart Houses and the Dream of the Perfect Day* (Durham, NC: Duke University Press, 2008); Lynn Spigel, “Yesterday’s Future, Tomorrow’s Home,” *Emergences: Journal for the Study of Media & Composite Cultures* 11, no. 1 (May 2001): 29–49, <https://doi.org/10.1080/10457220120044657>.

Surveillance and Urban/Suburban Domesticity

Alongside the threat of communism, another essential element of the discourse of postwar domesticity and home security stemmed from broader anxieties about race which emerged throughout the era and continued in various forms well into the 1980s. Despite its status as the idealized form of American domesticity and the embodiment of *the good life*, suburban living was not available to everyone. The 1950s and 1960s marked the tail end of the Great Migration, during which millions of black men and women moved from Southern states to Northern cities. Throughout this period, cities like Philadelphia and Chicago doubled their African American populations, while Newark and Washington moved from being predominately white to predominately black.⁵⁶ As city populations grew, the government encouraged suburban emigration as legislation like the GI Bill made single-family homeownership affordable to a wide range of Americans—so long as they were white. At the same time as the government promoted suburbia, African Americans and other racial minorities were systematically excluded from the suburbs. The Federal Housing Administration employed redlining policies. Landlords and real estate agents’ refused non-white tenants or advertised exclusively in media geared to white audiences. If black families did manage to settle in the suburbs, they were repeatedly greeted with violence and systematic displays of racism. Together, these conditions meant that African Americans were ostensibly barred from participating in this vision of the American dream.⁵⁷ Thus, in postwar America, urban and suburban space was demarcated along racial lines, so that even in the North, there was an unofficial policy of segregation.

⁵⁶ Douglas S Massey and Nancy A Denton, *American Apartheid: Segregation and the Making of the Underclass* (Cambridge, Mass.: Harvard University Press, 1993); Thomas J. Sugrue, *The Origins of the Urban Crisis: Race and Inequality in Postwar Detroit* (Princeton, NJ: Princeton University Press, 2014).

⁵⁷ David M. P. Freund, *Colored Property: State Policy and White Racial Politics in Suburban America* (Chicago, IL: University of Chicago Press, 2014); George Lipsitz, *How Racism Takes Place* (Philadelphia, PA: Temple University Press, 2011).

According to George Lipsitz, such actions not only worked to systematically deny the suburban dream to large segments of the American population, but also helped enforce racialized ideologies of space. Lipsitz argues that the “white spatial imaginary,” founded on and supported by longstanding structures of racism and discriminatory housing policies, functions to support racialized configurations of space.⁵⁸ In its operations and its discourses, the white spatial imaginary constructs certain places as good, safe, clean, and morally adroit, and others as dangerous, dirty, and constituting a social problem. “It produces a society saturated with hostile privatism and defensive localism through secret subsidies for exclusive and homogenous housing developments premised on promoting the security and profitability of private property regardless of the larger social costs to society.”⁵⁹ It is embodied by the suburbs, which with their uniform design, insistence on ownership, separation from the city, and legal and illegal enforcement of white homogeneity, promote an idealized vision of space defined above all-else by economic prosperity, privacy, and predictability. At its core, the white spatial imaginary seeks to hide social problems and presentations of difference. Its very existence requires the expulsion of those individuals deemed “impure” and who threaten this all-governing need for sameness—an act so central to American ideology that it can be traced back to the systematic removal of indigenous populations by European settlers.⁶⁰ Thus, the idealization of the suburbs essential to postwar domestic ideology did not merely express gendered visions of home and family. It also embodied an ideology of segregation, a white spatial imaginary in which racial privilege was inextricably linked to an idea of home that needed to be protected at all costs.

⁵⁸ It should be noted that Lipsitz also theorizes the “black spatial imaginary,” which he contends operates against the hegemonic ideology of white space, valuing community, democracy, cross-class solidarity, minority resistance, and alternative forms of knowledge. For more, see: *How Racism Takes Place*, 51-70.

⁵⁹ *Ibid*, 28-29.

⁶⁰ *Ibid*, 29.

In his analysis of the emergence of home security discourse in postwar America, Gilbert Caluya argues that the growth of this industry (an industry with which closed-circuit television was certainly imbricated but not entirely subsumed by) was directly related to racist fears. Although home security products were sold to the American public prior to the mid-1960s, electronic home security only emerged as a fully fleshed out industry with its own unique discursive patterns in this decade. In the 1960s, a variety of security firms entered the consumer market and established corporations (most notably Westinghouse) which began to produce their own home security systems. Some of these were simple motion detectors while others involved advanced assemblages operated by solid-state computers that would automatically monitor if anything was amiss in the home. Caluya attributes this rise in home security and home security discourse to the insecurity experienced by whites in response to the public and legal gains made by black Americans throughout the 1960s. As the Civil Rights movement combatted the institutions and structures of white supremacy, which among other things put pressure on racist housing policies, home security discourse emerged. It represented an attempt to “regain control over private space,” just as “conservative white, middle-class Americans felt they were losing control over public space.”⁶¹

According to Caluya, though these racialized desires were rarely stated explicitly, the advertisements and news reports surrounding the industry invoked a coded racial discourse. They regularly presented white families, and particularly white women, as the subjects of this kind of technological protection. They also repeatedly referenced rising crime rates that they attributed to urban centers populated by poor racial minorities from which home security represented the only

⁶¹ Gilbert Caluya, “Pride and Paranoia: Race and the Emergence of Home Security in Cold War America,” *Continuum: Journal of Media & Cultural Studies* 28, no. 6 (December 2014): 808, doi:10.1080/10304312.2014.966406.

protection. Deploying the latest technologies, industry discourse promised to protect the white, suburban family home from those supposedly “crime-filled...urban areas.”⁶² In so doing, it offered consumers a new “panoptic mastery over domestic space through its centralized surveillance, control and communications.”⁶³ Thus, according to Caluya: “The discourse of security recodified racial issues. As black Americans struggled for equality in public life, the vestige of white power shifted from public segregation to private security.”⁶⁴

Caluya’s article cites the suburban homeowner as the primary target for the home security industry. He notes that security companies sought out clients that owned their own homes and made a minimum of \$25,000 a year, something inaccessible to the majority of black urban residents in the postwar period. However, unlike the systems discussed by Caluya, *closed-circuit television* home security actually found its most significant application in urban residences. Throughout the 1960s, CCTV systems started to be installed in urban, upscale apartment buildings. While I do not have concrete evidence as to why precisely apartments integrated close-circuit surveillance systems more rapidly than private homes, it is likely that at least one reason was cost. As I previously mentioned, a basic closed-circuit TV system cost approximately \$1000, which while cheaper than the television equipment used by broadcast professionals, remained out of reach of the average consumer.⁶⁵ Installing CCTV security in apartment buildings, though often requiring more complex closed-circuit set ups that were priced somewhere between \$6,000 and \$7,000, ended up costing less per unit than if an individual resident purchased a system him or herself.⁶⁶ Moreover, even though an installation on such a

⁶² Caluya, “Pride and Paranoia,” 816.

⁶³ *Ibid.*, 815.

⁶⁴ *Ibid.*, 817.

⁶⁵ Buchsbaum, “Industrial TV,” 37.

⁶⁶ “Tenants’ Video Guard Goes on Duty,” *New York Times*, May 14, 1960; Charles G. Bennett, “Landlords Will Get Rent Rise If They Install TV Monitors,” *New York Times*, August 12, 1965.

scale represented a significant one-off expense for building owners, as permanent fixtures, such systems would give added value to landlords' properties. The attraction of a state-of-the-art closed-circuit television home security system presumably rendered a building more desirable. It could justify an increase in tenants' rent, potentially lead to the reduction of insurance premiums,⁶⁷ and thus, allow a building owner to recuperate their initial expense.⁶⁸

In addition to cost, another likely reason behind the increased prominence of closed-circuit television in apartments stemmed from the specific domestic configuration of the apartment itself. In many ways, the apartment represents a different kind of domestic ideal from that embodied by the suburban dream house—one more independent, cosmopolitan, and public. Such visions of apartment living have been explored by Sharon Marcus in her study of nineteenth-century discourses about apartments in London and Paris, and by Pamela Wojcik in her analysis of the “apartment plot” in American media from 1945 to 1975.⁶⁹ According to both Marcus and Wojcik, apartment buildings emerged throughout the nineteenth and twentieth centuries in distinction to other modes of dwelling, both urban and rural. Marked at least initially as residences of the middle and upper middle classes, apartments distinguished themselves both from the tenements and row houses occupied by the urban poor and from the detached suburban home, whose residents might share a similar class background but lacked the bohemian ideals

⁶⁷ It is unclear whether or not closed-circuit television installations affected insurance premiums, but it is suggested as a potential benefit in Daniel Street, “How Safe Are Apartments,” *Washington Post*, January 23, 1971, sec. D.

⁶⁸ In New York, landlords of rent controlled apartments were even allowed to raise rents if they installed CCTV security systems: Bennett, “Landlords Will Get Rent Rise If They Install TV Monitors”; Francis X. Clines, “Landlords and Tenants Eager for City Ruling on TV Security,” *New York Times*, January 24, 1965, sec. R.

⁶⁹ Sharon Marcus, *Apartment Stories: City and Home in Nineteenth-Century Paris and London* (Berkeley, CA: University of California Press, 1999); Wojcik uses mobilizes the concept of the ‘apartment plot,’ which is drawn, at least in part, from Marcus, to describe a series of American films in the apartment serves more than merely a setting. In these films, “The apartment not only hosts but motivates action; it entails certain sets of relationships; it involves formal and thematic elements; it conveys ideologies of urbanism” (5). Although romantic comedies are the chief genres of the apartment plot, it also can be found in other genres (film noir, thrillers, horror, social realism, etc.) What is key to the apartment plot is thus less genre or tone, but the intersection of urbanism and domesticity that they embody. Pamela Robertson Wojcik, *The Apartment Plot: Urban Living in American Film and Popular Culture, 1945 to 1975* (Durham, NC: Duke University Press Books, 2010).

and metropolitan access provided by the apartment's urban location. For Marcus: "As a then uniquely urban form of housing that combined the relatively private spaces of individual apartment units with the common spaces of shared entrances, staircases, and party walls, the apartment house embodied the continuity between domestic and urban, private and public spaces."⁷⁰ The apartment operates almost as a microcosm of the city. It is a space simultaneously individualized and communal, both an entry point to and an embodiment of the pleasures and encounters of urban life.

According to Wojcik, the apartment's semi-private, semi-public structure is essential to her conception of the domestic imaginary embodied in 'the apartment plot.' For her: "The apartment plot offers a vision of home—centered on values of community, visibility, contact, density, friendship, mobility, impermanence, and porousness—in sharp contrast to more traditional views of home as private, stable, and family based."⁷¹ While the typical protagonists in apartment plot narratives tend towards the middle class, over the course of the twentieth century, apartment buildings diversified in the class location of their occupants. Although members of the bohemian bourgeoisie continued to live in urban centers, the apartment also became a place for those individuals not yet ready to enter or actively excluded from the suburban fantasy. Even with the exponential growth of the suburbs "single and divorced people, African Americans, working-class whites, ethnic minorities, and gay people" stayed in the city, becoming increasingly prominent residents of the urban apartment.⁷² These visions of domesticity ran counter to the dominant discourse predicated on the ideology of separate spheres that seemed to equate home with the suburban house. However, apartment domesticity with its seemingly more inclusive and

⁷⁰ Marcus, *Apartment Stories*, 2.

⁷¹ Wojcik, *The Apartment Plot*, 5.

⁷² *Ibid*, 18-19.

diverse conceptions of home and dweller still marked itself against those other more abject forms of domesticity embodied by the tenement and the housing project. As white flight left urban centers increasingly occupied by visible minorities and the urban poor, the apartment persisted. It not only represented an alternative vision of domesticity, but also emerged as the embodiment of the ideal city home, a terrain that must always be distinguished from othered modes of urban dwelling.

The semi-public nature of apartments, the kinds of intrusion and contact they afforded, and the need to distinguish themselves from the homes of the urban poor shaped their relationship with closed-circuit television. Unlike its suburban and futuristic counterparts, apartment CCTV was never directed inside the home itself. It did not turn the home into a visually networked space, seamlessly integrating security and domestic labor, but instead focused its gaze exclusively on the spaces outside the individual private unit. Although closed-circuit set-ups varied, they generally offered some kind of video-doorbell service. These systems allowed residents to view prospective visitors before deciding whether to not to let them enter. In buildings with guards and concierges, the apartment's public areas (entryways, elevators, laundry rooms, and hallways) were also monitored for suspicious behavior. As such, apartment CCTV evaded some of the more threatening dimensions of other models of domestic surveillance. Even as certain articles suggested the advantages of turning the home itself into a site of total technologized surveillance, such visions of closed-circuit television brought with them echoes of Big Brother or at least the specter of new domestic disputes. By removing CCTV from the inside of individual apartments and turning its gaze exclusively on a building's public or semi-public spaces, apartment closed-circuit television was first and foremost about security. It represented a

means of protecting residents from dangerous strangers who threatened to penetrate their apartment walls.

In the 1960s, news reports profiled the installation of closed-circuit television systems in urban apartments.⁷³ In contrast to articles about the house of tomorrow whose discussions of CCTV usually mentioned the technology alongside a variety of other electronic devices, rendering it only one part, albeit an important part, of America's domestic future, those discussing CCTV in the urban home often focused exclusively on closed-circuit television security. They profiled different building installations—from those focused largely on helping guards monitor elevators and lobbies⁷⁴ to those which had residents take control of their own surveillance, relaying an “image of callers in the lobby”⁷⁵ to an in-suite TV screen. Simple systems used the tenants' regular television sets, while more advanced set-ups had special screens installed right next to the door.⁷⁶ In addition, articles discussed the benefits (and the costs) of various systems for landlords, the desire for more security expressed by tenants, and proposed municipal regulations designed to encourage the installation of security systems.⁷⁷ Throughout all of these articles, closed-circuit television surveillance emerged as a desirable mark of the modern, safe, urban apartment. A protective domestic force, it promised to improve tenants' comfort and assuage the inevitable anxieties of city living.

⁷³ E.g. “Closed Circuit TV In Manifold Uses,” *Baltimore Sun*, October 30, 1960, sec. RE; “Tenants' Video Guard Goes on Duty”; “TV System Screens Visitors,” *Chicago Daily Tribune*, May 4, 1961, sec. S; “Added Security Via Television,” *Boston Globe*, July 19, 1964, sec. A; “TV System Is Used To Guard Tenants,” *New York Times*, October 4, 1964, sec. R; “TV Security Center Guards Apartments,” *New York Times*, November 14, 1965, sec. R; “Safety For Residents,” *Baltimore Sun*, April 17, 1966, sec. AP; James R. Berry, “New Electronic War On Burglars,” *Popular Mechanics*, December 1967; “Tenant Safeguard,” *Baltimore Sun*, April 21, 1968, sec. AP.

⁷⁴ “Tenants' Video Guard Goes on Duty”; “TV Security Center Guards Apartments”; Stuart Auerbach, “Apartment Dwellers' Fears Spur Elaborate Security Precautions,” *Washington Post*, June 18, 1967, sec. B.

⁷⁵ “Closed-Circuit TV To Protect Tenant,” *New York Times*, April 16, 1961, sec. R, 1.

⁷⁶ James M. Gavin, “Closed Circuit TV Big Hit with Tenants,” *Chicago Daily Tribune*, December 29, 1961, sec. C; “TV System Screens Visitors”; “TV System Is Used To Guard Tenants.”

⁷⁷ Bennett, “Landlords Will Get Rent Rise If They Install TV Monitors”; Clines, “Landlords and Tenants Eager for City Ruling on TV Security.”

Throughout the 1960s, articles constructed a vision of CCTV as an active agent in the protection of the urban dweller. More than simply assisting in home security, headlines like “Tenants’ Video Guard Goes on Duty”⁷⁸ and “TV Set Becomes Answer Man”⁷⁹ anthropomorphized the closed-circuit television terminal. They suggested that the technology might even function as a substitute for, or at least an addition to, human employees. For instance, a 1961 *Chicago Daily Tribune* article described a CCTV security system recently installed in a Hyde Park high rise as a “video receptionist.”⁸⁰ Similarly, a 1967 *Chicago Tribune* report remarked, “Chicago apartment developers are becoming increasingly interested in electronic security systems that stand silent guard over the units of their tenants.”⁸¹ In these articles, television does not merely exist as another passive layer of domestic protection, but works as an active force in defending the home. It takes the role of receptionist or guard, and performs a kind of defensive labor that might have been done by a human employee. As a 1960 *Baltimore Sun* report puts it: “Such [closed-circuit television] equipment can be used for many jobs, increasing the effectiveness of personnel and, in some cases, substituting for them in surveillance, property protection, traffic control and baby sitting. It can perform tasks normally handled by a watchman, doorman, elevator operator or swimming pool life guard.”⁸²

Indeed, throughout the 1960s and 1970s, the introduction of CCTV (as well as other electronic equipment) worked to alter the structure of service work in apartment buildings. Although elevator operators appeared as the most frequently mentioned position under threat (automatic elevators and more elaborate security measures decreased the need for such

⁷⁸ “Tenants’ Video Guard Goes on Duty.”

⁷⁹ “TV Set Becomes Answer Man,” *Washington Post*, April 16, 1964, sec. B, 1.

⁸⁰ “TV System Screens Visitors,” 3.

⁸¹ “Apartments, Tenants Guarded by Electronic Security Systems,” *Chicago Tribune*, October 15, 1967, sec. D, 1.

⁸² “Closed Circuit TV In Manifold Uses,” 7.

positions), multiple news reports also mention a reduction in the number of doormen and a fundamental change in their mode of work.⁸³ The labor of doormen, which according to Daniel Levinson Wilk was among those service positions that expanded throughout the late nineteenth and early twentieth centuries as traditional domestic service labor declined,⁸⁴ was not merely about security.⁸⁵ Doormen did not simply guard an apartment; they walked dogs, collected parcels, opened taxi doors, and took messages. In short, they performed all manner of manual and emotional labor for apartment residents, becoming an integral part of apartment daily life.⁸⁶ However, with the introduction of closed-circuit television, these more social and interpersonal dimensions of doorman labor began to diminish. As landlords reduced the number of employees at their buildings (sometimes even eliminating the post of doorman all together), those that remained performed a very different kind of work, far more akin to a guard than a concierge.⁸⁷

According to Anthony J. Michaels, vice president of Plaza Management profiled in a 1971 *New York Times* article, “Doormen used to be largely for service...but now the emphasis is strictly on security.”⁸⁸ Instead of leaving their posts to “walk one tenant’s dog” or “park another tenant’s car,” they remained fixed at their desks interviewing visitors and monitoring their CCTV screens.⁸⁹ No longer “a part of their tenants lives” in the way they had been previously,

⁸³ E.g. Clines, “Landlords and Tenants Eager for City Ruling on TV Security”; Lesley Oelsner, “Today’s Doormen Are Guards, Mixing Charm and Alertness,” *New York Times*, September 13, 1971; “Tenants Guarded By Gatehouse TV,” *New York Times*, September 6, 1964, sec. R; “Tenants Chided Over Burglaries,” *New York Times*, December 29, 1963.

⁸⁴ Daniel Levinson Wilk, “Tales from the Elevator and Other Stories of Modern Service in New York City,” *Enterprise & Society* 7, no. 4 (December 5, 2006): 695–704.

⁸⁵ Bob O’Connor, “Manual Elevators Holding Their Own,” *Baltimore Sun*, June 24, 1979, sec. K; Richard Severo, “Bronx Buildings Novel in Design,” *New York Times*, August 8, 1971, sec. R; Dee Wedemeyer, “For Co-Ops, Penny Pinching Is the Vogue,” *New York Times*, March 19, 1978, sec. R; Richard B. Lyman, “Savings May Help Robot Lifts Here,” *New York Herald Tribune*, July 2, 1953.

⁸⁶ Wilk, “Tales from the Elevator and Other Stories of Modern Service in New York City,” 695–704.

⁸⁷ Oelsner, “Today’s Doormen Are Guards”; “Tenants Guarded By Gatehouse TV”; “Tenants Chided Over Burglaries.”

⁸⁸ Michaels as quoted in Oelsner, “Today’s Doormen Are Guards,” 39.

⁸⁹ *Ibid*, 39.

doormen's labor was becoming increasingly specialized and centralized. With the installation of new technology, their work was concerned far less with assisting apartment residents than with the practices and routines of electronically assisted surveillance. It was a move that allowed landlords to employ fewer staff, thus echoing CCTV's effect in other industries mapped by Hughes.

Although some articles did express a sense of loss regarding the change in the doorman's mode of work, many asserted the need for such a shift as a force against urban crime.⁹⁰ One article even suggested that replacing traditional doormen with closed-circuit TV actually represented an improvement on their flesh-and-blood counterparts, citing its lack of sociality as an advantage. As Francis X. Clines contends in her article about New York City's impending regulations to encourage landlords of rent-controlled properties to install closed-circuit television systems: "Occasional complaints that the TV systems are sensors of 'Big Brother' are dismissed by the closed-circuit installers who point out that cameras are usually installed overhead, in the open, and that an inquisitive doorman can be more intrusive with tenants' guests than a softly humming camera."⁹¹ Thus, more than just adding an additional layer of domestic protection, CCTV's technical efficacy, protective powers, and lack of sociality promised to save landlords money, change the nature of service labor, and render the modern apartment safer and life within it less invasive than ever before.

Besides presenting CCTV as an active force in fortification of the home, news reports in the 1960s repeatedly established the absolute need for televisual home surveillance by describing the fears and the threats of urban living. By monitoring lobbies and elevators and allowing

⁹⁰ Oelsner, "Today's Doormen Are Guards," 39; "Tenants Guarded By Gatehouse TV"; Severo, "Bronx Buildings Novel in Design"; Wedemeyer, "For Co-Ops, Penny Pinching Is the Vogue"; "Tenants Chided Over Burglaries."

⁹¹ Clines, "Landlords and Tenants Eager for City Ruling on TV Security," 1.

tenants to screen their visitors, closed-circuit television was described as an important means “to ease...tenants’ fears”⁹² and “relieve their anxiety.”⁹³ Indeed, according to certain articles, tenants themselves actively sought to improve building security through the installation of TV cameras. In a *New York Times* report about the city’s new apartment security rules, Charles G. Bennett notes that: “In announcing the regulations, Mrs. Hortense W. Gabel, City Rent and Rehabilitation Administrator, said they had been drawn in response to the terror felt by tenants over crimes in apartment houses.”⁹⁴ According to Gabel: “I have received appeals from hundreds of New Yorkers who are concerned about their personal safety to assist in making their buildings crime proof.”⁹⁵ Through such reports, closed-circuit television security emerged as a natural and common sense response to the conditions of urban life, a necessary (and cost-effective) means of domestic fortification being demanded from the ground up.

In conjunction with such general discussions of tenant fear, certain articles also carried with them more specific gendered articulations of anxiety. Indeed, just as the suburban housewife was often envisioned as the chief operator of her closed-circuit television of tomorrow, the female apartment dweller was often pictured as the potential victim of urban crime.⁹⁶ She required increased layers of electronic protection to secure her home (and her body) from the threat of intrusion. Sometimes such gendered ideas were merely mentioned in passing.

⁹² Auerbach, “Apartment Dwellers’ Fears Spur Elaborate Security Precautions,” 4.

⁹³ “Closed Circuit TV In Manifold Uses,” 7.

⁹⁴ Bennett, “Landlords Will Get Rent Rise If They Install TV Monitors,” 1.

⁹⁵ Hortense Gabel as quoted in Bennett, “Landlords Will Get Rent Rise If They Install TV Monitors,” 35.

⁹⁶ None of the articles gave specific crime statistics broken down by gender. Nevertheless, an examination of the Uniform Crime Reporting statistics does show a persistence of reported rapes throughout the 1960s. For instance, 1960 shows 17,190 reported rapes in the United States (a number which grew to 37,170 by 1969). However, there is no information about whether or not such crimes took place in apartment buildings or were related to issues of building security. Thus, while gender-based violence was undoubtedly significant in 1960s America and it is very possible that women were targeted in their apartment buildings, the construction of women as the chief victims of apartment crime seems to be at least in part a gendered scare fantasy that emerged in popular discourse during this period. US Department of Justice, “Uniform Crime Reporting Statistics,” Uniform Crime Reporting Statistics, accessed July 17, 2018, <https://www.ucrdatatool.gov/Search/Crime/State/RunCrimeOneYearofData.cfm>.

For instance, when describing the installation of CCTV cameras in an apartment lobby, an industry expert suggested “knowing who is ringing the bell is a great security for women who live alone.”⁹⁷ And an article about a new patented closed-circuit television security system noted that with this device “a woman alone in the house could alarm the neighborhood immediately by pressing a button.”⁹⁸

However, in other moments the specific dangers experienced by the female apartment dweller were unpacked in greater depth. This occurred most explicitly in a 1967 article by Stuart Auerbach of the *Washington Post*, which traces the various ways in which tenants and landlords have worked to increase security, doing everything from installing CCTV cameras to merely ensuring residents lock their doors after a violent attack on a young woman (“a pretty Capitol Hill secretary”) in her home.⁹⁹ Although apartment living in general carries with it a myriad of threats, Auerbach contends it is women who most often live in fear of their urban homes, their fear based on the potential for bodily harm, rather than property theft. As such, it is the semi-public spaces of the apartment complex which seem to carry the greatest threat. According to Auerbach: “Women especially are afraid to ride in elevators or to do their wash in basement laundry rooms. One woman carries a lighted cigarette for protection when she rides an elevator. Single girls band together to do the wash as much for protection as company, and many husbands accompany their wives to the laundry room at night.”¹⁰⁰ According to Auerbach, it is the laundry room and the elevator, those spaces where a resident has the least control—where a stranger is most likely to penetrate, where encounters with one’s neighbors frequently occur, where that already paper thin fissure between home and street emerges at its finest—that women appear the

⁹⁷ Gavin, “Closed Circuit TV Big Hit with Tenants,” 4.

⁹⁸ Stacey V. Jones, “Audio-Viewer Screens Callers,” *New York Times*, December 6, 1969, 59.

⁹⁹ Auerbach, “Apartment Dwellers’ Fears Spur Elaborate Security Precautions,” 4.

¹⁰⁰ *Ibid.*, 1.

most threatened. Thus, although theft may be the most likely consequence of lax apartment security, the need to fortify one's home against bodily harm and protect women from assault emerges in popular discourse as one of the central causes for home security measures and CCTV surveillance.

The discourse surrounding domestic closed-circuit television and home security focused largely on its installation in (mostly white) residential luxury apartments and cited surveillance as a marker of the modern high-tech urban home. Nevertheless, it should be acknowledged that certain African Americans were intimately involved with the development of the closed-circuit television and home security. In 1966, Marie Van Brittan Brown and her husband Albert filed a patent (US3,482,037) for a CCTV home security system. Their invention would not only allow individuals to see and hear whoever was approaching their home. It would also let them unlock their door or sound an alarm, all from the comfort and safety of their bedroom.¹⁰¹ The Browns, who lived in Queens, envisioned their system being installed in private homes, apartment complexes, and businesses. They believed it could not only prevent crime but also help individuals in an emergency when one does not always have time to call the police.¹⁰² Despite the fact that this patent was cited in thirty subsequent inventions, Brown was barely mentioned in the many articles about home security and CCTV I have examined for this dissertation. At the time, a single *New York Times* report represented the only mainstream coverage of her invention

¹⁰¹ I first learned about Marie Van Brittan Brown and her patent during Simone Browne's talk "A Patent, A Whistleblower, A Ship, A Redaction: Archives of Surveillance," April 5, 2017, at Northwestern University. During her talk, Browne positioned Brown's patent as part of the long imbricated history of race and surveillance, a history in which surveillance not only gets wielded as a weapon towards black bodies, but where the contributions of African Americans get erased and ignored. For more, see: Simone Browne, *Dark Matters: On the Surveillance of Blackness* (Durham, NC: Duke University Press, 2015).

¹⁰² Jones, "Audio-Viewer Screens Callers"; Home security system utilizing television surveillance, issued August 1, 1966, <https://patents.google.com/patent/US3482037A/en>.

and her contributions are only being brought to light in recent years as part of an active effort to recuperate black history from its longstanding marginalization.¹⁰³

In addition, in the late 1960s and early 1970s, numerous articles in the black press reported on V.G. Systems, a black-owned South Chicago company that was awarded a contract to install a CCTV security system in the city's Cabrini-Green public housing project. Although the mainstream press did occasionally mention V.G. Systems (one article even described the impact of the company's presentation at Chicago's Black Expo on local children),¹⁰⁴ most discussions of the planned improvements to Cabrini-Green reported in the *Chicago Tribune* rarely discuss V.G. Systems at any length. Instead, their reports focused on the many dangers endemic to living in the "violence-ridden" housing project. They expressed the need for increased security with sensationalistic descriptions of the project as a place where doctors "refuse to make sick calls"¹⁰⁵ and "rival gangs of juveniles" exercise their influence.¹⁰⁶

This rhetorical choice characterized the media representation of Cabrini-Green throughout the project's fifty-year history—a history marked by poverty, racism, violence, public neglect, and sensationalistic reporting. According urban development and public housing scholars Lawrence Vale and David Fleming, journalists (along with housing developers and governmental officials) repeatedly discussed Cabrini-Green in language which dehumanized and

¹⁰³ For such efforts see: "Brown, Marie Van Brittan (1922–1999) | The Black Past: Remembered and Reclaimed," accessed February 17, 2018, <http://www.blackpast.org/aah/brown-marie-van-brittan-1922-1999>; "Marie Van Brittan Brown: Home Security Inventions," accessed February 17, 2018, <http://www.black-inventor.com/Marie-Van-Brittan-Brown.asp>; "Inventor Marie Van Brittan Brown Born," African American Registry, accessed February 17, 2018, <https://aaregistry.org/story/inventor-marie-van-brittan-brown-born/>.

¹⁰⁴ Donna Gill, "Children Are Awed by Success Story on Display at Black Expo," *Chicago Tribune*, November 13, 1970, 26.

¹⁰⁵ John O'Brien, "Security Plan Told for Cabrini-Green," *Chicago Tribune*, May 9, 1973, sec. B, 2.

¹⁰⁶ Robert Davis, "City to Tighten Cabrini Security," *Chicago Tribune*, June 27, 1974, sec. W, 9.

disempowered project tenants.¹⁰⁷ Taking an outsiders' perspective, they rarely spoke to residents and only occasionally reported on the forms of community being forged in the project—something which has been documented in oral histories about Cabrini-Green.¹⁰⁸ Instead, journalists focused almost exclusively on the crimes committed in the housing project, citing it as an almost mythic source of any violence and unrest occurring in Chicago.¹⁰⁹ Through such reporting, mainstream newspapers constructed the predominately black-occupied housing project as the epitome of urban failure. And as such, they echoed dominant discourses of the white spatial imaginary.

In contrast, African American newspapers and magazines ran more complex depictions of the project and the effort to increase its security. Correspondingly, V.G. Systems occupied a far more prominent position in these publications, and particularly in the *Chicago Defender* which ran the highest number of articles on the company.¹¹⁰ Like the *Tribune* reports, these articles still discussed the many problems occurring in Cabrini-Green and other public housing projects. Indeed, a 1970 *Jet* article about the pilot installation of V.G. Systems' security equipment at Cabrini-Green positions the company's potential positive impact on the everyday lives of Chicago public housing residents through one of the most dramatic descriptions of the violence

¹⁰⁷ David Fleming, "Subjects of the Inner City: Writing the People of Cabrini-Green," in *Towards A Rhetoric Of Everyday Life: New Directions In Research On Writing, Text, & Discours*, ed. P. Martin Nystrand and John Duffy, 1 edition (Madison, WI: University of Wisconsin Press, 2003), 207–45; Lawrence J. Vale, *Purging the Poorest: Public Housing and the Design Politics of Twice-Cleared Communities* (Chicago, IL: University of Chicago Press, 2013), 237-247.

¹⁰⁸ E.g. Audrey Petty, ed., *High Rise Stories: Voices from Chicago Public Housing* (San Francisco, CA: McSweeney's, 2013).

¹⁰⁹ Vale notes how newspaper articles reporting on robberies and attacks occurring downtown often suggested that perpetrators came from Cabrini-Green.

¹¹⁰ E.g. "Blacks Close \$28G Deal," *Chicago Defender*, October 13, 1969; "Black Business Of The Day: Area Electronics Firm Scores With Closed-Circuit TV Pact," *Chicago Defender*, October 27, 1969; "Firm Gets 265Gs Loan," *Chicago Defender*, July 2, 1970; Theophilus Green, "Youthful Businessmen Perfect Pioneering Security System," *Jet*, July 23, 1970; "Big Deal Closed by Electronics Firm," *Los Angeles Sentinel*, October 23, 1969, sec. A.

and horrific accidents at the project prior to the system's trial.¹¹¹ However, it does so by interviewing Cabrini-Green residents and public housing tenants associations. As such, these reports frame Cabrini-Green's residents as more than just the sources of violence. In these articles, they become both the victims of failed public policy initiatives and active agents in efforts to secure their homes.

Moreover, these black press reports also focus on the good being done by V.G. Systems, not only for residents of public housing projects but for the black community as a whole. Indeed, alongside discussing V.G.'s plans for Cabrini, articles described the ingenuity of the company's security inventions, its many corporate accomplishments, and the political commitments of its founders, particularly those of Vice President James Hutchinson. They regularly make a point of acknowledging that V.G. Systems is a black-owned business and include quotes from Cabrini-Green residents expressing pride in the fact that members of their community are responsible for the new high-tech security installation.¹¹²

These articles often interview Hutchinson, asking him about his company's mandate, his commitment to improving the experience of Chicago public housing through enhanced security, and the New Breed, an association of black capitalist youth committed to promoting black businesses and facilitating opportunities for young people.¹¹³ In responding to these questions,

¹¹¹ This article repeatedly discusses the rapes, murders, attacks, and accidents occurring throughout the project, describing the tactics of muggers and a tragic incident where a child was killed in an elevator shaft in detail. Green, "Youthful Businessmen Perfect Pioneering Security System," 20-24.

¹¹² E.g. Blacks Close \$28G Deal," 2; "Black Business Of The Day," 4; Green, "Youthful Businessmen Perfect Pioneering Security System," 20-24.

¹¹³ Black Capitalism contends that the way to fight white supremacy is to have black individuals control the structures of capital. Black capitalism advocated not for political revolution but for the support and cultivation of black enterprise which its proponents argued would lead to social and political change. This perspective has been critiqued by many scholars who contend that it misses the fundamentally racialized dimension to the history of capitalism. As Manning Marable argues: "America's 'democratic' government and 'free enterprise' system are structured deliberately and specifically to maximize Black oppression. Capitalist development has occurred not in spite of the exclusion of Blacks, but because of the brutal exploitation of Blacks as workers and consumers. Blacks have never been equal partners in the American Social Contract, because the system exists not to develop, but to

Hutchinson regularly brings his various commitments together, constructing V.G. Systems as not merely an economic enterprise but a political one. As he contends in “Black Business of the Day: Area Electronics Firm Scores With Closed-Circuit TV Pact,” a 1969 *Chicago Defender* profile on V.G. Systems:

The V. G. Systems enterprise can benefit the black community in several ways, such as producing more jobs as business expands and uplifting the level of aspiration of young blacks. We’ll need black youths to train in electronics as installers and maintainers and secretaries, accountants and managers. They’ll find it easy to identify with us and hopefully, they will be motivated and inspired to seek a career in this field.¹¹⁴

Thus, for Hutchinson, the potential of a black-owned electronic security company represented more than a business venture. It embodied a means of elevating the black community through skills training, corporate investment, and economic opportunity, all while protecting the largely African American residents of Chicago’s public housing projects.

Indeed, Hutchinson and the New Breed became news stories in their own right, even outside the corporate actions of V.G. Systems. During the late 1960s and early 1970s, there were numerous reports on Hutchinson’s actions and accomplishments, from his endorsement of political candidates to his involvement with youth education programs to his receipt of the Jaycee’s “10 outstanding men” award in 1969.¹¹⁵ Throughout all of his success, Hutchinson continuously suggests the centrality of business to his political vision. As he contends in a 1968 *Defender* article about the New Breed: “If this country had promoted the Negro businessman the

underdevelop Black people” (2). For more see: Manning Marable, *How Capitalism Underdeveloped Black America: Problems in Race, Political Economy, and Society*, Updated ed., South End Press Classics, v. 4 (Cambridge, MA: South End Press, 2000).

¹¹⁴ Jim Hutchison as quoted in “Black Business Of The Day: Area Electronics Firm Scores With Closed-Circuit TV Pact,” *Chicago Defender*, October 27, 1969, 4.

¹¹⁵ E.g. Teresa Fambro Brooks, “Fashion Royalties Entertian Friends At Thank-You Dinner,” *Chicago Defender*, November 15, 1969; Faith C. Christmas, “New Breed Group Backs Woods For Second Ward Aldermancy,” *Chicago Defender*, January 11, 1969; Pierre Guilmant, “Dr. Odom Sparks Rally For Metcalfe Campaign,” *Chicago Defender*, January 15, 1970; “Southside Jaycees Name ‘10 Outstanding Men,’” *Chicago Defender*, January 22, 1970; “Jaycee Unit Names Slain Panther ‘Outstanding,’” *Jet*, February 12, 1970.

way it has the Negro athlete, we'd have a lot more of them... Before Jackie Robinson, black youth didn't think about sports, but after he made it, everybody wanted to play professional sports. I believe the same must be done for the black businessman."¹¹⁶ For him, being an entrepreneur, entering the home security business, and working with other young black men and women was essential not merely for improving the living conditions in the Chicago projects, but for helping the black community at large.

Despite Hutchinson's best intentions however, the installation of surveillance equipment in Cabrini-Green was not without any troubling political consequences. Although the articles reporting on the security installation frame the pilot project as a benefit for residents, suggesting ways in which the new system could help tenants in moments of emergency, in reality it operated by placing residents under surveillance. It aimed not to protect residents from the threatening world outside the project, but from one another. And as such, it constructed the project itself as the site of danger in need of enhanced disciplinary governance. The decision to install security cameras functions as part of a greater design politics that strove to eliminate the problems at the project by controlling the building's public spaces.¹¹⁷ Throughout its history, the Chicago Housing Authority strove to manage any outbreak of violence or vandalism by targeted architectural decisions. In their initial design, numbers of the high-rises were outfitted with outdoor ramps that ran along the side of every floor, eliminating the need for indoor corridors. When these ramps proved dangerous (with residents getting hit from objects falling from one ramp to another), they were fenced off, rendering the building increasingly carceral.¹¹⁸ In response to assaults and vandalism, areas of the courtyard were walled off and the greenery,

¹¹⁶ "New Breed Spurring Black Action," *Chicago Defender*, November 2, 1968, 1-2.

¹¹⁷ In *Purging the Poorest*, Vale argues that architecture, urban planning, and building maintenance form a "design politics" which is central to the history and political contours of public housing and urban renewal, 30-33.

¹¹⁸ *Ibid.*, 227-228.

which had initially been a central part of the project's appeal, was replaced by concrete, effectively rendering the buildings' surrounding park inhospitable and restricting the possibility of public gathering.¹¹⁹

In addition to this spatial control, project residents were regularly subjected to modes of surveillance by the state—a condition experienced not just by those living in public housing but by black Americans as a whole.¹²⁰ In the decades prior to VG Systems' installation, project residents experienced many levels of surveillance. They endured tenant screenings, police patrols, and income reporting.¹²¹ Moreover, less than a year after the pilot project, Cabrini-Green residents were subjected to apartment searches and increased monitoring after two police officers were killed by a sniper from one of the Cabrini buildings fenced off ramps. Thus, even though VG Systems securing of the Cabrini-Green contract was construed as a positive development in the black press and a win for black capitalism, the racial and spatial politics of surveillance at Cabrini-Green are not clear cut or straightforward. Racialized ideologies of space and their connection to discourses of security and practices of surveillance are not overturned even when African Americans are involved in the invention and installation of surveillance systems. Therefore, as we acknowledge the important contributions of black inventors and entrepreneurs to the history of closed-circuit television, we must also understand the complex negotiations and racial politics wrapped up in any surveillance system—especially when it is deployed towards those individuals systemically marginalized by the structures and systems of white supremacy.

¹¹⁹ Vale, *Purging the Poorest*, 233.

¹²⁰ Browne argues that the surveillance of black life is essential to understand blackness itself. She contends: "An understanding of the ontological conditions of blackness is integral to developing a general theory of surveillance and, in particular, racializing surveillance—when enactments of surveillance reify boundaries along racial lines, thereby reifying race, and where the outcome of this is often discriminatory and violent treatment." Browne, *Dark Matters*, 8.

¹²¹ Vale, *Purging the Poorest*, 193-253.

Despite the fact that CCTV was typically conceived as a security device, the installation of closed-circuit television in American domestic life brought with it other conceptions of its potential use. Throughout the 1950s and 1960s, there were also numerous reports that suggested some unforeseen pleasures that could come from the installation of CCTV. While rarely conceived as closed-circuit television's primary domestic function, CCTV cameras were also envisioned as a source of entertainment. As early as 1954, Leiber's *New York Herald Tribune* report suggests that regardless of RCA's claims to utility, CCTV was bound to be deployed in the production of amateur television programs. With a slight joke about the inevitable poor quality of people's homemade TV shows, she warns: "If you're the conversational type who hates being shackled to your neighbor's TV set all evening, wait till you see the latest wrinkle in video appliances. It's a midget TV camera for home use which, at a cost of around \$1,000, will make it terrifyingly possible for every neighbor in the United States to become a television producer on his own cellar-to-attic network."¹²²

Moreover "The Closed Circuit," a 1958 episode of *The Adventures of Ozzie and Harriet* (a popular domestic sitcom that depicted a fictionalized version of the real-life celebrities Ozzie and Harriet Nelson and their two sons David and Ricky) centers on the pleasures and potential conflicts of a closed-circuit television camera.¹²³ In this episode, Ricky's friend Joey Radolph (whose parents Clara and Joe are close with Harriet and Ozzie) builds a CCTV camera. This camera is deployed in a variety of different comedic situations: becoming a site of entertainment, a medium for creativity, a source of domestic deception, and a means of surreptitious surveillance. It is used to first trick David and then Ozzie into believing are they being spoken

¹²² Leiber, "Homemade TV," 17.

¹²³ Ozzie Nelson, "The Closed Circuit," *The Adventures of Ozzie and Harriet*, March 26, 1958, <https://www.youtube.com/watch?v=EPIsenPhlfQ>.

about on broadcast TV (a gag which revolves around the TV announcer comparing several members of the Nelson family to a picture of a gorilla) and then deployed by Ozzie and Joe to play a trick on their wives who have been neglecting their domestic duties by spending their evenings at a women's club.



Figure 4.2 CCTV camera in “The Closed Circuit,” *The Adventures of Ozzie and Harriet*, 1958, Screen Grab

In the most prolonged CCTV sequence in the episode, Ozzie, Joe, and their bachelor friend Fred work to make Harriet and Clara believe their husbands are out at a nightclub flirting with other women. Aided by David, Ricky, and Joey, they set up the Nelson's basement to resemble “Club Zsa Zsa” and ensure that Harriet and Clara turn on the TV when they arrive home. Once installed in front of the television set, the women witness Ozzie and Joe sitting at what looks like

a dinner table being interviewed by Fred (taking the role of TV host) who announces that they have won a dance with two of the club's showgirls. Incensed, Harriet and Clara watch as Ozzie and Joe pretend to dance with these imaginary showgirls. They use the edges of the camera's frame to make it seem like their dancing partners are paying them scandalous attention; Ricky, his hand in a long white glove, touches Joe's face and throws a grass skirt at Ozzie.

Before Ozzie and Joe can give their wives an explanation however, Clara and Harriet turn off the TV set and storm off to the real Club Zsa Zsa to find their straying husbands. Ozzie and Joe then pursue their wives to the club but are thwarted in their attempt to confess because when they arrive back home the TV equipment has been taken away. Although Harriet believes Ozzie, Clara is far more skeptical and in a rage returns home with Joe. After Ozzie and Harriet's reconciliation, the Nelsons turn on the TV set one last time, but instead of showing a commercial broadcast or even their own basement, the screen is now transmitting a scene of domestic discontent from the Radolphs' living room. While Ozzie enthusiastically watches Clara yell and hurl objects across the room at Joe, remarking that, "This is the best show I've seen in weeks," Harriet calls Clara, informing her that she is on TV. Once Joe and Clara realize their televisual exposure, they turn to the camera, smile, wave at the Nelsons, and share a brief kiss. In response, the Nelsons smile, wave back at the Radolphs, and then, in a gesture of self-reflexivity, look up at the unseen television camera in their own living room and wave at us: the TV audience.¹²⁴

¹²⁴ This kind of reflexive collapsing was common to 1950s domestic sitcoms, especially those like *Ozzie and Harriet* that follow the fictionalized lives of celebrities. For me see: Spigel, *Make Room for TV*, 136-180.



Figure 4.3 Joe and Clara on “TV,” “The Closed Circuit,” *The Adventures of Ozzie and Harriet*, 1958, Screen Grab

In this episode, the television set, through the installation of home closed-circuit TV equipment, becomes a site for Ricky and Joey’s creative ventures, benign familial jests, somewhat more pointed—though apparently comedic—modes of gendered domestic revenge, self-reflexivity, voyeuristic pleasure, and uncanny exposure. Even though companies like RCA worked to construct closed-circuit television as the industrial alternative to broadcast TV, the possibility that such systems could be used, not for security or domestic labor, but for the pleasures and entertainments of the family still emerged in the popular press. It represented a

mode of discourse which would of course become prevalent with the release of home video cameras.¹²⁵

Despite the fact that the possibility of making ones' own television programs was not an option for those apartment dwellers whose CCTV systems were installed and managed by their landlords, reporters discussing the presence of closed-circuit television in such buildings still retained a sense of their potential power to entertain. Certain articles mentioned this dimension of CCTV in passing. Sometimes they spoke generally about the possibility of appearing on (closed-circuit) TV, beginning their reports with statements like: "Have you made your TV debut yet?"¹²⁶ or "It's getting so these days you don't know when you're on television or not."¹²⁷ In other instances, articles offered more specific descriptions of people's reactions to CCTV. They noted that: "Some of the children who used the elevator yesterday made faces at the camera and shouted into the microphone on the car ceiling."¹²⁸ In these reports, the desire to appear on television and the potential performative instincts it might provoke emerged as unintended consequences of closed-circuit television surveillance. Here CCTV operated not by disciplining its subjects, but by encouraging their participation in directorial and theatrical recreations.

¹²⁵ *The Adventures of Ozzie and Harriet* was not the only fifties TV show to play surveillance for comedic effect. In the later seasons of *The George Burns and Gracie Allen Show*, George's asides to the audience are supplemented by his use of a 'magic television' that lets him see the events occurring in homes and business of his neighbors. For instance, in the 1956 episode "Von Zell's Raises," an episode during which Gracie decides George's employee Harry Von Zell should get married and convinces George to give Harry a raise (despite the fact that Harry, unbeknownst to either George or Gracie, has no intention of marrying), George uses his television set to see into his neighbors' living room. He watches them explain the situation, celebrate the deception, and insult his intelligence. After he figures out what is going on, George calls his neighbors on the phone, responds to their insults, and watches as they disconcertedly try to appease him and figure out how he seems to know exactly what they are doing. Here the magic TV set's powers of surveillance serve to enhance George's audience asides. They give him a heightened degree of omniscience that aligns him with the viewer as he responds to and strives to counteract Gracie's madcap schemes. Rod Amateau, "Von Zell's Raises," November 26, 1956, <https://www.youtube.com/watch?v=dfnQN6xo5ZY>.

¹²⁶ Elizabeth L. Sullivan, "TV's a Burglar Trap--The Unseen Eye Can Watch Us!," *Boston Globe*, May 8, 1960, sec. C, 16.

¹²⁷ Gavin, "Closed Circuit TV Big Hit with Tenants," 4.

¹²⁸ "Tenants' Video Guard Goes on Duty," 20.

Conversely, the article that dwells most explicitly on the possibilities of CCTV surveillance entertainment focuses not on the experience of being on TV but on the voyeuristic pleasures of watching a closed-circuit television transmission. In his 1968 article, “One Way to Beat Summer Repeats,” Hal Humphrey of the *Baltimore Sun* suggests that for those individuals living in a building with a closed-circuit television system that allows residents to view guests in their apartment lobby, CCTV offers an exciting terrain of televisual entertainment. Although he notes that this system is designed for security:

The real sport...is to tune in and watch and listen to the neighbors' friends (there's a phone on the door too) who come to the door...You see some real domestic drama, better than 'Peyton Place'... A husband forgot his key, but his wife wanted to know, over the phone, where he'd been so late. They got into a good argument before she rang the buzzer. I hadn't seen anything on TV as good as this since Merv Griffin had on writer Norman Mailer.¹²⁹

In this report, closed-circuit television emerges not merely as a means of protecting the home against possible intrusion but as a site of voyeuristic pleasure. By tuning one's TV set to the lobby channel, the apartment dweller is given access to the mini domestic dramas occurring in their own building. As such, CCTV becomes the latest tool in the pleasures of eavesdropping provided by the urban apartment. Following up on the possibilities afforded by poorly insulated walls, chance encounters in the hallway or laundry room, and the imagined science fiction potential of emerging media, closed-circuit television offered a technological amplification of the kind of overlapping, semi-public existence essential to the conditions and lived experience of the urban apartment.¹³⁰

¹²⁹ Hal Humphrey, “One Way to Beat Summer Repeats,” *Baltimore Sun*, July 7, 1968, sec. TW, 6.

¹³⁰ The connection between apartment life and the possibilities of eavesdropping have a long history. Not only does Wojcik mention eavesdropping as one of the central features of the apartment plot, but the pleasures and pains of overhearing one's neighbors has been a subject of note since the 19th century. Indeed, concerns about the regulation of building materials and anti-noise ordinances have been traced at length by Emily Thompson in her 2004 publication *The Soundscape of Modernity: Architectural Acoustics and the Culture of Listening in America, 1900-1933* (Cambridge, MA: MIT Press). Moreover, the fantasy of actively listening in on the private conversations

Taken together, the discourses which surrounded the installation of closed-circuit television in the urban apartment functioned to express a complex vision of protective domesticity. In many ways the discussion of CCTV security embodied the tendencies of the white spatial imaginary. It wielded surveillance technology as a means of enforcing the boundaries of the private home. Installed predominantly in luxury apartments occupied mostly by white residents, CCTV emphasized the difference of these dwellings from the housing projects of the urban poor. It constructed a line of defense for the protection of private property. When surveillance systems were installed in public housing projects, like they were in Cabrini-Green, it was the residents themselves who were placed under surveillance. Rather than protect the housing project from an unnamed external threat, CCTV claimed to protect residents—marked as dangerous and criminal by their reliance on public housing—from one another.

Indeed, when black Americans were involved in the closed-circuit television security industry, this racialized politics of surveillance did not disappear. As inventors or operators, their contributions to the field were often minimized if not outright ignored by popular rhetoric at the time. Moreover, as is evident in VG Systems' Cabrini-Green contract, even when a company is owned by black citizens and operated with an agenda of cultural uplift, surveillance is not free from classed and racialized regimes of power. Though aiming to help the African American community, VG Systems' surveillance practices at Cabrini-Green worked to discipline and police project residents on behalf of the state. And as such, their operations, like those in luxury apartments, were inscribed with racializations of space and systems of white supremacy so integral to American social and political life.

occurring in other apartments—with all its attenuating pleasures and dangers—became the subject of science fiction texts, most notably Don Cheever's 1947 short story "The Enormous Radio," in which a housewife becomes obsessed with her new radio that broadcasts the sounds of her neighbors' domestic dramas instead of commercial entertainment.

That being said, the discourse surrounding closed-circuit television surveillance still conveyed a vision of home that assumed some of the public and diverse modes of dwelling essential to apartment domesticity. Indeed, the very fears and fortifications demanded by the installation of closed-circuit television could be understood as a reaction against the kinds of chance encounters and heterogeneity essential to the urban apartment. From the safety of their own private units, closed-circuit television surveillance brought more than protection. With access to their building's CCTV systems, residents were given a new window on the private lives of their neighbors, electronically extending the possibilities of voyeurism and eavesdropping already established as a condition of apartment dwelling, a condition capable of producing both pleasure and fear, sometimes simultaneously.

Urban Crisis, Interactive Cable, and Smart Surveillance

By the end of the 1960s, closed-circuit television surveillance had become an almost standard feature of the modern, secure, high-tech apartment building. Throughout the 1970s, news reports ceased to be focused on CCTV specifically, but mentioned the technology in more general discussions about the profound need for electronic surveillance in the face of a growing crime wave. Indeed, during this period, closed-circuit television was joined by a series of new technologies deployed in the electronic protection of the home, one of the most notable being cable. These electronic tools banded together, emerging as significant lines of defense against the threats of an era defined by an apparent urban crisis.

According to Douglas Massey and Nancy Denton, the 1970s marked an intensification of income inequality in the United States that affected the lives of black Americans

disproportionately.¹³¹ The history of racial segregation and black poverty, stemming from those long-established economic structures, political institutions, and social policies that had systematically inhibited black Americans from generating wealth since confederacy, coupled with the economic conditions of the postindustrial city in the emergence of what has been called the American “underclass.”¹³² After the oil crisis of 1973 which impacted the American economy as a whole and caused a severe economic downturn in the Rustbelt cities of the North and the Midwest, African Americans long-barred from the structures of capital suffered heightened levels of poverty.¹³³ Correspondingly, the neighborhoods which they occupied deteriorated, businesses closed, tax revenue declined, school systems lost money, and public investment failed. Thus, despite the gains made by the Civil Rights movement, black Americans in the 1970s, and the spaces of the city they occupied, remained disproportionately affected by poverty, constructing an impression of an urban crisis in which class and race were deeply imbricated. These conditions of extreme racialized poverty and urban degradation were generally perceived not as the results of long histories of systemic oppression but as the personal failings of African

¹³¹ Massey and Denton, *American Apartheid*.

¹³² Witnessing this new crisis of (black) urban poverty in the 1970s, scholars have analyzed its relationship with history and structures of white supremacy especially as they pertain to the intersections of race, space, and the discourse of crisis. Thomas Sugrue argues that the roots of this urban crisis actually emerged much earlier than the 1970s. Despite its reputation for vast economic prosperity, the postwar era did not result in universal wealth. In the 1950s, American manufacturing was already beginning to move out of Northern city-centers and relocating to cheaper labor markets. This made it especially difficult for black workers—many of whom had left the South looking for opportunities in the supposedly desegregated North—to find the same degree of consistent employment as whites, in the face of multiple levels of discrimination in the labor market. Moreover, the persistence of redlining practices (whether official or unofficial) continued to exacerbate the racial segregation of urban and suburban space. Even though such policies were officially overturned through work of the Civil Rights movement and eventually the passing of the Fair Housing Act of 1968, these new regulations were often poorly enforced, so that racial minorities remained largely in the urban neighborhoods and underinvested spaces of the inner city. See: Thomas J. Sugrue, *The Origins of the Urban Crisis: Race and Inequality in Postwar Detroit* (Princeton, NJ: Princeton University Press, 2014), 3-14.

¹³³ This poverty only increased through the 1970s. Although the faltering American economy caused layoffs amongst whites, black workers bared the brunt of it. As Robin Kelley remarks: “While the number of unemployed white workers declined by 562,000 between 1975 and 1980, the number of black unemployed *increased* by 200,000 during this period.” Robin D. G. Kelley, *Into the Fire: African Americans Since 1970* (Oxford, UK: Oxford University Press, 1996), 46.

Americans. According to racist popular rhetoric, it was black people's own choices that had led them and their neighborhoods into the state of crisis in which they were living.¹³⁴ Violence, crime, gangs, and drugs were constructed as synonymous with the inner city and seen by large swaths of white America not just as conditions of poverty, but as endemic conditions of blackness.

As such, the 1970s witnessed a kind of moral panic around the problems of the “ghetto” and the threat of an (largely black) urban underclass. This moral panic was in part linked to the representation of racialized violence and rising crime rates in the mass media. Indeed, as a whole, the 1970s witnessed a rise in crime reporting in the United States; news reports on crimes, particularly violent crimes, increased, especially when offenders were black and victims white.¹³⁵ In *Policing the Crisis: Mugging, the State, and Law and Order*, a hallmark study of the moral panic surrounding ‘mugging’ in 1970s Britain, Stuart Hall, Chas Critcher, Tony Jefferson, John Clarke, and Brian Roberts argue that: “Crime...is ‘news’ because its treatment evokes threats to, but also reaffirms, the consensual morality of the society: a modern morality play takes place before us in which the ‘devil’ is both symbolically and physically cast out from the society by its guardians—the police and the judiciary.”¹³⁶ The routines and norms of reporting cast violent crime as an unusual spectacle, relied on institutions like the police or the law as central sources for their narratives, and rarely delved into the systemic forms of oppression which might have contributed to the so-called rise in violent crime.¹³⁷ News discourse thus functioned hegemonically, framing the ‘mugging’ crisis as a direct assault on British society. It

¹³⁴ Lipsitz, *How Racism Takes Place*, 25-50.

¹³⁵ Valerie J. Callanan and Jared S. Rosenberger, “Cultivation Theory: Gerbner, Fear, Crime, and Cops,” in *The Routledge Companion to Media and Race*, ed. Christopher P. Campbell (New York, NY: Routledge, 2016), 32.

¹³⁶ Stuart Hall et al., *Policing the Crisis: Mugging, the State, and Law and Order*, 1978 edition (London, UK: Palgrave, 1978), 66.

¹³⁷ It should be noted that Hall et al. contend that there actually is not discernible evidence that crime rates actually increased during the 1970s.

joined police practice and judicial policy in constructing ‘mugging’ as not merely a class problem, but also as a race problem, repeatedly presenting it as a conflict between young black, typically male (working class) perpetrators and (working class) white victims.

In a historical conjuncture marked by growing economic uncertainty, eroding colonial power, and an influx of black and Asian immigration, Hall et al. argue that mugging emerged in popular discourse and social policy as “an index of the disintegration of the social order, as a sign that the ‘British way of life’ is coming apart at the seams.”¹³⁸ As such, it was wielded as an ideological tool, an expression and enforcement of the profound fracturing of the working class along racial lines that aided and abetted the structures and hegemony of capitalism.¹³⁹ Although the context of 1970s Britain cannot and should not be grafted onto 1970s America, in both locations, crime emerged, at least in the mass media, as a racially marked crisis, a threat to the social order that seemed rooted in the spaces of the inner city and the actions of racial minorities. As such, the rise of a vast array of home security technologies, their installation in the high-tech home, or at least the rise of their prominence in popular discourse must be understood as a product of the United States in this particular historical conjuncture in which race, urban poverty, and the popularity of televisual modes of defensive surveillance cannot be disarticulated.

In the 1970s, popular discussions of domestic CCTV appeared most commonly within articles remarking on the growing concern with public safety and the corresponding increase in

¹³⁸ Stuart Hall et al., *Policing the Crisis*, vii-viii.

¹³⁹ It is this final point that marks the crux of Hall et al.’s project. *Policing the Crisis*, beyond being an important example of the kind of media discourse analysis that would be among a model for cultural and media studies scholars for years to come, also marked a key shift in the cultural studies agenda as a whole. It is at this moment when race becomes most clearly part of its project. Class, though forever present, can no longer be seen as the primary subject of critical and political attention, for it is through race that class is structured and experienced, and thus it is to the intersection of class and race that political and intellectual praxis must begin to turn. For, as Hall et al. conclude: “Race is the modality in which class is lived. It is also the medium in which class relations are experienced. This does not immediately heal any breaches or bridge any chasms. But it has consequences for the *whole class*, whose relation to their conditions of existence is now systematically transformed by race.” Ibid, 393.

the home security industry. Headlines like “How Safe Are Apartments”¹⁴⁰ and “Buzzers and Phones And TV, Too, Add To Building Security”¹⁴¹ peppered the *Chicago Tribune*, *Washington Post*, and *New York Times*, commenting on what they perceived as the increasing demand for new layers of domestic protection.¹⁴² In his 1971 article about the growing demand for home security, Daniel Street of the *Washington Post* argued that the growth in the home security industry represented a universal desire for safety that lay at the heart of most urban dwellers, regardless of class. According to Street: “Security is a serious concern in the Washington metropolitan area. An informal...survey of apartment residents living in the area indicated a general dissatisfaction with the security provided in their projects.”¹⁴³ Here closed-circuit television emerged not as a subject of sustained analytical concern, but as one feature deployed in the increased demand for home protection. It appeared in both luxury and midrange buildings, with high-end projects arming professional guards with networked televisual monitoring and midrange complexes leaving this labor in the hands (or rather the eyes) of their tenants. For Street, and the security experts he interviews, the need for new safety precautions (or at least the perceived need) arose largely in response to a “growing wave of juvenile crime.” Thus he affirms the increasingly popular notion that urban life in the 1970s had become more dangerous, necessitating new forms of home surveillance and security.

¹⁴⁰ Street, “How Safe Are Apartments.”

¹⁴¹ Mel Mandell, “Buzzers and Phones And TV, Too, Add To Building Security,” *New York Times*, April 13, 1975.

¹⁴² The phenomenon was so widespread that real estate listings often made a point of highlighting the existence of a home security system in new condo and luxury apartment developments, with headlines like “Rossmoor Chateau Features ‘Lobbyvision’” and “Privacy and Security Stressed at Project” that emphasized closed-circuit television security, even when the actual descriptions of the properties said very little about the features of these security systems; “Rossmoor Chateau Features ‘Lobbyvision,’” *Los Angeles Times*, June 14, 1975, sec. C; “Privacy and Security Stressed at Project,” *Los Angeles Times*, April 9, 1983, sec. I.

¹⁴³ Street, “How Safe Are Apartments,” 2.

In a similar article, Patricia Leeds of the *Chicago Tribune* argues that security had become a major selling point in the upscale apartment market.¹⁴⁴ CCTV installations, along with private guards, intercoms, and alarm systems were now becoming important parts of urban apartment life. According to Leeds, they represented the latest iteration of an age-old and natural desire to protect one's home. This conviction is most explicitly invoked by Lt. James O'Neil, a Chicago police officer interviewed in Leeds' report. For him, this need for security stems from a deep rooted (colonial) impulse that has been central to the United States since its founding: "Our pioneer fathers built forts for their families to keep the Indians out, and, before that, our medieval ancestors built fortresses to keep the enemy at bay. We are reverting to this—we are building our own modern fortresses to protect ourselves from invaders."¹⁴⁵ Through such language, O'Neil explicitly ties the contemporary security apartment to the history of American white supremacy. He articulates an explicit call to the "hostile privatism and defensive localism" essential to the white spatial imaginary.¹⁴⁶ The urban apartment, by virtue of its physical location and imagined occupants, becomes a colonial fortress, a building designed explicitly to defend against enemies who are, in this instance, presumably members of the racialized urban poor so long equated with crime and urban crisis.

In addition to being mentioned as one security force among an array of other systems and practices in articles on the fortification of apartments in urban space, the application of closed-circuit television to support home safety also appeared with renewed force in the suburbs. The suburban equivalent of the high-security, luxury, urban apartment complex was the gated community or exclusive subdivision. These spaces, which in their suburban deployment reflect

¹⁴⁴ Patricia Leeds, "Pool, Sauna, Security, Guard--Necessities for Today's Fortress," *Chicago Tribune*, April 13, 1973, 41.

¹⁴⁵ James O'Neil as quotes in Leeds, "Pool, Sauna, Security, Guard," 41.

¹⁴⁶ Lipsitz, *How Racism Takes Place*, 28.

the values of the white spatial imaginary even more forcefully than their urban counterparts, often saw CCTV as essential to creating a suburban space so safe that residents would cease to worry about their persons or their property. Like the discourse that surrounded the high-security apartment, the need for these protective subdivisions was described in the news reports which surrounded their proliferation. The *Wall Street Journal's* Noel Epstein, in a move that seems to anticipate the critiques of postmodern urbanism expressed by Mike Davis in the 1990s,¹⁴⁷ contends: “The suburban ‘fortress’ is an extreme local reaction to deep fears generated by a wave of lawlessness—but it may well be the start of a nationwide push to sell a frightened populace on a new mode of ‘maximum security’ living.”¹⁴⁸ The construction of private subdivisions saturated with electronic surveillance and fortified by guards, also expressed a desire to reclaim an imagined past ideal of a secure neighborhood “where unlocked doors don’t perturb families.”¹⁴⁹ These articles, though framing the need for such secure subdivisions as a response to crime, repeatedly insist that with such precautions residents can finely relax. In their fortified homes, residents can now enjoy a place where they can feel “safe and yet have a ground-level home and a patio overlooking the lake.”

Indeed, in these subdivisions, the labor of security was removed from the resident. Unlike the closed-circuit television systems of both the futuristic suburban dream house and apartment complexes of the 1960s and 1970s which often required residents take responsibility for their

¹⁴⁷ In *City of Quartz: Excavating the Future in Los Angeles*, Mike Davis criticizes the privatization and control of public space that defined LA in the early 1990s. According to Davis, postmodern LA, with its deep, racialized divides between the rich and the poor, expresses a carceral tendency that exerts control over the urban environment. Like Epstein, he evokes the metaphor of the fortress, describing the political and economic imbrications of development, surveillance, policing, and design: “We live in ‘fortress cities’ brutally divided between ‘fortified cells’ of affluent society and ‘places of terror’ where the police battle the criminalized poor.... ‘Security’ becomes a positional good defined by income access to private ‘protective services’ and membership in some hardened residential enclave or restricted suburb.” Mike Davis, *City of Quartz: Excavating the Future in Los Angeles*, New ed. (New York, NY: Verso, 2006), 224.

¹⁴⁸ Noel Epstein, “Housing Development Near the Capital Aims to Emphasize Security,” *Wall Street Journal*, June 19, 1969, 1.

¹⁴⁹ George Vecsey, “Where Unlocked Doors Don’t Perturb Families,” *New York Times*, February 14, 1971, 76.

CCTV system and decide who should or should not be granted access to their home, in such subdivisions closed-circuit television was utilized exclusively by guards. It was their responsibility to screen prospective guests, monitor the parameters of the community, and on occasion, report the misbehavior of local children to their parents. Through such measures, homeowners could feel safe without the burden of performing such protective tasks themselves. As such, they were not only relieved from the need to use security equipment, but even from enacting those more perfunctory defensive tasks like shutting windows or locking doors.¹⁵⁰ By moving out of the city, hiring professional guards, providing them with the latest electronic surveillance equipment, and designing a semi-private neighborhood exclusively based on the need for security, these subdivisions removed the responsibility of protection from the hands of the family and reassigned it to those of a private company. In so doing, they created a televisual division of labor. Guards, deploying the medium for surveillance, engaged with television's exclusively utilitarian dimensions, while residents enjoyed its more traditional function as an entertainment medium.

Alongside the persistent presence of closed-circuit television in the high-security apartments and the fortress-like subdivisions of the 1970s, this era also brought with it another mode of using television for protective domestic surveillance. In the mid-1970s, cable television entered the home security field. As I discussed in the previous chapter, the 1970s represented a surge of interest in cable as policy makers, industry professionals, and cultural critics expressed a deep faith in its capacity to serve as a powerful communications medium capable of revolutionizing everyday American life. Although Warner Amex's QUBE represented the most extensive and elaborate interactive cable system in the American market, it was not the only

¹⁵⁰ Epstein, "Housing Development Near the Capital Aims to Emphasize Security"; Vecsey, "Where Unlocked Doors Don't Perturb Families."

attempt at two-way cable. Indeed, seven years before QUBE launched in Columbus another franchise, operated by Texas-based TOCOM (short for Total Communications) secured a patent for their own of interactive cable system based largely on home security.¹⁵¹ Unlike QUBE, the TOCOM system did not create a series of two-way entertainment programs, cultivating audience responses through tactile interaction, but instead, integrated cable's two-way communication into a complex automatic security system. It connected various alarms and detectors to a cable box attached to the home TV set and linked with a headend computer located at a central service plant. Through this system, television programming would be transmitted to the cable-enhanced TV console downstream. At the same time, information from the sensors and alarms would be electronically monitored, sending data on the status of the home back to TOCOM's central computer and alerting the requisite authorities if a sensor had been tripped.

In 1973, when the Federal Housing and Urban Development Department approved the construction of thirteen New Town developments throughout the United States, TOCOM entered the home security market in full force.¹⁵² The government, responding to critiques leveled at the failures of urban planning of the postwar era, sought to solve the problems that had arisen with the rapid growth of the suburbs and the corresponding urban crisis, dedicating federal money to support the construction of new consciously designed communities. These developments, funded largely through a combination of private and public investment, worked to reimagine and remake the suburbs, creating harmonious communities that aimed to provide an “alternative to sprawl—

¹⁵¹ John Campbell, *How CATV Came To Texas “LBJ Country”: 3 Channels to 55 Plus* (North Charleston, SC: BookSurge, 2005), 123-139.

¹⁵² It should be noted that in 1972, TOCOM did launch their two-way cable system on a trial basis in their home town of Irving, TX. However, it was not until 1973 that the full extent of their cable security system received national attention.

aesthetically, socially, and ecologically.”¹⁵³ They strove to be self-sufficient and profitable, and bring people from different economic, racial, and cultural backgrounds together in new, almost utopian configurations of living. One of these new government-supported housing developments was The Woodlands, a community outside of Houston, Texas, spearheaded by developer and oil tycoon, George Mitchell. Mitchell sought to distinguish The Woodlands from other Houston developments. He hoped it would present a vision of small town life that would seamlessly integrate with and protect the natural environment (its design emphasizing the largely un-manicured woods that surrounded the development), while providing residents with a harmonious and diverse small town experience.¹⁵⁴

One of the features that The Woodlands brought to its new development was two-way cable. Every home that was built in the community was wired with a TOCOM cable TV system hooked up to a smoke detector, two police alarms, two medical alert buttons, and of course, a TV outlet. More advanced systems also offered automatic burglar alarms aimed at protecting Woodlands residents against possible thefts when away from home. The system (the installation of which was included in the cost of the house) could be utilized by residents for ten dollars a month.¹⁵⁵ Once it was activated, the residents’ home would be monitored every six-seconds, twenty-four hours a day by TOCOM’s headend computer. Unlike closed-circuit television surveillance, which transformed TV watching into an act of surveillance and thus required

¹⁵³ Ann Forsyth, *Reforming Suburbia: The Planned Communities of Irvine, Columbia, and the Woodlands* (Berkeley, CA: University of California Press, 2005), 14.

¹⁵⁴ In *Reforming Suburbia*, Forsyth documents how, because of the Housing and Urban Development funding, The Woodlands was obliged to provide a significant percentage of low income housing, contributing to the communities economic diversity. Every street would have between six and twenty-five houses, which cost the same but strove to attract individuals from diverse social and racial backgrounds. These streets or “clusters” were first grouped together in “sections,” then “neighborhoods,” and finally villages, which brought together clusters occupied by residents of varying economic backgrounds into seemingly diverse and cohesive wholes. Forsyth, *Reforming Suburbia*, 161-207.

¹⁵⁵ Donald T. Rozak, “Security System Operation Via Cable - November 1977” (TOCOM, November 1977), Folder: Tocom, Barco Library.

human labor in the system's constant operation, TOCOM's cable-based security worked through a combination of mechanical sensors, coaxial cables, and a centralized computer that would automate the process of monitoring. The smoke detector would automatically pick up the presence of smoke in a home and send a message via cable to the system's central monitoring computer. Once activated, the detector would simultaneously alert residents (by sounding an alarm) and the fire department (by sending a message via coaxial cable). The police and medical alert buttons, while less automatic than the smoke detector, operated similarly. After the computer detected that a resident had pressed a button, the computer would instantly inform the police or the emergency medical officers. Once the appropriate emergency personnel received the alert, they would dispatch the necessary service as well as call the resident to ensure they were safe and to help avoid false alarms.¹⁵⁶

The reports that surrounded the installation of TOCOM cable security in The Woodlands not only discussed the system's capacity to increase resident safety but also emphasized its automatic functioning. In a 1977 *Popular Science* article, entitled "Two-way cable TV protects America's safest town" (an article which was also reprinted and distributed at TOCOM's promotional events), Dudley Lynch introduces the system by telling the story of the Bakers, a Woodlands' couple whose home was saved from destruction by the quick action of TOCOM's fire detection.

The blaze started with a defective furnace. In the attic of a Texas home, a tiny lick of flame jetted from the door of a gas heater. If not detected quickly, this hidden fire could rage out of control, destroying the entire house... the flame grew into a fan-like sheet of fire. Rafters began to blacken from the heat, and insulation smoldered. Suddenly a console mounted on the living-room wall began to beep a steady warning. Puzzled, George froze for an instant, then ran toward the stairs, guided by the insistent buzz of a smoke detector now shrilling in the attic. At the same time the phone rang. The town's Emergency Services dispatcher was on the line. 'We have a fire alarm from your location.

¹⁵⁶ Donald Rozak, "Two-Way: An Experience Not Just an Experiment," *TVC*, April 1976, Barco Library.

Do you know what tripped it? Not yet,' Marjorie answered. She paused, then screamed: 'Hurry, there's a fire in our attic!' But even as she shouted the alarm, she heard the wail of fire engines down the block. On the scene, the firefighters quickly shut off the gas, doused the flames in the furnace, and left. The damage? A few blackened boards.¹⁵⁷

With this opening narrative, Lynch argues how in joining in-house alarms with interactive cable television, TOCOM revolutionized home security, providing cable subscribers with the most efficient and responsive level of domestic protection. By alerting the Bakers to the problem through the sounding of an alarm, contacting the fire department directly the instant the system picked up a potential problem, and dispatching emergency personnel even before they received confirmation from the Bakers' that they were aware of the problem, the TOCOM system automated the enforcement of domestic safety. Its very structure anticipated the failure of residents to be sufficiently alert to the potential danger in their homes. It relied instead on a system of automatic, computerized surveillance which, using technology already deployed for television entertainment in the home, would bypass human actors and send a message directly to emergency personnel.

The first year after the installation of the TOCOM cable security system in The Woodlands, the city boasted only one fire-related loss at a protected home (an event that TOCOM's president was sure to insist occurred because the homeowner had used "poor judgment"), no forcible entries or property losses, and the saving of several lives due to instant medical alerts.¹⁵⁸ And other communities began to take interest in the possibility of cable security. New Towns similar to The Woodlands began to follow its example and even larger cities, including Fort Lauderdale, Florida and Dayton, Ohio also started to install cable security systems. For in addition to representing a potentially lucrative new service, home security became an increasingly important

¹⁵⁷ Dudley Lynch, "Two-Way Cable TV Protects America's Safest Town," *Popular Science*, August 1977, Folder: Tocom, Barco Library, 70.

¹⁵⁸ Donald Rozak, "Security System Operation Via Cable."

selling point for companies striving to make their franchise bids desirable in increasingly competitive conditions.¹⁵⁹

In the late 1970s and early 1980s, cable security was repeatedly discussed in articles as an important issue in franchise debates. According to a 1978 report in *TVC*, home security was becoming of central importance to companies hoping to make inroads in the urban market. As TOCOM's Michael Corboy, interviewed in the article, contends: "Today, there are an awful lot of cable operations in metropolitan areas that are going to have to answer questions soon to some city councilmen about two-way security systems."¹⁶⁰ Similarly, a 1980 *New York Times* report entitled "Home Security By Cable TV" argued that "Cable television home-security systems, a new and virtually untested use of cable television technology, are expected to become a key issue in New York's hotly contested franchises—Brooklyn, Queens, the Bronx and Staten Island."¹⁶¹ In these articles, cable home security emerged as an essential new dimension of the cutting edge, competitive cable service provider. It represented a means of securing the interest of city councils and conquering the urban market. As such, home security represented a mode of fulfilling that long-held demand for two-way cable. However, instead of rendering television interactive by soliciting viewer responses, it constructed its two-way operations by providing what it conceived as a practical, desirable, and almost benevolent (not to mention profitable) service that spoke to ever-present concerns about the threats of city living.

As cable security moved out of the controlled settings of New Towns and into American cities, automatic burglar alarms that operated much like the smoke detectors, instantly informing the police if something was amiss, also emerged as central pillars of the new cable security

¹⁵⁹ "Backers See Two-Way Cable Coming On Strong in '78," *TVC*, May 1978, Barco Library.

¹⁶⁰ *Ibid.*, 27.

¹⁶¹ "Home Security By Cable TV," *New York Times*, November 22, 1980, 29.

systems. Like the reports that surrounded closed-circuit television, those which circulated around cable security, particularly when they appeared in cable industry publications, often stressed the need for home-security systems by drawing attention to the plethora of apparent dangers that plagued the average homeowner. For instance, a 1978 *TVC* article about the Dayton installation contends: “In a city with an above-average crime rate, according to FBI statistics, two-way cable security is a welcome sight. Daytonians will be less afraid of criminal intrusions and of answering the door to a total stranger.”¹⁶² Similarly, a May 1980 article insisted that, “Burglary is one of this country’s strongest growth industries. Thievery from unprotected homes is, like inflation, virtually out of control.”¹⁶³ And a 1981 article, arguing that the time was right for the cable home security industry to flourish, claimed that: “Crime rates in this country are sky-high, and yet Americans have invested more of their consumer dollars in electronic garage-door openers than in home-security systems.”¹⁶⁴

This rhetorical strategy, which mirrored the discourse long established in reports of closed-circuit television surveillance and the growth of high-security urban and suburban dwellings, was sometimes taken even further. Indeed, in some reports, rising crime rates emerged alongside a series other dangers endemic to everyday domestic life; threats to which cable possessed the unique capabilities to respond. For instance, a 1983 article in *Cable Television Business* begins its report by listing statistics from The National Fire Protection Association and the National Safety Council along with the more commonly cited Uniform Crime Reports generated by the FBI. These statistics, which are articulated quite dramatically, claim that 1980 reported “3.6

¹⁶² “Security System Linked to Cable Opens Door to Two-Way TV in Dayton,” *TVC*, March 1978, Barco Library, 20.

¹⁶³ “Home Security Offers Opportunities For Many of Nation’s Cable Operators,” *TVC*, May 15, 1980, Barco Library, 128.

¹⁶⁴ Jim Smith, “Home Security: The Crucial Realities,” *TVC*, July 15, 1981, Barco Library, 54.

million burglaries and more than 50,000 robberies,” 1981 presented almost six billion dollars worth of fire damage, and “21,000 home accidental deaths” resulting “from falls, fires and burns, suffocation, poisoning and firearms.”¹⁶⁵ Such statistics worked together to construct the modern home as an essentially dangerous place, a domain where not just burglars, but fires, fatal accidents, and unforeseen attacks threaten the average American at every turn.

Stressing rising crime statistics along with those of fire and medical emergencies, these articles appeared in cable trade publications and were often written by individuals with a vested interest in the success of the cable business. They echoed longstanding home security and surveillance discourse and embodied the industry’s promotional strategy.¹⁶⁶ Faced with these seemingly ever-present dangers, cable security industry enthusiasts insisted not only on the vital need for a complex, multidimensional, and automatic home protection system, but on cable television’s special capacity to provide such a service. As *Cable Television Business* insists:

Only three percent of all U.S. homes are protected by a security system. What do these figures point to? While it’s hard to make dramatic conclusions from such staggering statistics, two things can be said. One, there is an urgent need for increased protection of American homes, and, two, there is plenty of room for the cable industry to provide that protection.¹⁶⁷

As a broadband communication system already installed in many American homes and easily equipped with two-way capability, its proponents (trade reporters and industry members) argued that cable TV was uniquely suited to branch into security. With a few tweaks it could easily network burglar alarms, smoke detectors, and medical response buttons into a total, automated communication system monitored by the companies’ headend computer and armed with the capacity to instantly alert emergency services. Moreover, in capitalizing on the ever-present

¹⁶⁵ Ilene V. Smith, “Security: Making It Pay,” *Cable Television Business*, July 1, 1982, Barco Library, 92.

¹⁶⁶ “Home Security Offers Opportunities For Many of Nation’s Cable Operators” was even prepared for *TVC* by TOCOM.

¹⁶⁷ Smith, “Security,” 92-93.

anxieties suggested by the crime, fire, and medical statistics invoked by industry rhetoric, these reports also suggested that in addition to becoming instantly profitable, providing security services could also help enhance the reputation of the cable industry. “Acting as ‘protectors’ of the communities in which they serve by working closely with such city officials as police and fire chiefs,” the cable industry could gain a newfound power in the American home. It could represent more than a means of expanding televisual content, but a force in the defense of its audiences.¹⁶⁸ As such, the discussion of the many dangers facing American domestic life represented an essential selling point for cable companies to offer home security services, a means of emphasizing their social necessity, commercial profitability, and potential for enhancing community connections.

In the promotion of cable home security, the industry’s proponents sought to position their systems in relation and often in distinction to other modes of home protection, especially to those security companies also that provided burglar alarms, monitoring, and emergency response. When comparing their services to these other companies, cable security providers often argued that their products held an edge over adjacent systems because of cost. According to the cable trade publications, the price for a complex security system like those offered by cable companies (with automatic alarms, sensors, and built-in emergency response) would typically run over two thousand dollars for installation and approximately fifty dollars a month for monitoring. This high cost meant that only the very wealthy could afford such a system. Thus, such services were generally only a small part of the security business. Most companies made the vast majority of their income by protecting commercial enterprises and public buildings.

¹⁶⁸ Smith, “Security,” 96.

In contrast, cable security was almost exclusively a domestic enterprise. It saw itself as an addition to an existing entertainment and information service that could be afforded by a large portion of Americans. Their installation and monitoring fees were still relatively high: around two to five hundred dollars for installation and between ten and twenty dollars monthly for monitoring. However, they were significantly lower than those of the average home security company.¹⁶⁹ As such, cable industry rhetoric constructed cable home protection as the accessible, everyday, middle-class alternative to traditional home security. As Jim Smith, from Smith Cable Security, puts it:

Conventional security firms have viewed home security systems as a consumer luxury, like swimming pools. Cable security firms, alerted by the cable industry's experience with entertainment services, have approached the home security system more as the installation of an appliance, like a microwave oven or washer-dryer—something 'affordable' to the consumer.¹⁷⁰

Thus, at the same time the cable industry pitched their television services as revolutionary, when promoting cable home security, the industry sought to make them seem ordinary and utilitarian, distinguishing their tactics from the high-class and luxury approach that they claimed had previously dominated the home security industry.

Although the majority of the companies developing cable home security technology were not cable service providers themselves,¹⁷¹ Warner Communications represented an exception to this trend. In the late 1970s, Warner developed its own cable home security system offered as an additional interactive feature of QUBE. This decision prompted TOCOM to sue Warner for copyright infringement when the company sought to secure a franchise agreement in Texas. The

¹⁶⁹ Smith, "Home Security," 58.

¹⁷⁰ Ibid, 58.

¹⁷¹ Indeed during the 1980s, TOCOM was joined by other companies, like Jerrold Electronics and Universal Security Instruments, who sold their systems to cable franchises. "Jerrold Entering Cable Home Security Market With Hardware, Consulting Arm," *TVC*, December 15, 1980, Barco Library, 34; John Dougherty, "Security Firms Get Wired Through Cable TV Lines," *Washington Post*, April 4, 1983, 8-9.

QUBE security system was promoted by the company as an essential counterpart to QUBE's other interactive properties. QUBE's promotional pamphlets positioned security alongside interactive entertainment, pay-per-view, and community engagement. It was one of the many features that made "QUBE everything TV is not."¹⁷² As an already established leader in two-way cable, articles and advertisements for QUBE security focused on Warner's commitment to technical superiority. Headlines like "In Pursuit of the Perfect Alarm"¹⁷³ and "QUBE Home Security Has Promising Debut"¹⁷⁴ peppered the trade publications. Articles praised the sophistication of Warner's new system, which included a variety of built-in redundancies that would let it operate in the case of a power or a cable outage. Similarly, Warner's own promotional materials claimed:

For years electronic designers dreamed of developing a home security system built around a high capacity coaxial cable. Now Warner Amex QUBE cable technology provides a fast, reliable way to put these security services into action for both residential and commercial subscribers. Warner Amex is the only major cable company with its very own proprietary security system.¹⁷⁵

Even though its entrance into the home security field was relatively late, Warner insisted that its long established reputation rendered its system one of the best in the industry. Framed as a natural addition to its plethora of two-way services, the company claimed: "The Warner Amex burglar, fire and medical alert system could be the most important investment you even make for your family's security."

In addition to its technological advancements, QUBE security sought to distinguish itself from all other systems on the market by offering high degrees of customization. Initially Warner

¹⁷² Warner Cable, "Touch the Button" (Warner Communications, cir 1978), Box: CC79 QUBE PUBL + Videos, Barco Library.

¹⁷³ Scott Sherry, "In Pursuit of the Perfect Alarm," *TVC*, February 1, 1980, Barco Library, 50-58.

¹⁷⁴ Smith, "Security," 26-28.

¹⁷⁵ Warner Amex, "A New Perspective On Cable Television" (Warner Amex Cable Communications, Cir 1980), Folder QUBE, Barco Library.

imagined its home security set-up as a tiered system: subscribers could have fire protection, burglar alarms, emergency medical alerts, or some combination of all of them (the cost of installation varying on what kinds of protection were selected).¹⁷⁶ By 1980, they increased the degree of customization even further. A homeowner could now decide nearly every aspect of her home protection. She could select any combination of smoke alarms, heat detectors, burglar alarms, emergency medical buttons, window sensors, and strobe lights, all of which were networked together into a home terminal and monitored every few seconds by a central computer.¹⁷⁷

Warner also invited its security subscribers to share information about themselves and their homes. They claimed that such disclosure would help ensure subscriber safety; if there was some kind emergency Warner could transmit details about “housing construction material, number of residents, medical histories and medication requirements” to the police, fire department, or medical response team via computer.¹⁷⁸ By adding security to their other two-way cable services, Warner brought a new level of surveillance to their operations. Through their cable security system, they automatically gathered information on the events occurring within the home. While already collecting information about people’s opinions and viewing habits through their audience’s participation with QUBE’s interactive programming, Warner security created a new incentive for subscribers to divulge personal information to the company. Thus, in order to receive the best and most comprehensive domestic protection, QUBE subscribers disclosed personal details about their lives and their living spaces and consented to the installation of an

¹⁷⁶ Warner Cable, “Touch the Button.”

¹⁷⁷ Sherry, “In Pursuit of the Perfect Alarm,” 51-53.

¹⁷⁸ *Ibid.*, 51.

automatic, electronic monitoring system which ensured that the home itself “talks back” to the TV set.¹⁷⁹

In all its iterations, from the original systems developed by TOCOM in the early 1970s to Warner’s customized set-ups of the 1980s, cable home security represented an entirely different vision of domestic protection than that embodied by closed-circuit television; one which saw home defense as necessarily totalized and automated. It unified home protection, fortifying American homeowners against the threat of fire, burglary, forced entry, and medical emergencies. In the cable defended home, individuals’ television service ceased to be merely a source of entertainment. It represented an entry point for a complex communications system that automatically scanned their home for defects, responded instantly to their commands, and mechanized the process of summoning emergency relief. Through the connection of coaxial cables and strategically placed sensors, the home was constantly under surveillance, not by individual people but by a centralized computer, a smart technology which gathered personal data in order to fortify domestic space. As such, cable home security took the automation of surveillance begun in part by closed-circuit television to its ultimate end point. Whereas as CCTV centralized and streamlined surveillance, reducing the need for guards or concierges but still requiring that the television screen operate in conjunction with a human actor, cable home security bypassed TV viewing altogether. Connected to a series of sensors and alarms, people’s cable television systems not only delivered them entertainment programs but also surveilled their homes. They gathered data to be transmitted to and processed by a central computer, and thus anticipated many of the modes of data-based surveillance that would become essential to digital media and the smart home.

¹⁷⁹ Arthur Hill, “Cable and the Future,” *TVC*, January 1, 1980, Barco Library, 48.

In her analysis of the discourse surrounding smart homes in the late 1990s and early 2000s, Spigel contends that although such visions of futuristic domesticity have roots in the houses of tomorrow of the postwar era, often embodying a nostalgic reverence for this mode of Cold War futurism, they are not mere replications of these older imagined models.¹⁸⁰ “Whereas the old ‘mechanical servants’ were promoted pragmatically as timesaving devices that could enhance the lives of housewives, the new intelligent appliances do not just do the chores. They virtually become the housewife, as they perform the managerial and care taking roles previously ascribed to women.”¹⁸¹ Rather than mechanical tools, designed to streamline the labor of the homemaker, the new, often computerized features of the smart home were constructed as intelligent alternatives to the housewife. They were not merely capable of assisting her but of replacing her in everyday domestic labors.

Although home security is not necessarily a strictly gendered enterprise, the discourse surrounding closed-circuit television protection functioned to construct it, at least in part, as a dimension of women’s domestic labor. Through such discourse, CCTV emerged as a tool to assist in the execution of housework. However, its deployment actually increased rather than decreased the domestic duties of the housewife, adding home security and household monitoring to her roster of labors. In contrast, cable, by automating security, connecting an army of sensors and computerized alert mechanisms into a complex intelligent system, promised to take responsibility for the fortification of domestic space. Its operation and communication bypassed the home’s human agents entirely, rendering its increasingly “thing-like” residents the recipients of its protective actions and alerts.

¹⁸⁰ Spigel, “Yesterday’s Future, Tomorrow’s Home,” 29–49.

¹⁸¹ Lynn Spigel, “Designing the Smart House: Posthuman Domesticity and Conspicuous Production,” *European Journal of Cultural Studies* 8, no. 4 (November 1, 2005): 408, <https://doi.org/10.1177/1367549405057826>.

More significantly, cable home security also helped establish a fundamental shift in domestic surveillance practice. Until the advent of cable home security, discussions of surveillance in the home often focused on issues of sight and sound. Whether in the anxieties about television's possibility to act as an 'evil eye,' the inevitable intrusions and eavesdropping opportunities afforded by city living, or the collapsing of these possibilities in the installation of CCTV cameras, domestic surveillance was rooted in the act of watching or listening in real time. With cable home security however, this shifted. Now that surveillance had been taken over by a computer, its monitoring did not operate through the long established visual and auditory terrain. It did not 'watch' the home in a traditional sense, but aggregated a constant stream of data from the various electronic sensors positioned and networked throughout the home. In order to learn whether anything was amiss in the home, the burglar alarms, smoke detectors, and so forth, monitored for specific, sometimes minute changes in the home, sending information back along coaxial cables to the headend computer. As such, cable home security must be understood as one step in the rise of data-driven surveillance that has come to dominate practices of monitoring in the digital age.¹⁸² It installed a networked series of sensors in the home and linking them up to a remote computer system, engaged in a constant process of monitoring. In some instances, it even asked audiences to provide cable companies with detailed information about one's home and family life. As such, cable home security helped establish a practice of data-centric,

¹⁸² For more on surveillance and digital media see: Daniel Trotter, *Social Media as Surveillance: Rethinking Visibility in a Converging World* (New York, NY: Ashgate Publishing, Ltd., 2012); Greg Elmer, *Profiling Machines: Mapping the Personal Information Economy* (Cambridge, MA: The MIT Press, 2003); Mark Andrejevic, *ISpy: Surveillance and Power in the Interactive Era* (Lawrence, KS: University Press of Kansas, 2007); Sean P Hier and Joshua Greenberg, *Surveillance: Power, Problems, and Politics* (Vancouver, BC: UBC Press, 2009), <http://www.deslibris.ca/ID/425110>; Lyon, *Theorizing Surveillance*; Wendy Hui Kyong Chun, *Control and Freedom: Power and Paranoia in the Age of Fiber Optics*, unknown edition (Cambridge, Mass.: The MIT Press, 2008); Fuchs, "Political Economy and Surveillance Theory," 671–87. Dandeker, *Surveillance, Power and Modernity*.

computerized surveillance that would become an increasingly normalized dimension of contemporary domestic life.¹⁸³

Conclusion

Since the 1980s, both CCTV and cable technologies have continued their prominence, combining with digital and computational media to provide new layers of surveillance in the service of domestic protection and household efficiency. Closed-circuit television cameras, though most visible in public spaces, continue to be made for the home and sold to the public at Best Buy and Costco; visual baby monitors operate in conjunction with mobile phone apps; and cable companies continue to offer advanced forms of home protection. Indeed, as computer technologies have expanded into more and more aspects of everyday life, placed in our homes, integrated within our TV sets, and fundamental to our systems of communication, the tools and technologies surveillance have become ever more ubiquitous. As such, unpacking the histories and specificities of domestic surveillance is vitally important not only to understanding the ways in which television was reimagined and reconfigured in the 1960s, 1970s, and 1980s, but also to the practices, norms, and discourses of surveillance that have come to dominate the contemporary moment. Closed-circuit television and cable home security embody two distinct regimes of surveillance that are not only prominent in the discourses and practices of televisual monitoring, but also represent a more general shift in conceptions of high-tech living.

Embedded in racialized (and racist) discourses of space and gendered ideologies of home and family, closed-circuit television embodies one vision of domestic surveillance. Here the TV

¹⁸³ While I do believe that cable home security represents one aspect of the history of data-surveillance in the home, I do not want to assert that it is the chief cause of the rise of domestic digital surveillance. Instead, I see it as one piece of a larger assemblage of technologies, norms, conditions, practices, and economies that has contributed to the dominance of data collection and home monitoring in everyday American life.

set is transformed from a medium of entertainment into a site of utility, and TV watching turned from pleasurable leisure into disciplined labor. By monitoring the outside world, CCTV promised to protect the American home against those forces perceived as threatening its destruction. By observing the inside world, it claimed to modernize domestic life, expand the potential uses of television technology, and discipline the housewife. It provided her with new 'electronic eyes' with which to watch her children or monitor her kitchen range and ensure she did not indulge in those more frivolous forms of TV viewing that threatened to compromise her productivity. When brought out of the suburb and into the city, closed-circuit television operated simultaneously as a means of distinguishing the apartment from those more abject forms of urban dwelling as well as extending the voyeuristic pleasures and perpetual anxieties of intrusion and exposure central to all forms of city life. Taken together, the discourses that surrounded closed-circuit television in the American home (whether urban or suburban), as well as the imagined and actual uses of this technology, articulated a distinctly visual mode of surveillance. On the one hand, it embodied a new kind of domestic governance, in which television, surveillance, and visibility combined to modernize household labor, manage housewife attention, and monitor possible intruders (or public housing project residents) in the defense of the white spatial imaginary and idealized middle-class domesticity. On the other hand, this visual mode of surveillance opened up possibilities of voyeuristic pleasure, fears of exposure, and even opportunities for African American engagement and invention.

Whereas CCTV articulated a distinctly visual surveillance regime, cable home security embodied an automated and data-driven one. By networking a series of alarms, sensors, and alert buttons, connecting them via coaxial cable to an ever-active headend computer, cable security displaced the human viewer and the TV screen. Instead of repurposing the television set and

disciplining the TV viewer, cable security adapted a means of television transmission to serve as a tool for computerized domestic monitoring. As such, cable security functioned through the aggregation of data. The sensors, detectors, alarms, and alert buttons operated by transmitting information instantly to a centralized computer, which would process it and, should anything be amiss, instantly contact the appropriate authorities. Its operations assumed either the absence or the failure of individuals to protect their own home. Fires, burglaries, home invasions, and medical emergencies were, according to cable industry discourse, a real and ever-present danger that seemed to demand a technological solution only cable could provide. As such, the industry perpetuated many of the discursive trends present in popular discussions of closed-circuit television. At the same time, they stressed the unique need for instantaneous automatic response and computerized monitoring. Unlike CCTV, which operated as an assistant to human labor, cable home security promised to replace it, its networked and computerized system of data-driven monitoring helping establish surveillance protocols that would become essential in the smart technologies and digital media of the contemporary moment.

Closed-circuit television and cable home security thus embody two different surveillance practices: one a visual assistant to human labor, the other a data-driven system aiming to replace the human altogether.¹⁸⁴ Although there is some degree in which this move from electronic helper to smart manager, visual monitor to information processor corresponds with a historical transition, the first surveillance regime embodied by CCTV was not simply replaced by the second. In the mid-1980s, cable home security ceased to be a primary subject of discussion in the cable trades. By 1984, a year which marked the closure of QUBE, the selling of TOCOM to General Instruments, and a general pulling back of enhanced cable services, there were far fewer

¹⁸⁴ I do not wish to suggest that these technologies *established* such regimes, but rather represent two distinct and important configurations of them.

articles about cable security in industry publications. Although this did not represent the end of cable security, it indicated a doubt in the firmly held belief that cable security could generate unprecedented profits for the industry.

At the same time as cable security seemed to be losing industry attention, interest was returning in personalized, closed-circuit television surveillance. During the mid to late-1980s, newspapers and magazines turned with renewed enthusiasm to the possibilities of merging domestic labor and household protection with a series of new home CCTV systems released throughout the decade. These devices, which included the Sony WatchCam, Unisonic Video Doorphone, GBC Security's Babyvision, and Zenith's Video Sentinel, echoed much of the rhetoric that had surrounded RCA's "TV Eye" and closed-circuit television in the home of tomorrow more than twenty-years before. Like their earlier imaginings, these new systems, especially the WatchCam and the Video Sentinel, envisioned a home thoroughly integrated with closed-circuit television surveillance. Its occupant was imagined using her system to monitor the front door or her children, giving her not only domestic protection but also increased efficiency in household and familial labors. The articles and the advertising images operated simultaneously to construct women as both those most in need of protection and most likely to be responsible for taking care of the home and the children. As such, they perpetuate a gendered image of female fragility, domestic labor, and family care that has been central to CCTV discourse since the 1950s.¹⁸⁵ Thus, even as cable home security seemed to mark the rise of a new surveillance

¹⁸⁵ Barbara L. Isenberg and Mary Smith, "Helpful Hardware: A Monitor For Home," *New York Times*, October 23, 1980, sec. C; "Zenith Video Sentinel System Advertisement," *Gettysburg Times*, September 8, 1980; John Free, "Video Doorbells Show Who's Knocking," *Popular Science*, August 1982; Rob Howe, "Mother Is Watching," *Washington Post*, September 19, 1985; Jane Wollman, "Home TV Keeps an Eye on Babies," *New York Times*, September 28, 1985; Howard Blumental, "WatchCam: The New Wave in Home Security," *Star Tribune*, February 9, 1986.

regime, closed-circuit television and the gendered, racialized, and classed politics it embodied, persisted throughout the 1980s.

In the contemporary moment, as we face a world increasingly dominated by digital surveillance, it is important not only to consider contemporary forms of data-driven, computational surveillance, but also to think about how multiple surveillance regimes have operated historically. We must consider how they have clustered around a variety of social functions, perpetuated specific political agendas, and operated within diverse institutions. As I have demonstrated, in the 1960s, 1970s, and 1980s, surveillance was not merely the carceral force of state power. Integrated with television technology, it became a means of securing the home, disciplining its occupants, policing its boundaries, and offering a vision of fortification and safety embroiled in racialized and gendered visions of home and family care. In its varying technological forms, it helped construct distinct regimes of surveillance that would only grow in prominence in subsequent decades as computational and digital media proliferated the tools and techniques of surveillance in everyday domestic life. Throughout all its iterations, whether visual or informational, assisting the homemaker or replacing her, these surveillance and security practices functioned to transform television, increasing the TV set's domestic role from simply transmitting entertainment to protecting the home and facilitating its management.

EPILOGUE

Situating the Smart TV

“Just point. Just draw. Just speak. Just share... as you naturally would... Smart. Inspired by You.”

—LG Cinema 3d Smart TV Commercial, 2013

A 2013 commercial for the LG Cinema 3d Smart TV begins with a low angle shot of a mother, standing in the middle of a park, holding her young son.¹ Soft guitar music plays, the sun peaks out from behind a tree, and she points up to the sky (her son quickly mimicking her movements). A male voice states: “Just point”—words which are also inscribed on the screen in a non-descript white font. The scene then cuts to a medium shot of a young girl, five or six years old, running out of her house and down her front walk, waving goodbye to her mother. Once installed in the back seat of a car, the daughter breathes on the car window and traces a heart with her finger, while her mother stands outside the vehicle and smiles at her daughter’s gesture of parting affection. During this scene of familial intimacy words appear on screen and are spoken by the narrator, this time making the proclamation: “Just Draw.” Again the scene changes, the words “Just Speak” appear immediately, as a father is shown holding his new baby. He stares into his or her face, while seemingly speaking softly. The baby, though remaining silent, is shown in extreme close-up gazing attentively at his or her father. This scene cuts again to reveal two hands clasping one another on a beach in front of a sunset. The hands begin to move and we cut to see their owners, a young couple staring into one another’s eyes, described this time by the words “Just share.”

¹ LG, *LG Cinema 3D Smart TV Commercial Ad - YouTube*, accessed April 21, 2018, https://www.youtube.com/watch?v=JTJu9_nCdPY.

This last vignette cuts to an extreme close-up of a silver remote control being touched by a hand. As the hand picks up the remote, the words “As you naturally would” appear onscreen (and are also spoken by the narrator). The camera then cuts to a close-up of the hand holding the remote. Panning to follow its movement, the camera racks focus, exposing the TV screen that the remote controls. The scene cuts again to reveal the mother (remote control in hand) and son from the first vignette, sitting on a couch in front of the TV screen. The words “Just point” again accompany this image. But this time rather than point at the sky, the mother is using the remote to point at the television console as her son mimics her, pointing his finger at the TV set. Again the shot changes, cutting back to the television screen as a cursor, directed by the remote control “points” to the different widgets occupying the screen. Indeed, the TV is not being used to watch a traditional broadcast; instead it displays a variety of applications (e.g. games, YouTube, Facebook, Skype), none of which are what has previously been considered “TV.”

The scene shifts, now revealing a different duo on the couch: the mother and daughter from the second vignette. Positioned in front of the television, the daughter moves the remote control in a circular motion, tracing a pink shape over an image of two puppies on the TV screen. As the daughter completes her act of televisual play, the words “Just draw” are again written/spoken and the image of the two puppies is replaced by one of a butterfly. The mother and daughter turn to one another laughing at the fun they seem to be having with their TV set. Again the scene changes; the father from the third vignette, this time pictured without his baby, sits on the couch whispering into his remote control. This act, accompanied by the words “Just Speak,” controls his television set, which is shown in the following shot to be searching for a “3d movie.” The scene shifts one last time to depict a close up of phone on which a photo of the young couple on the beach at sunset is displayed. The phone is placed momentarily over some

kind of smart surface, as words “Just share” are invoked. The shot cuts. We see a hand raise the phone parallel to the TV set, swipe the screen forward, and as the camera again racks focus, the picture that was on the phone now occupies the television screen. The camera cuts to show the couple. They sit close to one another on the couch, watching these memories of their vacation on the TV, as the words “Smart. Inspired by You” close the scene. With one brief cut to an image of the TV set and another to LG’s corporate logo, the commercial ends, reminding us that with their products “Life’s Good.”

Though only a minute long, LG’s advertisement articulates its new smart television set with a cluster of meanings, structures, practices, and feelings that have long been a part of television’s popular imaginings. Indeed, both in its constructions of newness and its calls back to intimate familial connection, this 2013 commercial resembles much of the discourse that surrounded the attempts to remake television explored in this dissertation. First and foremost, the ad situates the smart TV in the home. It positions this new television set as an active force within family relationships—something which was not merely central to modes of the televisual practices I explore, but also to television’s very introduction to the American consumer market.² Although there are other television ads which eschew the domestic, favoring instead grand displays of new TV sets’ visual powers,³ the LG commercial privileges depictions of familial and interpersonal intimacy. Here the television emerges as something that brings people together. It is the object around which a mother and son can engage, a space in which a daughter can explore her creativity supported by her mother, and the site through which a young couple can

² Something which of course Spigel has discussed at length. Lynn Spigel, *Make Room for TV: Television and the Family Ideal in Postwar America* (Chicago, IL: University of Chicago Press, 1992).

³ Samsung, *Samsung SmartTV Commercial - 3D VoD - YouTube*, accessed April 21, 2018, <https://www.youtube.com/watch?v=3gOVRpJtg3s>; Samsung, *Samsung Smart TV: Join In - YouTube*, accessed April 21, 2018, <https://www.youtube.com/watch?v=4vf9UQnCjDc>; Digital Trends, *Hisense 100-Inch Laser TV - Hands on at CEDIA 2017*, accessed April 21, 2018, <https://www.youtube.com/watch?v=jiwmnASfaMw>.

relive their romantic vacation. It apparently even evokes the same kind of intimate speech and tactile contact as that demanded by a baby.

At the same time as the advertisement works to embed the smart TV in the spaces and relationships of the home, it also functions to distance itself from traditional notions of television. In a gesture deeply reminiscent of video and cable's promotion, LG never shows its family audiences watching TV. The television set itself is never depicted playing a broadcast or even a movie, and viewers are not presented aimlessly flipping through channels. Instead, every interaction with the TV console is purposeful and directed. We see it search, play a game, and show personal photographs. On its start screen (the menu-like space from which all its complex televisual functions can be accessed), the majority of the widgets depicted highlight its interactive and 'smart' dimensions; there are apps for using the internet, accessing streaming services, checking social media, and completing video calls. Indeed, the remote, which like the QUBE console seems to embody much of the smart TV's unique functions, is repeatedly pictured in close-up, rendered as important or almost as important as the TV set itself. As such, in an effort to make this new television console desirable, to show off its difference from what came before, LG evacuates broadcast television from the promoted uses of its technology, as if to say that the user of a Smart TV has very little interest in actually watching television.

Moreover, by beginning the advertisement with a series of vignettes of interpersonal interactions occurring away from the TV set, showing moments of familial connection happening in a park, a car, or a beach and then recreating these scenes with the television console, the commercial works to make such televisual interactions appear as an authentic and inevitable extension of these unmediated modes of contact. Perhaps most obviously embodied by the words "as you naturally would," there is barely a difference between the actions depicted

away from the television and those imagined in conjunction with it. The mother and son continue to point, often looking at one another instead of at the screen. The daughter still draws, but this time, rather than tracing a heart as a goodbye, her mother is right beside her as she interacts with the television set. The young couple, though no longer on the beach, sits close to one another, looking into each other's eyes as the TV screen recreates their memories. As such, the television set with its enhanced features, increased interactivity, and advanced remote control emerges as something that is more than just TV. It is a multi-faceted tool and interactive instrument, a prosthesis, whose very futuristic qualities enable the technological extension of longstanding and natural desires for closeness, communication, and familial connection.

Although released in 2013 and equipped with the latest in digital television technology, LG's Cinema 3d Smart TV's promotion is connected to a much longer history of televisual imagination. Through its appeals to domestic intimacy, interpersonal interaction, and active engagement, as well as its efforts to distance itself from the mere act of watching television, LG's advertisement bears the traces of television's redefinitions in the 1960s, 1970s, and 1980s. Both the new smart functions it enables *and* the discourses invoked in its promotion call back to those early acts of televisual convergence explored in this dissertation. The capability to playback one's own media productions, to interact in new and creative ways with the TV set, and to perform non-traditional television functions like making video calls or looking up information—not to mention the forms of interpersonal connection, data disclosure, and increased modes of monitoring that embody the inevitable consequences of this technology—are digital reconfigurations tied to much older televisual practices. Indeed, far from the exclusive result of television's integration with computational media, the smart TV continues this much longer televisual legacy. It is haunted by the practices and technologies of home videomaking,

video telephony, interactive cable, and home surveillance and security that worked to redefine the television set, solve the problems inherent in broadcasting, and reinforce domestic life.

Given the persistence of these discourses and practices into the contemporary moment, the histories explored in this dissertation should not be considered as fringe examples or disconnected novelties. Even if some of the technologies I examine have been relegated to the status of ‘failure’ or ‘prehistory,’ I believe they represent potent sites in which contours of television’s identity—its aspirations and its dangers—have been defined, especially in conjunction with the changing spaces of home and the relations of the family. In my dissertation, I have worked to illuminate different dimensions of television convergence from 1960 to 1990. By focusing on home videomaking, video telephony, two-way cable, and televisual surveillance and security, I have worked to study how television was reimagined through its conjunction with new and adjacent technologies. I have examined how television was reconfigured from a medium exclusively to be *watched* into a tool also to be *used*, something malleable, personalized, and practical. Moreover, I have analyzed these moments of technological linkage largely through the discourses that circulated around their introductions. I have studied advertisements, magazine articles, news reports, industry publications, press releases, promotional photographs, television programs, and popular films, unpacking the fantasies and anxieties that surrounded these moments of televisual connection. Throughout my analysis, I have paid particular attention to how these technologies (video cameras, recorders, Picturephones, cable, and of course television) were articulated with ideas of home, family, and American domesticity; ideas that permeate the discourses and practices of television convergence, shaping their hopes, fears, futuristic imaginings, and nostalgic longings.

Although my study concludes in 1990, this year by no means marks the end of the modes of televisual redefinition I examine in this dissertation. As is evident from the LG ad, traces of the discourses and practices so central to television's convergence with new media in the 1960s, 1970s, and 1980s have persisted since the decades' end. Throughout the 1990s and 2000s, the electronics and TV industries continued to push new technological and televisual developments. Practices and discourses that emerged in previous decades persisted, reemerged, and were reinvented. While growing out of new historical conjunctures and articulated to distinct technological configurations, these forms of contemporary televisual transformation are worth considering. As interactive television, amateur videomaking, video telephony, two-way transmission, and surveillance persist into the contemporary media landscape, it is important to think through their continuities, discontinuities, and points of tension with the technologies, practices, and discourses of the 1960s, 1970s, and 1980s.

Since the early 2000s, digital media have interfaced with television, changing how it was transmitted, produced, and consumed. As such, questions about television's identity have emerged as central concerns amongst scholars and popular critics. They have been tackled by books like Spigel and Jan Olsson's *Television after TV: Essays on a Medium in Transition*, Michael Kackman's *Flow TV: Television in the Age of Media Convergence*, and Jennifer Gillan's *Television and New Media: Must-Click TV*.⁴ They have also prompted many speculations about whether the medium is coming to an end.⁵ Indeed, this moment of great

⁴ Jennifer Gillan, *Television and New Media: Must-Click TV* (New York, NY: Routledge, 2011); Michael Kackman, *Flow TV: Television in the Age of Media Convergence* (New York, NY: Routledge, 2011); Lynn Spigel and Jan Olsson, *Television after TV: Essays on a Medium in Transition*, Console-Ing Passions (Durham, NC: Duke University Press, 2004).

⁵ E.g. Henry Jenkins, "Is This the End of Television As We Know It?," Henry Jenkins, May 23, 2013, <http://henryjenkins.org/blog/2013/05/is-this-the-end-of-television-as-we-know-it.html>; Elihu Katz, "The End of Television?," *The ANNALS of the American Academy of Political and Social Science* 625, no. 1 (2009): 6–18, <https://doi.org/10.1177/0002716209337796>.

televisual change has only become more severe in the last several years as television has grown increasingly entangled with computational media. On the one hand, TV sets themselves have turned into interactive computer interfaces. Now capable of performing all manner of domestic functions, they can be used to access a variety of entertainment platforms, browse the internet, scroll through social media, and make video calls. On the other hand, television shows can now be viewed on devices other than TV sets. Laptops, desktop PCs, smart phones, and tablets can all be used to watch television as streaming services and file sharing software have created alternative modes of accessing shows. Yet despite these transformations, television persists. No longer tied to cathode-ray tubes or broadcast transmission, we cling to the term ‘television,’ even as what television actually means—what forms, technologies, and practices it embodies—emerges and reemerges in a state of flux.

Alongside television, home videomaking has continued as a popular cultural practice over the past forty years. In 1991, George Holliday’s recording of the beating of Rodney King gave new prominence to amateur video. As the tape was watched and rewatched in court, and then broadcast and rebroadcast on TV, it sparked a national conversation about both police brutality and the power of amateur media.⁶ Throughout this decade, NBC’s *I Witness Video* (1992-1994) along with many local news programs joined *America’s Funniest Home Videos* in their solicitation of footage shot by amateurs. In the 2000s, the growth of the internet and social media gave home videos new sites of exhibition. With websites like YouTube and Vine, amateur video became a cornerstone of contemporary digital media practice. Cameras (both still and moving image) were integrated into mobile technologies and facilitated accelerated practices of self-documentation.

⁶ For more on the Rodney King video see: Linda Williams, *Playing the Race Card: Melodramas of Black and White from Uncle Tom to O.J. Simpson* (Princeton, NJ: Princeton University Press, 2001).

Indeed, the collision between intimacy and spectacle, so essential to the early history of amateur home videomaking appears today to an unprecedented degree.⁷ With the rise of social media, the mediation of personal thoughts, feelings, and experiences through the sharing of images and information has become a common cultural practice, if not a full on expectation. That being said, today home video is less strictly about the home than it was in the past. No longer recorded on magnetic tape, it can be viewed from any digital platform, and thus its links to the TV set and its location in domestic space have been more or less severed. Though children and families remain a prominent part of domestic documentation, ‘selfie culture’ projects a different standard of intimacy, one focused predominantly on the self. Rather than record loved ones, the selfie urges the inclusion of one’s own image in all moments of digital documentation. It brings new levels of publicity to the intimate, giving credence to some of Shales’ speculations about a future where video has all but eclipsed the mirror and one’s appearance on screen is the only marker of truth, authenticity, and self worth.⁸

Video telephony, though not possessing the same steady history as home videomaking, did not disappear with the failure of the Picturephone or even with that of the Videophone. In the 2000s, when digital media and high-speed internet rendered broadband transmission in the home commonplace, video calling proliferated. Unlike the systems of the past, these new video calling services do not exist as discrete technological devices. Instead, they are integrated into computational media as software rather than hardware. They are installed onto PCs, deployed on smart phones, accessed through browsers, and integrated into Smart TVs. Today, almost every

⁷ Scholars of contemporary digital media practice have talked about it in terms of both intimacy and spectacle. E.g. Michael Mandiberg, *The Social Media Reader* (New York, NY: New York University Press, 2012); Cristina Miguel, “Visual Intimacy on Social Media: From Selfies to the Co-Construction of Intimacies Through Shared Pictures,” *Social Media + Society* 2, no. 2 (April 12, 2016): 1–10, <https://doi.org/10.1177/2056305116641705>.

⁸ Tom Shales, “Christmas Present,” *The Washington Post*, December 4, 1977.

major computer developer—Microsoft, Google, Apple, Facebook—has their own version of the technology, rendering it a seemingly essential feature of contemporary communication.

Though video telephony is all but ubiquitous now, anxieties about appearing ‘camera ready’ still permeate the discourse surrounding these applications. The *New York Daily News*, *Elle*, and *Teen Vogue* have all published articles on how to look good during a video call. The *New York Daily News* suggested finding flattering angles and using natural light.⁹ *Teen Vogue* recommended avoiding shiny make-up and using cosmetics to highlight your best feature (so it is noticeable on the relatively low-definition screen).¹⁰ And *Elle* concluded that the solution to the unexpected video call was to look good even when not wearing make up, something that could be accomplished through the purchase a variety of different beauty products profiled (and thereby promoted) in the article.¹¹ Thus, even as the technical operations of today’s video calling systems are radically different from those of the past, they still evoke certain similar discourses. They assert the anxiety surrounding the unexpected video call, suggest the danger of looking bad on screen, and construct women as those individuals most in need of policing their appearance.

Cable and interactive TV also remained central elements of the American media industry throughout the 1990s and 2000s. Even though interactive cable as initially envisioned by Warner did not survive QUBE, some traces of its Blue Sky fantasy still persist. Today cable does not merely transmit television programming but also serves to connect households to the internet. Cable modems convey information both up and downstream, thus fulfilling (at least to some degree) cable’s longstanding promise of two-way communication—even if such interactivity

⁹ Megan Cerullo, “Tips for How Not to Look like Crap When You FaceTime - NY Daily News,” *New York Daily News*, nydailynews.com, July 21, 2016, /life-style/tips-not-crap-facetime-article-1.2719109.

¹⁰ Emily Gaynor, “How to Look Bomb on FaceTime,” *Teen Vogue*, July 22, 2015, <https://www.teenvogue.com/story/how-to-look-good-on-video-calls>.

¹¹ Sue Omar, “How To Go Make-Up Free And Still Look Flawless When You FaceTime Your SO,” *ELLE*, May 22, 2017, <http://www.elleuk.com/beauty/make-up/beauty-tips/a35821/how-to-look-good-on-facetime/>.

largely bypasses the television set in favor of the home computer. Moreover, digital video recorders and contemporary Smart TVs, though technologically, operationally, and industrially distinct from a service like QUBE, distinguish themselves from traditional television with claims to interactivity and tactile participation. Indeed, as is evident from the LG ad, much like the interactive cable systems of the 1970s and 1980s, these contemporary TV technologies strive to render television audiences active. Through their advanced operations, individuals cease to aimlessly watch TV shows. Instead, they purposefully use their TV sets to record specific programs, search a catalogue of movies, and browse the internet—all while providing companies details about their tastes and viewing habits.

Finally, televisual surveillance, whether through closed-circuit TV or data-collection, has only increased since the 1990s. Digital technology has rendered cameras smaller and cheaper. It has enabled them to record longer and store greater quantities of information. Indeed, over the last forty years, CCTV has proliferated far beyond what it was in previous decades.¹² Cities like London are so saturated with cameras that it is impossible to go almost anywhere without being recorded. Moreover, the integration of computer chips into everyday objects, epitomized by the so-called ‘internet of things,’ has led to the integration of surveillance with almost every dimension of our daily lives.¹³ Smart technologies have enabled the development of homebrewed security cameras and baby monitors, which can be integrated into and operated through mobile phones and laptops. Everyday devices now collect all manner of data on our behaviors and activities. Disclosing personal information and building taste profiles has become

¹² Clive Norris and Gary Armstrong, *The Maximum Surveillance Society: The Rise of CCTV* (New York, NY: Berg, 1999); Inga Kroener, *CCTV: A Technology Under the Radar?* (Farnham, UK: Routledge, 2014).

¹³ Daniel Trotter, *Social Media as Surveillance: Rethinking Visibility in a Converging World* (New York, NY: Ashgate Publishing, Ltd., 2012); David Lyon, *Surveillance Society: Monitoring Everyday Life* (Philadelphia, PA: Open University Press, 2001).

a central feature of contemporary TV platforms like Netflix and Hulu. Fitbits and smart watches monitor people's movements, "encouraging" (or perhaps more accurately, pressuring) individuals to reach fitness goals—rewarding them for their accomplishments and reprimanding them for being too stagnant. All of our activities online are tracked by a host of companies who sell our data to advertisers and political campaigns. Indeed, surveillance has grown so ubiquitous that it has prompted scholars to describe our current cultural and political environment as a "surveillance society."¹⁴

Even though there is no direct through line or clear causal link between the discourses and practices that define television, video, two-way transmission, and surveillance today and those that defined them in previous decades, it is clear that there are certain continuities and connections. As such, studying the discourses, practices, and technologies that transformed television in the 1960s, 1970s, and 1980s is important to understanding both the past and the present. By locating television convergence beyond the realm of digital media, my dissertation works to examine discourses and histories which—while sometimes relatively marginal—articulated dimensions of televisual meaning that still haunt the contemporary moment. Though each case study mapped in this dissertation differs, they all represent an attempt to make television better. They strive to rescue it from the vast wasteland of broadcast entertainment and deploy its technologies for the construction of intimate experiences, interpersonal communication, active engagements, and domestic protections.

At the same time, the realities of these technological linkages and the debates that clustered around their development are rarely straightforward or completely politically progressive. Though often expressing a yearning for a better future, one in which the massifying

¹⁴ E.g. Norris and Armstrong, *The Maximum Surveillance Society*; Lyon, *Surveillance Society*.

influence of media has been curtailed and the drudgery of domestic labor relieved, the visions of the future they embody often express nostalgic longings for an imagined past. The boundaries they threaten to expose repeatedly enforce regressive gendered expectations and racialized spatialities. The forms of interactivity they solicit do less to democratize than to support corporate interests. And the kinds of assistance they promise carry with them other consequences which might do more to discipline and to expose than they truly do to help. By reinventing television, expanding its functions, redefining its reception, and reimagining its uses, home videomaking, video telephony, two-way cable, and home surveillance and security articulated a new vision of television's place in domestic life—a vision that would mobilize longstanding ideas of home and family, while calling up many of the practices and structures that would come to define the medium in the digital age.

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