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CHANGES IN PACING, SOUND USE, VISUAL COMPLEXITY, AND NARRATIVE COMPLEXITY IN U.S. SITCOMS 1950-PRESENT

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ABSTRACT

Numerous theorists have argued that the manner in which television delivers information influences—and is influenced by—the information-processing preferences of its audience. Research supports a general intensity of the pace and visual complexity of several media forms in society, including television programming. Engaging with such scholarship, this thesis examines changes in content and formatting of three scripted, primetime, U.S. network domestic situation comedy television programs in three different eras of television history. Specifically, this thesis focuses on changes in pacing, sound use, visual complexity, and narrative complexity of such shows. Both quantitative content analysis and qualitative textual analysis were used to analyze episodes from *Father Knows Best*, *The Cosby Show*, and *Modern Family*, each of which represents a distinct era of television history in the U.S. It was found that over the past six decades, the pacing, sound use, visual complexity, and narrative complexity of television sitcoms has changed significantly. Such changes have implications for the U.S. culture as a whole, and may affect the ways viewers are influenced by newer televisual forms.

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INTRODUCTION

In *Amusing Ourselves to Death: Public Discourse in the Age of Show Business*, Neil Postman asserts that throughout human history, the dominant media of communication influence the characteristics of a culture. Postman argues that human expression and communication is reliant upon whatever mediated "languages" are available to convey meaning. These languages, therefore, are not merely a vehicle to convey the meanings of environments, conditions, and concepts; rather, languages also contribute to and influence these meanings. By languages, however, he does not mean languages in the linguistic sense, such as English or French. "Our languages," Postman writes, "are our media. Our media are our metaphors. Our metaphors create the content of our culture" (Postman, 1985, p. 15). The media that are available to and dominant in a particular society help to define the culture of that society; thus, as media changes—whether through innovation and technology advances within an existing medium, or the emergence and increase in usage of a new medium—so does the culture that uses that media as a means of communication and expression.

Discussing modern times, Postman argues that U.S. culture has, in essence, been redefined by the television. This medium became omnipresent in U.S. society, not only as a means of entertainment and information, but also as a force that modified U.S. expectations for and perceptions of visual and auditory stimuli.

Postman asserts, "Television is our culture's principal mode of knowing about itself. Therefore—and this is the critical point—how television stages the world becomes the model for how the world is properly to be staged" (Postman, 1985, p. 12). Television's expansive, undiscriminating reach is the source of the medium's influence. Postman explains,

> There is no audience so young that it is barred from television. There is no poverty so abject that it must forgo television. There is no education so exalted that it is not modified by television. And most important of all, there is no subject of public interest—politics, news, education, religion, science, sports—that does not find its way to television. Which means that all public understanding of these subjects is shaped by the biases of television (Postman, 1985, p. 78).

Postman wrote prior to the advent of the Internet—a medium which may have surpassed or will someday surpass television in its role as the U.S. culture's "principal mode of knowing about itself"—but Postman's words still ring true. The U.S. is a society in which nearly 99% of the population owns and operates at least one television set, and viewers watch an average of nearly 160 hours of television per month. Television viewing time has steadily increased in recent years, despite ever-increasing Internet usage (The Nielsen Company, 2011a). Ours is a nation of habitual television viewers, and it is likely to continue as such for years to come. Because of its widespread and frequent usage, television continues to have significant impact on the U.S. public.

Other scholars also assert that changes in the television medium reflect as well as reinforce changes in the characteristics and preferences of a society. Jason Mittell, for example, calls television, "a mirror of our lives, as viewing and talking about it [television] plays a central, albeit underexamined role in our everyday routines" (MIttell, 2010, p. 2).

For Postman, the way television presents information is more important than the specific messages the medium presents. Specifically, Postman argues that because the financial structure of the television industry requires programs to capture and maintain audience attention, "all subject matter [on television] is presented as entertaining." Postman ultimately asserts that television as a medium, with its emphasis on visual entertainment, is antithetical to important values, such as critical thinking and literacy.

Both Mittell and his contemporary, Todd Gitlin, take a more moderate stand, acknowledging that the content and form of television has an impact on culture, but criticizing Postman's point of view as excessively cynical. Gitlin offers several "styles of navigation" for media in the 20th and 21st century. One perspective echoes Postman: "There is a notion that television…is an all-around agent of stupefaction, a pacifier that turns us into infants, paralyzing analytical faculties, dumbing us down, reducing us to couch-potatohood." Gitlin labels the navigation style of these theorists "paranoid," noting that such theorists hold extreme views on the continuum of criticism.

Mittell, too, challenges the premise of *Amusing Ourselves to Death*, saying"

> If the danger of overlooking the impacts of a medium environment is that we risk ignoring how technologies shape our experiences like fish in water, it can be equally risky to focus on media ecology with a nostalgic vision, comparing the negative elements of today to the positive features of yesterday (Mittell, 2010, p. 406).

Other theorists, such as Steven Johnson, for example, take a position directly opposite Postman. Johnson asserts that television programming—which is becoming ever more "nuanced and complex"—has actually made U.S. viewers smarter during the late 20th century and early 21st century.

Though these television scholars disagree about whether the medium's impact is positive or negative, Postman, Gitlin, Mittell, and Johnson agree on one fundamental point: examination of the structure and content of television programming offers insight into the present and future directions of a televisual culture. The study of television programming is of great relevance because television is both a formative force and a representation of the way people in the U.S. consume and comprehend their world.

Other theorists—notably Jeremy Butler and John Thornton Caldwell—pose no position on the positive or negative effects of television, but instead argue that television is an art form and should be studied as such. Butler begins his book, *Television Style*, by arguing the following:

1. Television style exists.
2. Television style is significant (Butler, 2010, p. 21).

One of Butler's main arguments for the classification of television as an art form (just as cinema is considered an art form) is that the stylistic patterns of television programming, as with all forms of art, have changed and become more complex over time. Butler describes changes in the visual design, sound use, and narrative structure of television programs over the past several decades. Caldwell, too, advocates for the study of the television medium, and notes that the medium's style is related to "the complexity, scale, and operations of the televisual industry."

It is the goal of this thesis to analyze the changes in television style that Caldwell and Butler discuss, and to examine such changes in the context of changes in television technology, programming options, the financial structure of the industry, and viewer attention patterns. Specifically, this thesis examines changes in the pacing, sound use, visual complexity, and narrative complexity of three U.S. sitcoms—*Father Knows Best*, *The Cosby Show*, and *Modern Family*—representing three distinct eras in U.S. television history. The results of the study offer insight into the change in televisual style of sitcoms over the past six decades. Additionally, the examination of such changes raises issues regarding changes in human information-processing in the U.S. and, in a broader sense, reflects changes in the content of U.S. culture as a whole.

MEDIA PACING AND SOCIETY

In *Media Unlimited*, Todd Gitlin posits that the speed of Western society has been hastening for hundreds of years, citing written commentaries by Nietzsche and George Eliot. Gitlin suggests that this desire for speed has an evolutionary basis:

> Speed and the desire to speed are, in sense, built into us. On both offense and defense, agility is an advantage against enemies. Fast running, quick aiming—these are obvious benefits in the struggle against antagonists. Quick thinking often gets the better of slow thinking. Both a capacity for physical speed and an awareness of motion in the visual field are probably wired into human biology (Gitlin, 2002, p. 81).

This biological predisposition for speed is manifested, according to Gitlin, in the speed-up of media forms in the U.S.—an acceleration that is especially evident in television programming. The people who create media content, as well as the people who consume it, use the content to fulfill their need for rapid movement. Gitlin explains that creation and consumption of media offers an outlet for experiencing the biological gratification speed brings:

> It is hard to arrange your corporeal, marital, occupational, or spiritual life just as you want, to transform your life as rapidly as you like, but you can make images, sounds, texts flex, flow, yield as fast as you please (Gitlin, 2002, p. 87).

Gitlin offers several examples of media forms that have shown signs of accelerated pace in the past several decades. Gitlin and his research assistant, Jennifer Kelley, examined changes in the average word count of articles from the *New York Times Magazine* and *National Geographic*; articles ranged in publication date, from 1896 to 1996. The general trend exhibited in both magazines during the past several decades is toward shorter sentences. Both magazines reached their peak number of words per sentence in 1926: the *New York Times Magazine* averaged 32.1 words per sentence, and *National Geographic* averaged 31.6 words per sentence. By 1996, the average number of words per sentence had dropped to 20.0 for the *New York Times Magazine* and 18.4 for *National Geographic* (Gitlin, 2002).

Films, too, show accelerated pacing. According to a study by Barry Salt, which analyzed hundreds of films, the average shot length of theatrical films decreased significantly in the decades preceding the 21st century—from more than ten seconds in 1946 to 5.92 seconds in 1999. After the turn of the century, the average shot length continued to decrease; according to data from a CineMetrics analysis, the average shot length of U.S. films released from 2000–2008 was 4.8 seconds (Butler, 2010).

Another example of acceleration in media is found by examining political coverage in network news programming. Gitlin cites Kiku Adatto's 1989 work, which showed that on average, presidential candidates' sound bites aired on weekday network news decreased from 42.3 seconds in 1968 to 9.8 seconds in 1988. Gitlin adds that by 2000, the average sound bite length had decreased again, to 7.8 seconds (Gitlin, 2002).

Fiction forms of television programming demonstrate changes in pacing, too. Jeremy Butler cites a University of Alabama study that indicates a significant decrease over time in the average shot length of television drama programming. According to the results of the study, television programs in the 1950s and 1960s had average shot lengths greater than 10 seconds, and it was common for shows to clock in well above that, including one episode of *The Honeymooners* that was determined to have an average shot length of 17.7 seconds per shot. Butler analyzed 2008 episodes of *As the World Turns*, finding the average shot length to be 4.84 seconds (Butler, 2010).

The decrease in average words per sentence, the decrease in average sound bite length in television news, and the decrease in average shot lengths for both film and television illustrate a general acceleration in the pacing of media content over the past several decades.

Changes in the pacing of television programming coincide with other changes in the television industry over the past six decades—including changes in technology, programming options, financial structure, television usage, and attention patterns of viewers. Additionally, as pacing in television has accelerated, other aspects of television shows' content—most notably, sound use, visual complexity, and narrative complexity—have changed, too. The nature of these changes will be examined in the following sections.

HISTORY OF TELEVISION PROGRAMMING

Broadcast Network Television

During the 1940s, three major and enduring television networks—ABC, CBS, and NBC—began broadcasting. The operation of network television was modeled after that of national radio. In fact, the majority of very early and pioneering television shows were based on hit radio shows of the time, simply adding a visual element to already-popular programming. Each of the networks used the affiliation system for distribution of their programming, creating contracts with local stations such that the local stations agreed to air programming (and the accompanying advertising) provided by the network. Through their local affiliate stations, ABC, CBS, and NBC held a dominant share of audience throughout the 1970s (Mittell, 2010).

In the mid-1980s, Fox launched its television broadcast network and began competing with the big three in the broadcast arena. Today, Fox enjoys viewership rates that rival ABC, CBS and NBC in many time segments. During the 1990s, following the success of Fox, three new networks were established—UPN, The WB, and Univision. Univision, the Spanish-language network, retains a relatively large share of the market, with ratings besting larger network competitors in certain markets. Both UPN and The WB saw less success, and eventually ceased broadcasts in 2006; their parent companies—Viacom and Warner Bros.—joined forces to create The CW, which picked up both networks' hit shows (Mittell, 2010). Around the same time that The CW began broadcasting, MyNetworkTV was launched by parent company Fox. MyNetworkTV featured a lineup of soap-opera-type programming, which ultimately was unsuccessful in garnering viewers. In 2009, MyNetworkTV President, Greg Meidel, announced a shift in programming such that the primetime lineup includes only a few first-run shows, balanced by "big franchise, big branded" syndicated shows for "established well-known programming" (Malone, 2009).

Industrial changes in broadcasting over the past few decades—including increased competition from Fox and the other broadcast networks—were often accompanied by changes in the style of programming (Caldwell, 1995), as will be discussed later. However, arguably the biggest changes in the television industry resulted from the introduction of cable and satellite delivery systems.

Cable and Satellite Television Services in the U.S.

The roots of cable and satellite television providers lie in community antenna television—CATV—which came about during the 1950s. The original purpose of CATV was to provide better-quality television reception to small, rural towns that were barely within signal range. The first CATV providers were locally owned businesses, each of which operated a large, powerful antenna and charged households to hook up to the antenna via a cable (Mittell, 2010; Parsons, 2003).

Eventually, many CATV operators joined together, forming small multi-system operators (MSOs) many of which were eventually bought up and consolidated in entrepreneurial efforts of investors and businesses (Mittell, 2010; Parsons, 2003).

The tipping point for MSO growth occurred in the mid-1970s with the advent of satellite-delivered programming, a system which allowed cable providers to distribute a wider selection of channels nationally. As a result of the new distribution capabilities, cable subscription rates skyrocketed in the 1980s. The number of cable subscriptions in the U.S. more than tripled from 1980 to 1990, rising from 17.6 million to 55.8 million in the 10-year period (Parsons, 2003). In the mid-1990s, direct broadcast satellite (DBS) systems, in which customers use a small satellite dish to receive signals, became another means of multi-channel programming distribution (Mittell, 2010). At the time of writing, the four largest cable and DBS MSOs—Comcast Corporation, DirecTV, Dish Network, and Time Warner Cable, Inc.—serve more than 12 million customers each (National Cable & Telecommunications Association, 2011).

Non-network, multi-channel programming distributed by cable and satellite providers is pervasive in 21st century U.S. society. In 1996, 17% of people in the U.S. listed cable or satellite television service as a necessity instead of a luxury; ten years later, in 2006, this figure had risen to 33%; a statistic that was found to remain constant regardless of income level (Taylor, Funk, & Clark, 2006). In 2011, 91% of households with televisions paid for a TV subscription such as cable or satellite service (The Nielsen Company, 2011b).

Prior to the rise of cable programming in the 1980s and 90s, the three big network stations—ABC, NBC, and CBS—and, to a lesser extent, Fox, formed an oligopoly of sorts; 90% of viewers chose network stations when watching television during primetime hours. During this time, it was typical for a high-performing network program to receive Nielsen ratings between 30 and 40—which means the estimated number of households watching the program is 30-40% of all the households in the U.S. that own a television (Mittell, 2010).

As cable and satellite distribution grew, non-network channels began to offer shows during primetime hours. These shows compete with and often win viewers from network stations, though network stations still hold the majority share of viewers during primetime hours. Cable networks are able to more narrowly define their brand to target specific audiences, whereas broadcast networks still aim to serve a wide audience. As a result, networks today expect ratings of 10-20 for top-performing programs, and cable channels' ratings goals are usually between 1 and 5 (Mittell, 2010).

For broadcast networks, the growing primetime viewership rates for non-broadcast networks represents a competitive threat—a threat that continued to increase over the past several decades. In order to profit, broadcast networks must attract and maintain viewers' attention. As will be discussed later, the increasing competition for viewer attention corresponds with accelerated pacing, changes in the use and function of sound, increases in the visual complexity, and increases in the narrative complexity of television programming.

The Switch from Analog to Digital Over-the-Air Signals

From 1940 to the mid-1990s, there was relatively little change in the formatting of television broadcast signals. In 1941, the National Television System Committee (NTSC) determined that television broadcasts should be formatted with 4:3 (1.33:1) aspect ratio, a resolution of 525 horizontal lines, and a frame rate of 30 screens per second. In 1953, color broadcasting formats were approved by the FCC, but many programs remained in the black and white format until the mid-1960s, when the big three networks converted all programming to color. In 1984, the FCC approved another change in formatting—the switch from monophonic sound to stereophonic multichannel television sound (MTS) (Brooks & Marsh, 2007; Mittel, 2010).

Historically, each technological advancement in television broadcasting leads to a greater sense of realism. For example, the change from black and white pictures to color pictures allowed audiences a more accurate vision of each setting and character. Likewise the change from monophonic sound to stereophonic sound offered viewers higher-quality sound, creating a more life-like portrayal of sound in television programming. Recent changes in television technology—most notably digital television and high-definition broadcasting—have greatly enhanced auditory and visual clarity, allowing television programming to render sights and sounds that are more genuine and compelling than ever before.

Digital television (DTV) allows for more content to be translated across a spectrum of the same size, as compared to analog television. A digital-based channel has the capacity to accommodate multiple Standard Definition programming options at once or a single High Definition programming option. An analog-based channel, by contrast can accommodate only a single standard definition program. Digital television also allows for higher-quality sound to be transmitted. In 1996, Congress allowed each broadcast channel to acquire an extra channel in order to broadcast both a digital-based and analog-based channel (DTV.gov, n.d.).

In early 2007, the FCC ruled that all new television sets must include a digital tuner; at that time, retailers were required to—for all television sets without a built-in digital tuner—use signage to inform buyers that in 2009 the format of over-the-air broadcasts would switch to DTV and that after the switch, an analog-only tuner would not be able to receive a signal without a signal converter device (DTV.gov, n.d.).

In June 2009, a government-mandated transition began in which stations broadcasting both analog and digital over-the-air broadcasts offered digital-only broadcasts; after this change, television viewers could only view network signals using a television set with a built-in digital tuner or a digital-to-analog converter box for analog-only television sets. The transition resulted in a slight decrease in the number of households that watch television (DTV.gov, n.d.; The Nielsen Company, 2011a).

With the advent of digital programming and television sets with high-definition visual resolution capabilities came a rise in high-definition (HD) programming. HD programming offers audiences a clearer, more detailed picture by displaying a higher number of dots per inch.

Jeremy Butler explains that this higher-quality image enhances the televisuality of the programming by offering an image that is a close-to-perfect representation of that which is being filmed (Butler, 2010). Such picture quality allows for more intricate and engaging visual images in television programming.

Sponsorship and Commercials

In addition to vast changes in programming options and technology, changes in the financial structure of television have taken place over the past six decades. During the early era of television—the 1950s and early 1960s—the majority of programs had ties to a specific sponsor company. *Father Knows Best*, for example, was sponsored by Scott Paper Company during the 1957-1958 season (Liebman, 1995; *Sponsored openings*, n.d.). One basic way this may have muted the televisual style of early television was that there was a uniformity of advertising messages on any given sponsored program. Most—if not all—of the commercials would be for a single product or company, and often, therefore, in one basic homogenous style. However, sponsorship did not solely affect the style of television programming in relation to the commercials; the style and content of television programming as a whole was affected.

In the 1950s and early 1960s, sponsor companies purchased the time slots in which programs would run, and thus had the right to exert a direct influence on the shows' content. A sponsor company often provided substantial financial support for production of a program, and sometimes sponsor companies even acted as co-creators and/or producers of the programs they sponsored (Liebman, 1995).

Sponsors such as the Scott Paper Company desired programming that would enhance the image of their products; in 1956, Lawrence Laurent summed up the goals of companies in sponsoring programs:

> If the sponsor is trying to win 100 percent acceptance of his product, he is likely to prefer a program which will appeal to 100 percent of the audience.…The idea [in creating family situation comedies] is to have a TV family which closely approximates the family of the viewer. Having identified itself with the television family, the viewing family is similarly expected to identify itself with the sponsor of the TV family. (Liebman, 1995, pp. 58-59).

Laurent's comment illustrates two concepts that distinguish sponsored programming 1950s and early 1960s. First, the goal in creating programming content—especially content used in family sitcoms—was to appeal to a wide audience, which included family members of all ages. Second, it was expected that the content of a program would directly affect the way in which consumers perceived the sponsor's product.

In *Living Room Lectures*, Nina Liebman suggests that although sponsors wanted their viewers to identify with the characters of television programs, sponsors may have consciously worked to

limit the extent to which viewers were emotionally and cognitively stimulated by programming. For this reason, sponsors often advocated "a blandness among programming." Liebman cites Bob Shanks, former vice-president for programming at ABC:

> Program makers are supposed to devise and produce shows that will attract mass audiences without unduly offending these audiences or too deeply moving them emotionally. Such ruffling, it is thought, will interfere with their ability to receive, recall, and respond to the commercial message (Barnouw, 1978, p. 114; Liebman, 1995, p. 57).

Although sponsor companies did exert great influence over the content of shows, sponsors' presence in the equation of television programming economics diminished the influence of ratings in determining a programs' success and longevity. *Father Knows Best*, for example, received very poor ratings during its first season on television, but escaped cancellation because the president of Scott Paper Company was fond of the program. Scott Paper Company sponsored *Father Knows Best* on a different network and in a different timeslot, where it enjoyed significantly more success (Liebman, 1995; Brooks & Marsh, 2007). Several subsequent seasons of the program reached top-thirty in viewership rankings, peaking at #6 with a rating of 29.7 (Brooks & Marsh, 2007). The show also won several awards, including two Emmys for Robert Young and three Emmys for Jane Wyatt (Kassel, n.d.; *Awards for "Father Knows Best."* 2012).

After the mid-1960s, sponsorship of shows was no longer the norm, and programs typically featured multiple advertisers—and therefore potentially multiple televisual styles during commercial breaks. Economically, then, it is very unusual for any one advertiser or brand to have the ability to exert influence on a show's creative direction. However, advertisers collectively establish significant economic influence over shows' content. Advertisers can choose that their commercials not be aired during specific shows. Although the actions of a single company choosing not to advertise during a specific show is unlikely to affect the show's profitability, groups of advertisers opting not to sponsor a show can lessen network profits. This effect is illustrated by the case of the controversial MTV show, *Skins*, which aired for only ten episodes in spring 2011.

Skins, a show about the lives of a group of high-school students, featured heavy experimentation with sex, drugs, and lawbreaking, which was worrisome to the Parents Television Council. As many of the actors were under 18, the PTC claimed that some scenes from the show could be classified as child pornography (*Skins on MTV*, 2011). Advertisers including L'Oreal, Subway, General Motors, Taco Bell, Wrigley and H&R Block pulled their ads from *Skins*. Other companies did not rush to fill the vacant ad space, and the majority of the spots were filled with promos for other MTV shows (de Moraes, 2011). Advertiser behavior in response to *Skins'* controversial content is proof that advertisers still care about the potential effect a show's content can have on advertisers' images.

Although a shortage of mainstream advertisers can have a negative financial impact on a show, ratings still play a big role in networks' decisions to renew or cancel a show. In the example of

Skins, MTV decided to cancel the show after only ten episodes. MTV cited poor audience reception and low viewership rates as reasons for cancellation (Warner, 2011). Even though MTV did not acknowledge the lack of advertiser support as influencing the decision to cancel *Skins*, it is likely that the lack of advertisers played at least a small role in the show's cancellation. Ultimately, though, the show was cancelled because of low ratings.

Individual advertiser companies no longer overrule poor ratings in the financial equation that determines networks' programming schedules, but ratings are not necessarily the final say in a program's termination. In some cases, input from fans can play a significant role in network decision-making. One such example is NBC's *Friday Night Lights*, which regularly posted low ratings despite critical acclaim and fans who an NBC executive described as "passionate and vocal" (Ryan, 2007, para. 22). *Friday Night Lights* was almost cancelled after its first season, but fan response—including an online petition at www.savefridaynightlights.com—helped tip the scales in favor of renewing the series (*Save Friday Night Lights*, 2007). The program's loyal fans were also responsible for the show's renewal beyond the second season. Even though it was not a financially sound option for NBC to continue airing *Friday Night Lights* after the second season ended in 2008, NBC was able to work out a deal with DirecTV in which episodes of Friday Night Lights aired first on DirecTV's 101 Network, and then later on NBC. The series ended in 2011 after a total of five seasons (Ostrow, 2008). Fans advocating for *Friday Night Lights*—much like sponsor support in the 1950s and early 1960s—played an integral role in the series' renewal despite lackluster ratings. Like *Father Knows Best*, *Friday Night Lights* achieved critical acclaim after being saved from cancellation. *Friday Night Lights* has been nominated for nearly 50 awards, and has won numerous awards, including three Emmys (*Awards for "Friday Night Lights,"* 2012). As will be discussed later, the distinctive look, style, or narrative components of a program may be a significant factor in creating especially engrossing television programs that audiences want to watch multiple times. In such cases, programs often generate additional revenue through DVD sales, streamed content, or syndication, which occur after the original broadcasting of a program.

Over the past six decades, there have been significant changes in programming options, technology, and the financial structure of the television industry. Such changes have affected not only the necessity for television to capture viewer attention, but also the methods used to attract and retain viewers. These changes in television programming, however, are meaningful only because of the dominance of the television medium in U.S. culture. In accordance with the arguments of Postman and Mittell, the ubiquity of the television in the life of the average U.S. citizen indicates that television modifies—and also reflects—U.S. communication norms in the late 20th and early 21st century.

HISTORY OF TELEVISION USAGE

Television Ownership Trends

From 1950 to present, the number of households with televisions has risen. In 1950, only 9% of U.S. households owned a television. By 1955, television ownership had grown to account for 64.5% of U.S. households. Between 1955 and 1960, penetration again grew significantly, with 87.1% of U.S. households owning at least one television in 1960. By 1965, television penetration rates had risen to 92.6%, and by 1985, penetration rates were at 98%; penetration rates have remained relatively stable since then (Television Bureau of Advertising, Inc., 2011). In 2006, 64% of people in the U.S. said that a television is an item that they view as a necessity they could not live without; and 98% reported owning a television (Taylor, Funk, & Clark, 2006). The number of households in the U.S. that own one or more televisions rose to a high of 98.9% in 2010, then decreased in 2011, for the first time in nearly 20 years. The most current figures indicate that approximately 96.7% of households in the U.S. own at least one television, a 2.2% drop from the 2010 numbers (The Nielsen Company, 2011a). This slight drop in television ownership does not necessarily signify a drop in television-viewing habits, but rather, may reflect the increasing trend of watching television programming via the internet, which will be discussed later in this section.

Among those in the U.S. who do own a television, many are able to receive higher-quality HDTV signals via their television set. As of the first quarter of 2011, close to 70% of U.S. households own a high-definition television; this represents a 20% increase in a single year (The Nielsen Company, 2011b).

As television ownership rates have risen, so have the number of households with more than one television. In 1955, only 2.9% of television households owned more than one television set. By 1985, the percentage of television households with more than one television set had risen to 56.8%, and by 1990 the percentage had risen to 65.3%. In 2012, it is estimated that 84.4% of television households own multiple television sets (Television Bureau of Advertising, Inc., 2011). In 2010, it was reported that the average U.S. household had 2.93 television sets (The Nielsen Company, 2010).

In addition to a general trend of increasing television ownership rates, the options for watching programming have expanded beyond the television set in recent years. Viewers can access programming via the internet—through network web sites, subscription services, or illegal streaming/sharing sites. With these relatively new options, viewers can watch television programming via the internet on their computers, mobile phones, tablets, and even certain gaming systems. The number of people watching mobile video in the U.S. grew 41% between 2010 and 2011. In the first quarter of 2011, individuals in the U.S. spent an average of 4 hours and 33 minutes watching television content on the internet each month, a figure that rose an hour and ten minutes since the first quarter of 2010 (The Nielsen Company, 2011b).

Television Viewing Habits

Since then 1950s, the general trend in television viewership has been up. In 1950, the average household spent four hours and 35 minutes watching television per day; by 1985, the average amount of television watched per day per household had risen to seven hours and ten minutes; and in 2009, the average amount of time spent watching television per household had increased to eight hours and 21 minutes per day (Television Bureau of Advertising, Inc., 2011). As the number of televisions per household began to increase, Nielsen began measuring the amount of time individual viewers spend watching television programming as well as the amount of time an entire household spends watching television. Consistent with the trends of households as a whole, individual television viewing time continues to increase. Between the first quarter of 2010 and the first quarter of 2011, television viewership—including traditional viewing, mobile viewing, and Internet viewing—rose by an average of 22 minutes per month per person in the U.S. (The Nielsen Company, 2011b). The highest quintile (top 20%) of viewers watch almost ten hours of television per day, and the lowest quintile (bottom 20%) watch an average of about an hour of television per day (The Nielsen Company, 2011b). On average, people in the U.S. watch 33 hours of television per week (The Nielsen Company, 2011c).

Even though online television-watching habits continue to grow and become more pervasive in the U.S., traditional television viewing is still the dominant method of program viewing. Less than one percent of the population says they do not watch traditional television, and more than a third of the population says they do not stream TV over the internet (The Nielsen Company, 2011b).

The increase in the number of televisions per household, as well as the increase on non-traditional viewing methods such as mobile and internet, has given broadcast and cable networks the opportunity to segment their programming to appeal to different, more specific audiences. In the 1950s, when watching television was an event that the entire family took part in together, advertisers sought to sponsor programming that appealed to family members of all ages, because it was more likely that such programs would be viewed (Liebman, 1995). By the mid-1980s, members of more than 60% of U.S. households could choose to watch television programs separately from other family members, making it possible for programming focused on a certain age group to become profitable. For example, cable network MTV strives to appeal to adolescent and young adult viewers; in 2005, MTV was reported to be the top-rated network among viewers in the 12-24 age range (Downey, 2005). It is probable that without the prevalence of households with multiple televisions, highly segmented networks such as MTV would see significantly diminished viewership rates, as their programming does not hold universal appeal to all age demographics. The majority of broadcast networks, though, still seek to appeal to wide audiences during primetime, evidenced by the fact that their ratings success is often measured and compared in the 18-49 age range.

The faction of U.S. who are television viewers comprises nearly the entire population. Further, the time spent watching television is quite high—even the lowest uses average an hour of television viewing per day. Heavy television users may spend nearly two-thirds of their waking

hours watching television. The television medium is omnipresent in the mid-to-late-20th century and early 21st century U.S. society, and changes in the medium's content and structure have implications for U.S. culture as a whole.

Web Video

Web video—though it cannot technically be classified as television programming—is a trend that cannot be ignored in a discussion of 21st century television viewing habits. In July of 2011, about 180 million people in the U.S.—86% of the country's total internet users—watched online video content, spending an average of 18.5 hours per viewer during the month (comScore, 2011). For U.S. citizens ages 12-17, more than 30% of total internet time is spent watching video (The Nielsen Company, 2011b). Another 2011 report indicates that 71% of the total internet users in the U.S. use video-sharing sites such as YouTube and Vimeo, an increase of 5% from 2010, and an increase of 48% from 2006. Use of video-sharing sites among 18-29-year-olds is very high, as 92% of internet users in this age range say they use such sites (Moore, 2011).

In recent years, television networks have used web video to complement and enhance their traditional programming. For example, the Office released several series of "webisodes," digital shorts featuring short storylines between small groups of characters. The webisodes were so successful and popular that NBC has released a DVD solely consisting of the digital content available on the web (*The Office digital shorts collection*, 2012).[1]

Audience attention to web videos is markedly different than attention to traditional television. Online video viewers have vast entertainment options just a click away, including websites, games, social media outlets, and, of course, other video. A 2008 study found that, on average, more than 53% of viewers click away from short-form video content by the time a minute has elapsed. Notably, the study only examined viewer attention to short-form content videos; the sample did not include television episodes available online. While watching short videos online, audiences expect to be entertained for the full length of the video; if viewers become bored, they will click away and stop watching the video within a few seconds. In order to keep viewers from clicking away, web videos must be engaging enough to maintain a viewer's attention for the full length of the video. Further, based on the results of the 2008 study, the longer the video, the less likely the viewer is to remain engaged (TubeMogul, 2008).

The popularity of web video has risen significantly in the past decade, and is likely to continue to grow in coming years. The level of engagement viewers expect from web video—and the consequent changes in style and content of web video—may have changed, or reflect changes in, viewer expectations for television programming.

[1] External materials (such as webisodes) created to complement a television show are categorized as "paratexts" by Jonathan Gray (Gray, 2010). Further discussion of paratexts will be included in the "Changes in Narrative Complexity" section.

Changes in Viewer Attention Patterns and Distraction

As detailed earlier, the majority of television content is supported by advertisers. Programs with higher viewership ratings draw more revenue from advertisers, and thus are more profitable. However, the way viewers watch and pay attention to television programming and the accompanying advertisements is also relevant to the economies of television, and thus has been studied. Such studies reveal changes in viewer attention patterns over the past six decades.

In "Television/Sound," Rick Altman offers insight into viewer behavior during the era of television dominated by broadcast networks, citing a 1971 study by Bechtel et al. in which families were videotaped to reveal viewing habits. According to Altman,

> this study revealed that for much of the reported viewing time, families were not actually viewing—even though the television might have been on…programs were actually watched from 55 percent of the time (commercials) to 76 percent of the time (movies) while the set was on (Altman, 1986, p. 42).

Altman also cites a study, published in 1972 by LoSciuto, which found,

> 34 percent of the programs listed in [Nielsen] viewing diaries as "watched" were in fact intermittently watched or only overheard as the respondent engaged in other activities (in order of frequency: work, housework, eating, talking, reading, child care, sewing, personal care, hobbies, and schoolwork) (Altman, 1986, pp. 41-42).

The ten distractions noted by LoSciuto in 1972 are still activities people in the U.S. take part in while viewing television programs, but new distractions have become prevalent as well. The advent of mobile phones—and especially the more recent rise in internet-capable smart phones and tablets—represents additional threats to viewer attention. Recently, a focus group study by Strategy Analytics found that multi-screen users were "significantly distracted from the first screen [in this case, television] by their mobile phones and tablets" (Smith, 2011, para. 1).

However, contrary to the previous framework for audience attention, in which viewers take part in distracting activities during the show as well as during commercial breaks, the study of multi-screen users showed that these viewers tended to stopped paying attention during commercial breaks, and resumed watching the show after the ads were over. In fact, the study found that "users [of mobile phones and tablets] liked casual mobile games where the game play fit neatly into ad breaks. They wanted games that could be stopped quickly and easily when the show came on" (Smith, 2011, para. 9).

Despite the fact that viewer attention is higher during the show than during the commercials, viewers are not devoting 100% of their attention to the program content 100% of the time. The author of the Strategy Analytics study, Caroline Parks, explains, "Multi-screen users very rarely concentrate on a television show in its entirety" (Smith, 2011, para. 5). However, Parks sees utility in the shift in viewer attention, as it "offers new opportunities for viewer engagement" (Smith, 2011, para. 5).

Broadcast and cable networks are taking advantage of such opportunities by creating apps and social media tie-ins that viewers can use to interact with other fans, access bonus content related to the show, and—in some cases—create content for the show. Cable network, Bravo, for example integrates social media with several of the shows in its lineup. One of Bravo's apps—available for iPhone and iPad users—is the "Bravo Now" app, which allows fans to share their thoughts with each other, and also offers fans behind-the-scenes content such as comments from show producers and cast members. The description for the "Bravo Now" app is:

> Can't contain your thoughts when you watch Bravo shows? Join the conversation with the Bravo Now app, which lets you share with other fans -- and even the show's stars. As you watch premiere episodes, get instant reactions from Bravolebrities, producers, and other insiders, and add your own thoughts via Facebook and Twitter. Plus, take polls, watch instant replay of the night's best moments, and get the inside scoop about what happened behind-the-scenes. While you're at it, you can download full episodes of Bravo shows, watch previews and never-seen clips, or find out what cast members really think in their blogs. Re-live your top Bravo moments by saving them to your Favorites page, or send them to your friends. Don't miss out on what everyone is buzzing about -- get Bravo Now! (NBC Universal, Inc., 2011).

Bravo also offers viewers the opportunity to get involved in creating show content, as viewers can submit questions via twitter, phone, or email in real time for celebrities appearing on *Watch What Happens* Live, a half-hour, live, interview-style show aired five nights per week (Hampp, 2011). Additionally, in early 2012, Bravo began airing "social editions" of episodes in the *Real Housewives* series. The "social edition" of each episode features fans' tweets that appeared during the episode's premiere airing; tweets are highlighted in a chromakeyed box at the bottom of the screen (The Dish, 2012). The integration of social media into television shows is thought to allow viewers to engage with television programming, and will likely continue to increase as smart phone and tablet penetration rises in the U.S.[2]

In *Amusing Ourselves to Death: Public Discourse in the Age of Show Business*, Neil Postman suggests that the use of television affects the way people in the U.S. consume other media, saying:

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[2] Bravo's extensive use of social media and apps is another example of the use of paratexts in contemporary television.

> Our use of other media, for example, is largely orchestrated by television. Through it [television programming] we learn what telephone system to use, what movies to see, what books, records and magazine to buy, what radio programs to listen to. Television arranges our communications environment for us in ways that no other medium has the power to do (Postman, 1985, p. 78).

This statement was written about television in 1985, yet Postman's words could easily describe the role of the internet as the hub of communication and entertainment media in the beginning of the 21st century. Instead of being the veritable hub of media consumption, television today is subject to the effects of the internet as a moderator variable. Several scholars have argued that the processing speed and visual formatting of internet sites has lessened the average attention span and modified the spatial attention patterns of the U.S. public; the impact of the internet on media consumers' preferences, then, has led to alterations in pacing, format, and complexity of other media—including television programming (Carr, 2010). As the effect of internet usage on television viewing habits continues to increase, broadcast and cable networks must continue to conform their programming to fit the changing needs of consumers.

As with changes in television technology, programming options, and financial structure, changes in television usage and attention patterns over the past six decades provide historical context for transformations in the style and content of programming. As suggested earlier, the accelerated pace of all media—including television—is one such change. Shifting trends in the television industry correspond with other changes, too, including sound use, visual complexity, and narrative complexity.

COMPLEXITY IN AUDITORY, VISUAL, AND NARRATIVE STRUCTURE

Viewer Attention and Changes in Auditory Structure

As discussed in the previous sections, the nature of television economics and television usage may influence how the medium communicates. Rick Altman asserts this point explicitly in an analysis of the role of sound in television programming. Altman argues that two viewership-related factors have historically had significant weight in determining the flow of television programs, thus also affecting the sound used in television programs: "1) competition for spectators is allowed to govern the broadcasting situation, and 2) television revenues increase with increased viewing" (Altman, 1986, p. 40). These two factors, Altman argues, have a direct bearing on the type, placement, and frequency of sound used in television programming. Sound's purpose in television programs is, according to Altman, directly related to trends in viewers' attention and the economic incentive for networks to convince families to keep their television set on, even if families were not actively watching programming.

The prevalence of distractions such as housework, eating, talking, schoolwork, and other activities, Altman argues, necessitates the use of certain tactics to keep viewers apprised of the general trajectory of the storyline, as well as to signal to viewers that an important or funny moment is soon to take place. Altman poses that these signals are auditory, and that viewers are likely to resume paying full attention to a program (watching as well as listening) when they are alerted—via sound—that something noteworthy is about to occur. In *Living Room Lectures*, Liebman uses quotes from Altman's "Television/Sound" to summarize Altman's theory that writers and producers historically compensated for viewers' wavering visual attention by inserting auditory cues into the program:

> There is a growing body of data suggesting that intermittent attention is in fact the dominant mode of television viewing….
>
> The sound track thus begins to take on an active role. In order to keep those [television] sets operating while all viewers are either out of the room or paying little attention, the sound track must perform some quite specific functions…
>
> There must be a sense that *anything really important* will be cued by the sound track….
>
> The sound itself must provide desired information, events, or emotions from time to time during the flow (Liebman, 1995, p. 67).

Altman also explains, "The auditor must be convinced that the sound track provides sufficient plot or informational continuity even when the image is not visible. For example, it must be possible to follow the plot of a soap opera from the kitchen" (Altman, 1986, p. 42).

Producers' desire to keep the television set operating even when viewers are not actively watching the show is a result of the Nielsen rating system, which represents the programs that are aired during the time the television is turned on, and not on the programs that are actively being watched. Higher ratings, of course, resulted in higher show revenues and a higher

likelihood of renewal by the host network. By adding auditory cues such as voiceovers, monologues, background music, laugh tracks, and other non-diagetic sounds, show executives eliminated the need to be looking at the screen in order to understand the content of the program, thereby allowing people to engage in distracting behaviors while simultaneously acting as passive viewers of a program (Liebman, 1995).

But such incentives, and thus the nature of sound use in television, may be less universally applicable to programs now than in earlier eras. In *Television Style*, Jeremy Butler offers evidence that the model of accommodating viewers' tendency for distracting behaviors is less common in television shows produced in recent decades. Butler uses the example of *Miami Vice*—a drama which ran from 1984-1990 (*Miami Vice*, 2012)—to illustrate his point, explaining that *Miami Vice*, unlike programs from decades past, "rewards the sustained gaze of the viewer" (Butler, 2010, p. 71). Butler cites *Miami Vice*'s minimal use of music and ambient sound, both of which might have been considered necessary sound cues by Altman; the lack of these auditory elements compel the viewer to visually focus on the screen. Butler argues that the style of *Miami Vice*—including the lack of sound cues as well as the scripting and editing of the show which compels viewers to watch and pay attention—conflicts with "the widely held assumption…that broadcast television does not command our attention the way a film in a theater does" (Butler, 2010, p. 71). Butler notes that many other recent shows have followed this trend as well, including a several popular sitcoms in the 2000s. Based on the divergence between Altman's and Butler's observations, the role of sound in programming has become more variable as the aesthetics of television have become more complex.

Changes in Visual Complexity

As the role of sound in programming has changed, so has the complexity of visual aspects of television programming. Postman contends that the visual elements of television programming are at the heart of the medium, noting "'good television' has…everything to do with what the pictoral images look like" (Postman, 1985, pp. 87-88), and asserting that television is governed by "the requirements of visual interests." Postman explains,

> The single most important fact about television is that people *watch* it…and what they watch, and like to watch, are moving pictures—millions of them, of short duration and dynamic variety. It is in the nature of the medium that it must…accommodate the requirements of visual interest (Postman, 1985, p. 92).

In the mid-1980s, when Postman's *Amusing Ourselves to Death: Public Discourse in the Age of Show Business* was published, the balance between the importance of sound cues and the role of visual engagement was beginning to shift to favor visual stimulation. Butler argues that the *mise-en-scène*—the combination of cinematic or videographic elements that form visual style—of many television programs in the past three decades has changed to create a more engaging visual experience for viewers (Butler, 2010).

Butler asserts that in the early days of television, the focus of camerawork and editing was to "capture live performance" (Butler, 2010, p. 197). This paradigm held that the goal of programming was to provide a "window on the world" for viewers, with minimal visual complexity of style; this held true for sitcoms produced using the single-camera mode of production, as well as sitcoms filmed in front of a live studio audience using the multi-camera form of production (Butler, 2010).

In his 1995 work, *Televisuality: Style, Crisis, and Authority in American Television*, John Thornton Caldwell proposes that the visual elements of television have come to supersede the narrative and auditory elements of programming. He calls this new focus on visual style "televisuality."

> Rather than the "window on the world" concept that was so important in the early years of television, contemporary televisuality flaunts "videographic art-objects" of the world; rather than the concept of the cinematic "fiction effect," a psychoanalytic notion premised on the viewer's need to deny the apparatus, televisuality flaunts the digital apparatus. There is no attempt to deny the video picturing process in the new television. Rather, the objectification of the televisual apparatus is dramatically evident in its appetite for the pictorial artifact, surfaces, and images. The *new television does not depend upon the reality effect or the fiction effect, but upon the picture effect* (Caldwell, 1995, p. 152).

One aspect of the picture effect that heightens visual complexity and contributes to televisual style is the average length of shots, which has accelerated over the past six decades, as discussed previously.

Caldwell and Butler both cite *Miami Vice* as an example of one of the earliest series to exemplify the shift of emphasizing and intensifying visual style in the production of television programming. Butler shares a quote from John Fiske: "The look, the style, of *Miami Vice is* its character, its spectacle is the source of its pleasure" (Butler, 2010, p. 70). The visually engaging nature of *Miami Vice* created a new paradigm for television production—an expectation that television has the capacity to capture viewers' sustained attention.

The televisual style, argues Butler, is "organized to allow the medium itself to perform. In the televisual schema, style is aggressive, roughened, and opaque, not smooth and transparent. It carries meaning. It makes jokes. It might call attention to itself" (Butler, 2010, p. 197). Such style has become increasingly popular in single-camera sitcoms of the 2000s, including *Scrubs*, *Arrested Development*, *My Name is Earl*, and *The Office* (Butler, 2010).

Changes in Narrative Complexity

Steven Johnson, in *Everything Bad Is Good For You*, argues that the narrative complexity of television scripting increased significantly over the past several decades, requiring viewers to be more cognitively engaged in programming in order to comprehend the program's story. Three

elements characterize today's cognitively stimulating programming: multiple threading, more complex social networks, and the necessity for viewers to assimilate external information to comprehend and appreciate the humor in a scene and/or episode (Johnson, 2006).

Multiple-threaded plots. One of the facets of television programming that has become more complex is the use of multiple plotlines and sub-plotlines. Johnson asserts that the cognitive value of such complex narratives is that they require viewers to "do work to make sense of them" (Johnson, 2006, p. 63). In order to keep track of multiple plotlines and sub-plotlines, viewers must have the cognitive acuity to sort and analyze action and dialogue as it happens, evaluating each narrative clue to determine its fit in the trajectory of the episode's story, as well as that of the series as a whole.

Johnson uses the example of *Hill Street Blues*—a drama that ran from 1981-1987 (*Hill Street Blues*, 2012)—to illustrate the shift in narrative complexity in recent decades. *Hill Street Blues* was one of the first television shows to offer simultaneous plot threads—sometimes as many as ten per hour-long episode, and the program received lukewarm reception from audiences unaccustomed to multiple threading:

> Before *Hill Street*, the conventional wisdom among television execs was that audiences wouldn't be comfortable following more than three plots in a single episode, and indeed, the first test screening of the *Hill Street* pilot in May 1980 brought complaints from viewers that the show was too complicated (Johnson, 2006, p. 71).

Although the narrative complexity of *Hill Street Blues* was groundbreaking in the 1980s, it is uncommon to find a drama among current television programs that does not utilize the complex, multi-threaded format. In fact, the interplay of plot threads in *Hill Street Blues* is significantly simpler than that of many contemporary dramas such as *The Sopranos*, *ER*, and *24*. In general, plot complexity, as measured by multiple threading, "is trending upward at a dramatic rate" (Johnson, 2006, p. 63).

Social networks. Johnson also asserts that the number of characters, as well as the complexity of relationships between characters, has seen substantial increases across various genres of television programming. The more characters involved in a program or episode—and the more nuanced each character's relationship is with other characters—the more information viewers must process and assimilate to understand the program's storyline (Johnson, 2006). Thus, the more characters involved in a television program, and the greater the depth of relationships between these characters, the more complex the program's narrative.

Assimilation of external information. Johnson offers another narrative element that has grown in recent decades: the need for viewers to assimilate external information to fully appreciate and/or understand the narrative. Johnson calls this "'filling in': making sense of information that has been either deliberately withheld or left obscure" (Johnson, 2006, p. 63). In the mid-1980s, Neil Postman noted that television programming seemed to adhere to the following commandments concerning external knowledge: 1) "Thou shalt have no prerequisites,"

meaning, “every television program must be a complete package in itself. No previous knowledge is to be required.” And 2) “Thou shalt induce no perplexity,” meaning “there must be nothing that has to be remembered, studied, applied, or, worst of all, endured. It is assumed that any information, story, or idea can be made immediately accessible, since the contentment…of the learner is paramount” (Postman, 1985, pp. 147-48). Based on Postman’s analysis, television shows prior to the mid-1980s required little frame of reference beyond the scope of an individual episode within a program.

This need for viewers to “fill in” information is especially relevant in the evaluation of changes in sitcoms over the past several decades. Johnson differentiates between “intelligent shows and shows that force you to be intelligent” (Johnson, 2006, p. 64). Intelligent scripted shows are peppered throughout the history of television, and include sitcoms such as *The Mary Tyler Moore Show*, *Murphy Brown*, and *Frasier*; these shows are considered intelligent because of the level of discourse between characters and creativity in scripting the show.

> They [the characters] say witty things to each other, and avoid lapsing into tired sitcom clichés, and we smile along in our living room, enjoying the company of these smart people. But assuming we’re bright enough to understand the sentences they’re saying—few of which are rocket science, mind you, or any kind of science, for that matter—there’s no intellectual labor involved in enjoying the show as a viewer. There’s no filling in, because the intellectual achievement exists entirely on the other side of the screen…The intellectual work is happening onscreen, not off (Johnson, 2006, p. 64).

Many sitcoms of the 1990s and 2000s—including *Seinfeld*, *Scrubs*, *Arrested Development*, and *Friends*—represent a shift in the balance intellectual activity. Instead of relying primarily on onscreen-only humor, these shows used a combination of onscreen and offscreen references. Johnson uses several examples from *Seinfeld*—which aired from 1990-1998—to illustrate noteworthy trends in sitcom humor over the past several decades (Johnson, 2006).

Some of the humor requiring offscreen knowledge involves references to events that occurred in previous episodes of the program. For example, in *Seinfeld*, it is explained in one episode that George calls himself “Art Vandalay” when he is in awkward social situations; a total of seven later episodes in the show continue to reference “Art Vandalay.” In the first reference to “Art Vandalay,” the joke is set up, but in subsequent episodes the joke is not explained; rather, viewers must recall George’s alias and apply that knowledge in order to appreciate the joke. Johnson explains why *Seinfeld*’s use of cross-episode setup and payoff represents a revolution in sitcom scripting:

> It’s funny because it’s making a subtle nod to past events held offscreen. It’s…a joke that’s funny only to people who get the reference. And in this case, the reference is to a few fleeting lines in a handful of episodes—most of which aired years before. Television comedy once worked on the scale of thirty seconds: you’d have a setup line, and then a punch line, and then the process would start all over again. With Seinfeld, the gap between setup and punch line could sometimes last five years (Johnson, 2006, p. 86).

The capacity for viewers to recall information from previous episodes and integrate it into their understanding of the current episode necessitates a higher level of cognitive involvement than is required for episodes in which all comedic references are self-contained within the scope of the individual episode.

Other instances of humor requiring external knowledge include the scripting of allegorical episodes, which echo movie plots and/or current events. One Halloween-themed allegorical episode of *Seinfeld* in 1995 combined references to fifteen famous scary movies including *Nightmare on Elm Street*, *Ghostbusters*, *The Shining*, *Godzilla*, and *Poltergeist* (Johnson, 2006). In order to recognize allegorical references, viewers must be able to make connections between the action and dialogue within a program's scenes and the events the show is referencing. This process requires a higher level of cognitive functioning than the simple setup-payoff format of shows that incorporate strictly onscreen comedy. As with *Seinfeld*-specific offscreen references, the increased demand on cognitive processing required for viewers to get the joke of allegorical episodes represents a higher level of narrative complexity than was present in earlier sitcoms.

Some external knowledge is created as extra material. Jonathan Gray notes extensive use of paratexts—ancillary materials that are created about a TV show and that can add to the program's informational complexity—in contemporary U.S. television. One example of the use of paratexts, as noted in an earlier section, is *The Office*'s "webisodes," which feature characters from *The Office* taking part in activities after work. Plotlines in the *The Office* webisodes serve to further develop relationships between characters on the program. Also, events from the webisodes are sometimes referenced in regular episodes of *The Office*. Thus, information conveyed via *The Office*'s paratexts helps to enhance the experience of watching regular episodes of *The Office*.

A revolutionary, but lesser-used tactic of humor displayed by *Seinfeld* is one in which the punch line is offered before the setup. Such jokes go virtually unnoticed by viewers who watch the episode for the first time, but upon subsequent viewings, because viewers know what is going to happen, new layers of humor become apparent:

> The episodes often grow *more* entertaining on a second or third viewing, and they can still reveal new subtleties on the fifth or sixth. The subtle intertwinings of the plots seem more nimble if you know in advance where they're headed (Johnson, 2006, p. 88).

It is cognitively engaging—while watching a given episode for the second time—to synthesize the dialogue and action of the episode one is currently viewing with the dialogue and action one recalls will happen later in the episode. The cognitive demands placed on viewers reflect heightened narrative complexity.

Johnson explains the way in which the narrative of shows such as *Seinfeld* blended offscreen humor with onscreen humor.

> Shows like *Seinfeld* and *The Simpsons* offered a more challenging premise to their viewers: You'll enjoy this more if you're capable of remembering a throwaway line from an episode that aired three years ago, or if you notice that we've framed this one scene so that it echoes the end of *Double Indemnity* [a 1944 film]. The jokes come in layers: you can watch that 1995 Halloween episode and miss all the film riffs and still enjoy the show, but it's a richer, more rewarding experience if you're picking them up (Johnson, 2006, p. 88).

In *Seinfeld* and similarly-scripted shows, the layers of comedy, as well as the level of cognitive processing required to recognize and appreciate some comedic elements, represents a more complex narrative structure than that of sitcoms of Postman's time.

The economy of narrative complexity. According to Johnson, shows with complex narrative structures tend to be exceptionally popular among viewers. "The shows that have made the most demands on their audience," asserts Johnson, "have also turned out to be among the most lucrative in history" (Johnson, 2006, p. 65). Part of the reason these shows are so profitable is their potential for syndication and DVD sales; Johnson explains, "the shows that will prosper will be the ones that can withstand such repeat viewings, while the more one-dimensional series will grow stale" (Johnson, 2006, p. 161). Johnson deems this paradigm the "Most Repeatable Programming (MRP) model," as opposed to the "Least Objectionable Programming (LOP)" model of the early years of television. The LOP model held that networks start out with 1/3 of the total share of viewers, and that any objectionable content would cause viewers to switch to a different channel, resulting in a ratings loss for the network airing the objectionable content. Johnson cites former NBC executive Paul Klein, who explained that networks also avoided shows with "little 'tricks' that cause the loss of audience" (Johnson, 2006, p. 161). These "tricks" included elements that today might be considered engaging elements of a program, including programs that are intellectually complex. Klein explains the old rules for television narrative: "Thought, that's tune-out, education, tune-out. Melodrama's good, you know, a little tear here and there, a little morality tale, that's good. Positive. That's least objectionable."

Johnson's Most Repeatable Programming model, in contrast to the historical LOP model, emphasizes a program's long-term success in addition to short-term ratings:

> The most successful programs in the MRP model are the ones you still want to watch three years after they originally aired, even though you've already seen them three times. The MRP model cultivates nuance and depth; it welcomes "tricks" like backward episodes and dense allusions to Hollywood movies (Johnson, 2006, p. 162).

An example of this is a sitcom like *Seinfeld*, which incorporates levels of comedy—some overt and some subtle. Because such a series is humorous on several levels, viewers who watch episodes from the series multiple times are likely to discern more jokes and recognize subtle or additional comedic details with each subsequent viewing.

The current entertainment market rewards studios for producing programming that allows media consumers to find sustained—or even increased—value in repeated exposure. Complex programs engage viewers time after time, year after year; thus, the number of complex programs continues to increase, and the relative complexity of these programs continues to increase as well.

Changes in television technology, programming options, financial structure, and audience usage and attention patterns over the past six decades coincide with changes in the pacing, use of sound, visual complexity, and narrative complexity in television programming across genres. This study seeks to determine whether such changes are apparent and significant in the specific genre of the domestic sitcom.

METHOD

Overview of Methodology

Content analysis was the primary method used for this study. The goal of content analysis, as summarized by Bernard Berelson in 1952, is "a research technique for the objective, systematic, and quantitative description of the manifest content of communication" (Stempel, 1989, p. 125). The method has a rich history of use among media studies scholars, is empirical in nature, and relies on numerical expression of trends in the subject matter and/or structure of media. In this study, content analysis is used to determine both narrative-related and structural components of television programming. Content analysis for this study involved coding various stylistic and narrative elements of sample sitcom episodes. How these elements were operationalized and the coding process will be discussed in later sections.

The visual, narrative, and auditory elements of television programming that are highlighted in this study cannot be adequately represented by numbers alone. Recognizing this limitation of quantitative measures, qualitative analysis of the samples chosen for the content analysis was conducted in addition to quantitative content analysis.

Clifford G. Christians and James W. Carey, in "The Logic and Aims of Qualitative Research," explain the utility of qualitative research relative to quantitative research: "our purposes differ in qualitative research, so that we are continually building a cumulative perspective that makes the interpretation more penetrating and coherent....interpretive research seeks to capture original meanings validly, yet explicate them on a level that gives the results maximum impact" (Christians & Carey, 1989, pp. 369-370).

Consistent with Christians and Carey's notion, the qualitative research used for this study aims to create greater context for and enhanced description of the trends found in the quantitative research. The goal of the qualitative analysis was to augment, and in some cases qualify, the trends shown in the results of the quantitative study. For example, the quantitative content analysis measures the percentage of scenes for which pan and/or zoom is used, whereas the qualitative analysis examines the changing utility and aesthetic characteristics of camera movement (pan and/or zoom) in each program.

The qualitative analysis includes one decoupage (a breakdown of the program's shot structure) from each of the programs, as well as descriptions of plot, dialogue, and scene construction elements from each of the episodes. The format for the decoupage was based on Jeremy Butler's technique in *Television Style*. Butler explains why he employs the decoupage method of analysis for works of television:

> I agree with authors such as Bordwell, Thompson, and Salt who contend that one must "reverse engineer" media texts in order to fully understand their style. Thus the same attention to detail that scriptwriters, directors, cinematographers, editors, and so on,

> put into the *construction* of a television text must be employed in the *deconstruction* of that text (Butler, 2010, p. 6).

Such deconstruction, asserts Butler, can reveal "the *patterning* of techniques, the syntagmatic and paradigmatic relationships of one element to other elements within a textual system" (Butler, 2010, p. 29). The portrayal of a scene using precise and detailed description of its elements offers greater understanding of the methods of style and formatting used in that scene, shedding light on patterns evident in other scenes from the program as well.

Variables

This study seeks to determine the degree to which broadcast network television sitcoms have changed in their pacing, sound use, visual complexity, and/or narrative complexity over the past six decades. It will use a combination of quantitative content analysis and qualitative textual analysis to analyze the above elements. Each of these larger elements was operationalized to include several specific variables:[3]

- Elements of pacing include average scene length, average shot length, length of title sequence, and percentage of the episode devoted to storytelling.

- Elements of sound use include the use of the laugh track, the use of music, and the use of other non-diagetic sound.

- Elements of visual complexity include the use of camera movement (pan and zoom), the use of text captions, and the total percentage of the episode devoted to moving action.

- Elements of narrative complexity include the number of plotlines per episode, the number of speaking characters per episode, the number of plotlines per episode, the number and complexity of relationships between central characters, the nature of interplay between visual and auditory narrative elements, and the use of humor that assimilates external information.

For the purpose of coding, each episode was split into the following divisions: segments, scenes, cold open, title sequence, and end credits. For each division, the following variables were coded and/or calculated: start time, end time, length, number of shots, average length of shots, storylines featured, speaking characters, number of commercial breaks, total length of commercials, presence of music, presence of laugh track, presence of other non-diagetic sound, presence of text captions, use of animation, use of split-screen image, use of speed manipulation, and use of camera movement.[4]

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[3] Operational definitions for each specific variable are included in the next section, titled "Operational Definitions."

[4] A copy of the coding sheet is included in the Appendix.

For the purpose of decoupage, each shot was dissected to denote changes in scale and length of the shot. The shots were denoted in chronological order, and were numbered to depict their placement in relation to other shots in the scene(s). For each shot, the camera movement, character action, dialogue, and sound use were described.

Operational Definitions[5][6]

A **segment** was operationally defined as an uninterrupted flow of the program between commercial breaks.

A **scene** was operationally defined as a portion of a segment in which the dialogue and/or action is continuous and occurring in one location. The exception to this occurs if characters are physically moving location as a means of action and/or talking on the phone with one another while in two separate locations; both aforementioned scenarios are classified as a single scene. One of the sitcoms analyzed, *Modern Family*, features mockumentary-style interviews with main characters. Each of these mockumentary-style interviews with was considered a scene independent of the scenes before and after; scenes in *Modern Family* that followed the mockumentary-style interview format were noted as such on the coding sheet.

A **shot** was operationally defined as the continuous character motion captured by a single camera.

The **cold open** was operationally defined as one or more scenes aired before the title sequence.

The **title sequence** was operationally defined as the portion of the show in which the name of the show and the cast of characters are presented to the viewer, often with a theme song or music clip played in the background. In the case of *Modern Family*, the actors' and producers' names are not displayed during the title sequence, but instead during the segments preceding and immediately following the title sequence; despite the fact that the names are textually displayed during the segments preceding and immediately following the title sequence, those segments are considered independent of the title sequence for coding purposes.

The **end credits** (also called "closing credits") was operationally defined as the final portion of the show, in which a list of the names of the cast and crew is shown, as well as—in some cases—other pertinent details such as promotional consideration and music used. (Note: In the case of *Modern Family*, the end credits are shown during the final segment.)

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[5] Operational definitions are based on Jason Mittell's *Television and American Culture* (2008) and Jeremy Butler's *Television Style* (2009).

[6] Refer to the Appendix to view the coding sheet.

In order to determine **length**, the **start time** and **end time** of each segment and scene—including cold open, title sequence, and closing credits—were measured. The length of the entire episode was also calculated.

Character action, denoted in the decoupage, is operationally defined as the movement and expressions of characters in the scene.

An **action scene** was operationally defined as a scene in which characters are moving. The percentage of a program devoted to moving action was determined by dividing the number of action scenes by the number of total scenes, including the title sequence and end credits.

A **story scene** was operationally defined as a scene in which characters are moving and contributing new content to one or more of the plotlines of the story. The title credits were not considered story scenes in any of the programs.

For each scene, the number of **shots** was tallied. Then, in order to determine the **average length of shots** in a given scene, the scene length was divided by the number of shots in that scene. Historically, a greater number of shots are not associated with situation comedies. According to Mittell, "rapid rates of editing [rates of editing refers to the number of cuts per scene] are typically used in action sequences to increase excitement and tension" (Mittell, 2010).

The exact **shot length** for each individual shot was calculated (in seconds) for scenes included in the decoupages. The length of each shot was determined by subtracting the shot's start time from the shot's end time.

The **shot scale** was noted for each shot in the scenes included in the decoupages. Shot scale was operationally defined as the amount of magnification of the subject. Shot scales used in the sample include (in order of increasing magnification): long shot, medium long shot, medium shot, and medium close-up.

For each episode, **storylines** were labeled; the storylines included in each segment and scene—including the cold open—were noted.

For each episode, the **name of each speaking character** was recorded. The names of speaking characters appearing in each segment and scene—including the cold open, title sequence, and closing credits—were recorded as well. For each division, and the episode as a whole, the list of speaking characters' names was used to determine the **number of speaking characters**.

The **number of commercial breaks** was logged for each episode. As commercials are not included in DVD recordings of television shows, the existence of a commercial break was determined by the presence of a black frame between two scenes. The **total length of commercials** was calculated by subtracting the total episode length from 30 minutes, as each show was aired in a half-hour time slot.

For each scene, it was noted whether or not **music** was used. “Music” was operationally defined to include scored music, soundtrack music, and diagetic music that is in the narrative world of the characters and thus can be heard by the characters.

For each scene, it also was noted whether a **laugh track** was used. “Laugh track” was operationally defined to include both live in-studio audience response and recorded laughter added during post-production editing.

In addition to coding for the use of music and a laugh track for each scene, the presence or absence of **other non-diagetic sound** was coded. “Other non-diagetic sound” was operationally defined to include any sound that is not native to the scene, and thus would not be heard by a character in the scene. Soundtrack music, score music, and laugh tracks are all considered non-diagetic sound, but are excluded from the operational definition of “other non-diagetic sound” because they are being measured separately.

For shots in the scenes included in the decoupage, **sound use** was described. This includes both diagetic sounds (native to the scene) and non-diagetic sounds (not native to the scene, including laugh track and background music).

The presence or absence of **text captions** was noted for each scene. “Text captions” were operationally defined as words that appear on the screen but are not native to the scene, typically added in post-production, and thus could not be seen by a character in the scene.

For each scene, it was noted whether or not **animation** was used. “Animation” was operationally defined to include both computer-generated animation and transparent cel animation.

For each scene, it was noted whether a **split-screen image** was used. “Split-screen image” was operationally defined as the presence of two or more separate images appearing simultaneously.

The presence or absence of **speed manipulation** was also noted for each scene. “Speed manipulation” was operationally defined as the presence of footage in which action is slower or faster than it naturally occurs; this includes fast motion, slow motion, and time-lapse motion. Mittell argues that time-lapse motion provides “a heightened sense of drama and engagement,” and slow-motion movement “is commonly used to analyze movement and depth” (Mittell, 2010, p. 184).

For each coded scene, the presence of **camera pan** movement and/or **camera zoom** movement was recorded. “Camera pan” was operationally defined as horizontal and/or vertical axis movement by the camera. “Camera zoom” was operationally defined as the increase or decrease in the magnification of an on-screen object (in other words, a change in the scale of the shot). Additionally, it was noted whether **camera movement** was used in each scene.

"Camera movement" was operationally defined to include both panning and zooming movement.

For shots included in the decoupage scenes, both panning and zooming **camera movement** is explained in great detail.

Program name, **episode name**, **episode season**, **episode number**, and **original air date** of each episode were also included in the coding sheet; this data was gathered from tv.com, a database of information about television shows (CBS Interactive Inc, 2012).

Hypotheses

It was hypothesized that quantitative analysis of the sitcoms will demonstrate the following changes over the past six decades:

Changes in pacing

1) The average scene length has decreased
2) The total percentage of the program devoted to storytelling has increased
3) The length of the title sequence has decreased
4) The average shot length has decreased[7]

Changes in sound use

5) The use of the laugh track has decreased
6) The use of music has decreased
7) The use of other non-diagetic sound has decreased

Changes in visual complexity

8) The use of camera movement (pan and zoom) has increased
9) The use of text captions has increased
10) The use of animation has decreased
11) The use of split-screen images has increased
12) The total percentage of the program devoted to moving action has increased

Changes in narrative complexity

13) The number of plotlines per episode has increased
14) The number of speaking characters per episode has increased

It was hypothesized that qualitative analysis of the sitcoms will demonstrate the following changes over the past six decades:

15) The sound and visuals have increasingly worked in tandem to generate humor in the programs
16) External information has increasingly been used to create humor in the programs

[7] As noted in the "Changes in Visual Complexity" section, the average shot length is a measure of visual complexity as well as a measure of pacing.

Procedure

For the study's sample, one series was chosen to represent programming in each of three different eras in the history of U.S. television: the early broadcast network era (1950s-1960s), the rise of cable and the Fox network era (1970s-1980s), and the Internet and digital television era (2000s-2010s). The family sitcom (sometimes referred to as "domestic sitcom") is a style of programming that has been in use consistently since the debut of television (Mittel, 2010; Moore, Bensman, & Van Dyke, 2006; Spigel, n.d.). Because of the stability of the family sitcom genre over time, three popular, half-hour family-based sitcoms were chosen for analysis: *Father Knows Best*, *The Cosby Show*, and *Modern Family*. Each of these programs represents one of the distinct time periods listed above. All three programs are representative of their era—if not slightly progressive—in terms of the symbolism of their families (white traditional, affluent African American, and gay/inter-ethnic, respectively), but they are not especially notable for use of innovative style or narrative relative to their eras. For each of the three programs, two episodes from the same season were chosen—the final episode aired in the month of October and the final episode aired in the month of February.

Several pilot studies were conducted to ensure an efficient, effective, and consistent coding system. Pilot studies were conducted on episode segments from the third season of *Modern Family*; these episodes were accessed online on ABC's website, www.abc.com. *Modern Family* was chosen because it was estimated to be more complex relative to the other two shows in the sample, and thus would allow for more coding practice and more opportunities for analysis of the coding tool's utility.

The majority of the changes that came about as a result of the pilot studies were surface revisions to the formatting and order of elements for the coding sheet. For example, in the first pilot study, scene length was to be recorded, but scene start time and scene end time were not included as variables. In order to determine scene length, scene start time must be subtracted from scene end time, so recording the start and end time variables made the process of determining the scene length easier. For the second pilot study, scene start time and scene end time were added to the coding sheet. In the second pilot study, scene start time and scene end time were adjacent. This was not the ideal placements for the flow of the coding process, so "scene start time" was moved to the beginning of the scene variable list, and "scene end time" was moved to the end of the scene variable list. Surface changes such as these helped to make the coding process for the experiment as straightforward and seamless as possible.

Other changes were more substantive. In the first pilot study, for example, use of pan and zoom (or a lack thereof) were to be recorded for each individual shot. After attempting to code a few scenes this way, it was decided that the measurement of pan and zoom on a shot-by-shot basis was too complicated and tedious for the scope of the project. Instead, the use of pan and zoom was evaluated on a scene-by-scene basis.[8] Another substantive change that came about as a

[8] Although camera movement is not analyzed on a shot-by-shot basis in the coding analysis, the use of pan and zoom is examined in great detail in the qualitative textual analysis.

result of the pilot studies was the addition of additional categories for analysis such as storylines involved, total number of speaking characters, and use of non-diagetic sound other than a laugh track and/or music.

The pilot studies also functioned as an opportunity for honing coding techniques. For example, several techniques for counting shots were tried during the course of the pilot studies in order to find the most effective means of counting shots.

Finally, the pilot studies revealed several variable definitions which required for clarification. For example, as a result of one of the pilot studies, it was determined that the interview portions of *Modern Family* would be counted as independent scenes.

After the pilot studies were completed, coding for the study began. All of the coding data for the study was compiled by a single author. In addition to this, and in order to address the possibility of coder bias, a second coder was trained and completed coding of the title sequence and the segment immediately following the opening commercial of one episode for each series. Spot-check scenes were taken from the following three episodes: "Bud, the Millionaire," from *Father Knows Best*; "Isn't It Romantic?," from *The Cosby Show*; and "Halloween," from *Modern Family*. The method of "spot checking" to establish a measure of coder reliability for projects in which there is only one coder is suggested by Guido H. Stempel III in his chapter on content analysis in *Research Methods in Mass Communication* (Stempel, 1989).

Results of the inter-reliability testing indicate that, as a whole, the inter-coder reliability was 98.7%, as calculated by Hosti's reliability formula.

There was 100% agreement between the primary coder and the spot-check coder for all 17 elements in the title sequences of "Bud, the Millionaire" and "Halloween." There was also 100% agreement for 15 coding elements in the title sequence for "Isn't It Romantic?;" the two elements for which there was not agreement were "number of shots" and "average length of shots," which is calculated by dividing the length of the scene by the number of shots in the scene. The percentage agreement was greater than 95%, with the primary coder recording 23 shots, and the spot-check coder recording 22.

There was 100% agreement between the primary coder and the spot-check coder for all six elements in the segment 2 overview, as well as for all 17 elements in one of the two scenes in segment 2 of "Bud, the Millionaire." For scene 2, there was agreement for 15 elements; the two elements for which there was not agreement were "number of shots" and "average length of shots," which is calculated by dividing the length of the scene by the number of shots in the scene. The percentage agreement for the second scene in the second segment of "Bud, the Millionaire" was greater than 95%, with the primary coder recording 25 shots, and the spot-check coder recording 27.

There was 100% agreement between the primary coder and the spot-check coder for all six elements in the segment 1 overview, as well as for all 17 elements in one of the two scenes in

segment 1 of "Isn't It Romantic?" For scene 2, there was agreement for 15 coding elements; the two elements for which there was not agreement were "number of shots" and "average length of shots," which is calculated by dividing the length of the scene by the number of shots in the scene. The percentage agreement for the second scene in the second segment of "Isn't It Romantic?" was greater than 95%, with the primary coder recording 42 shots, and the spot-check coder recording 41.

There was 100% agreement between the primary coder and the spot-check coder for all six elements in the segment 2 overview as well as for all 17 elements in each of the six scenes in segment 2 of "Halloween."

After all six episodes in the sample were coded, the qualitative textual analysis began. The qualitative analysis was largely based on decoupages—shot-by-shot breakdowns of individual scenes. These decoupages

The decoupage format for this study follows the format Butler uses in detailing soap opera scenes in *Television Style*: depicting the shot number, scale, and length of one or more screenshots of each shot (the number of screenshots used depends on the amount of camera movement), dialogue, and action/camera movement (Butler, 2010). For the purpose of this study, a description of the sound used in the scene was also included in each decoupage.

In addition to the decoupages, the narrative of each program was examined as a part of the qualitative analysis. Watching a program for style and formatting involves a different focus than watching an episode to understand the episode's narrative. In discussing the cognitive act of reading, Postman describes the difference between paying attention to the aesthetics of a media text and comprehending the message conveyed:

> [In order to read effectively,] you must also have learned to pay no attention to the shapes of the letters on the page. You must see through them, so to speak, so that you can go directly to the meanings of the words they form (Postman, 1985, p. 25).

Just as readers must look past the visual properties of written works to interpret meaning, television viewers must also turn their consciousness away from technical elements (both visual and auditory) to appreciate and apprehend programs' narratives. For the purpose of qualitative research, each episode was watched multiple times; for at least one viewing the technical auditory and visual elements were overlooked in an effort to focus on the narrative message.

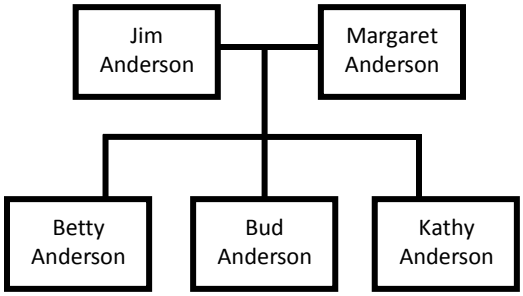
Description of and Rationale for Sample Texts

Father Knows Best. *Father Knows Best*, which aired on television for six seasons from 1954-1960, represents the early era of television programming, during which the big three networks dominated audience attention. *Father Knows Best*, aired in black-and-white format, is one of many programs that migrated from radio to television in the early-to-mid-1950s. Following a

five-year run on radio, *Father Knows Best* ran on television in the 10:00-10:30pm time slot on CBS from 1954-1955, moved to the 8:30-9:00pm time slot on NBC from 1955-1958, and finally moved to the 8:30-9:00pm time slot on CBS from 1958-1960 (Brooks & Marsh, 2007). *Father Knows Best* first appeared on the list of the year's top 30 highest-rated shows (based on viewership rates) for the 1957-1958 season, ranking 23rd; the program remained among the top 30 through the 1958-1959 and 1959-1960 seasons, ranking 13th and 6th, respectively. At its peak, *Father Knows Best* received an average rating of 29.7 (Brooks & Marsh, 2007). The show won several awards, including two Emmys for Robert Young, who played the title character, and three Emmys for Jane Wyatt, who played the wife/mother (Kassel, n.d.; *Awards for "Father Knows Best,"* 2012).

Father Knows Best centers on the Andersons, a white, middle-class family of five living in the suburban town of Springfield, Ohio. Jim, the father of the family, is an insurance salesman. The mother of the family, Margaret, is a homemaker. Jim and Margaret have three children. The eldest is Betty; the middle child is Bud, a boy; and the youngest child is Kathy. Figure 1 is a graphical depiction of the family tree of the central characters in *Father Knows Best*.

Figure 1: *Family Tree, Father Knows Best*



Father Knows Best dealt with the everyday concerns of a mainstream family, and like many other family sitcoms of the time, episodes often taught a moral lesson (Brooks & Marsh, 2007, Kassel, n.d.). Paul Kassel, in his "*Father Knows Best*" entry in the Museum of Broadcast Communication's *Encyclopedia of Television*, describes the historical significance of the program. Kassel explains that *Father Knows Best* was representative of the typical family sitcom of the time period:

> *Father Knows Best*, a family comedy of the 1950s, is perhaps more important for what it has come to represent than for what it actually was. In essence, the series was one of a slew of middle-class family sitcoms in which moms were moms, kids were kids, and fathers knew best (Kassel, n.d., para. 1).

The plotlines of episodes of *Father Knows Best* often heralded the value of hard work and family values. For example, in one of the analyzed episodes, "Bud, the Millionaire," Bud is given $10 per week to spend as he wishes, and Bud comes to realize that having money without having to work for it is unrewarding (West & Tewksbury, 1956). In the other analyzed episode,

"An Evening to Remember," the famous actor, Cornel Wilde (who plays himself in the episode) says, at the end of a visit to the Andersons as he sits with them on the couch in front of the fireplace, "You people haven't missed a thing. You have it all, right here. This is it" (Rogers & Tewksbury, 1957). Wilde's words emphasize the importance of family as the ultimate source of happiness and fulfillment, one that supersedes fame, fortune, and the glamour associated with life as a Hollywood actor.

Father Knows Best was filmed using single-camera telefilm production, a technique in which one camera is used to film; the camera is repositioned to capture the action from additional angles. Single-camera telefilm production is more expensive than live studio production because much more time is involved at both the filming and editing levels of the process; however, the single-camera telefilm production method allows for more creative control and flexibility (Mittell, 2010).

Because *Father Knows Best* was not filmed in front of a live studio audience, the program uses a laugh track, added in post-production to mimic audience response. According to Eugene Rodney, co-producer of *Father Knows Best*:

> I have determined the extent and places of laughs on three bases: (1) by referral to the original radio transcription, (2) to the laughs we received in the projection room from the people watching the dailies and first cut, and (3) my own judgment. (Liebman, 1995, p. 62)

Father Knows Best ended production of new episodes after six television seasons, even though the show was in the height of its popularity at that time. A syndicated version of the show, featuring rerun episodes from the six previous seasons, continued to air during primetime for three years after the series ended. *Father Knows Best* ran in various time slots on CBS from 1960-1962 and on ABC from 1962-1963. The program also has been syndicated on both local broadcast and cable networks throughout the decades since the program ceased production (Brooks & Marsh, 2007; TV Land, 2002). As of this writing, *Father Knows Best* airs weekday afternoons on Antenna TV, a digital multicast channel broadcast by over-the-air by local network affiliates across the country. Antenna TV was launched in January, 2011, and, in 2012, is operated in 59 local markets (*Antenna TV affiliates*, 2012; *What is Antenna TV?*, 2012).

Episodes from the third season of *Father Knows Best* (1956-1957) were chosen for content analysis because the third season was the latest season available via streaming online. According to ratings, *Father Knows Best* broke the top thirty shows during the fourth season (1957-1958). Episodes of *Father Knows Best* were accessed via Netflix streaming.

The final episode of *Father Knows Best* that was aired in October 1956 is titled "Bud, the Millionaire." There are two storylines in "Bud, The Millionaire." The first storyline involves the family's preparations for Jim's birthday. The second plotline is centers on Bud's desire to have more money. When Bud learns that one of his friends, Ernie Winkler, gets an allowance of $10 per week without having to do any chores, Bud approaches Jim for a similar deal. Jim wants Bud

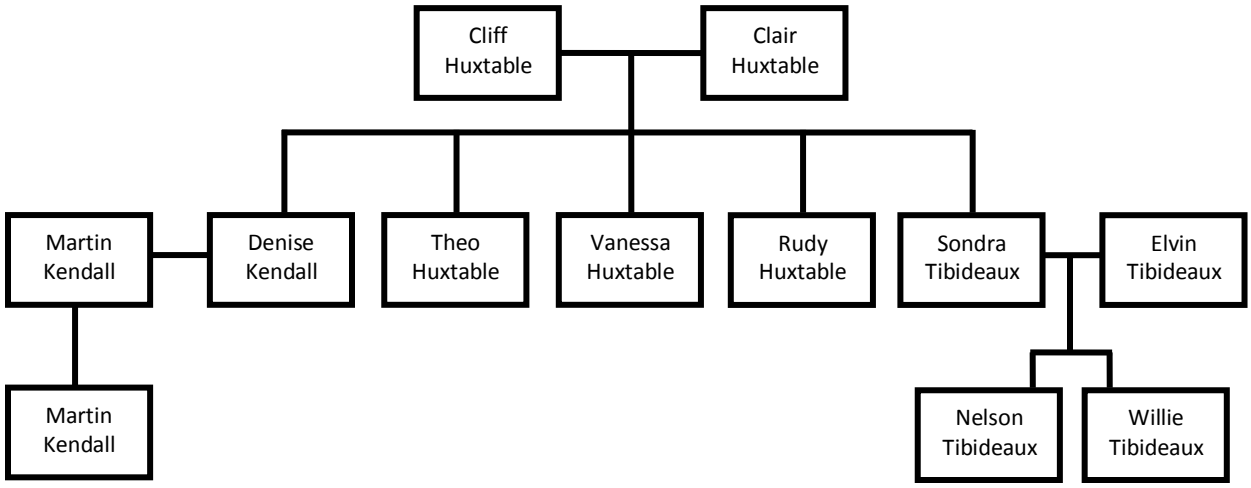
to learn the lesson that having money is not necessarily all it's cracked up to be, so Jim tells Bud that Bud can have $10 per week under two conditions: Bud cannot spend the money on anyone but himself, and Bud cannot do any work for the money. Bud happily accepts the deal, only to find himself lonely and sad because he cannot share the money with his friends. Eventually, Bud breaks the deal to purchase a birthday present for his father, and Bud once again has to work for his allowance (West & Tewksbury, 1956). The original air date of "Bud, the Millionaire" was Wednesday, October 31, 1956, and the episode was #8 of 37 total episodes aired during the third season of *Father Knows Best* (TV.com, 2012a).

The final episode of *Father Knows Best* that was aired in February 1957 is titled "An Evening to Remember." The focus of the plot is Cornel Wilde's visit to the Anderson household after Wilde's car is hit in town. Wilde interacts with the Anderson family as well as a few of their friends as he waits for his car to be serviced and endeavors to avoid a lawsuit from one of Jim's clients. (Rogers & Tewksbury, 1957). The original air date of "An Evening to Remember" was Wednesday, February 27, 1957, and the episode was #25 of 37 total episodes aired during the third season of *Father Knows Best* (TV.com, 2012a).

***The Cosby Show*.** *The Cosby Show*, which was in original production for eight television seasons from 1984-1992, represents the era of television during which cable programming rose in popularity. *The Cosby Show* ran in the 8:00-8:30pm time slot on NBC from 1984-1992, and moved to the 8:30-9:00pm time slot (still on NBC) during the final three months of the 1992 season. *The Cosby Show* was among the top 30 highest-rated shows every season it was on the air; the program debuted at #3 during the 1984-1985 season, then moved to #1 for five consecutive seasons from 1985-1990. *The Cosby Show* reached its highest rating—34.9—during the 1986-1987 season (Brooks & Marsh, 2007). The show has won more than 50 awards, including several Emmys and Golden Globes (*Awards for "The Cosby Show,"* 2012).

The Cosby Show centers on the Huxtables, a black, upper-middle-class family living in New York City. The patriarch, Cliff, is an obstetrician, and his wife, Clair, is an attorney. Cliff and Clair have five children: Sondra, Denise, Theodore, Vanessa, and Rudy. Although not all five children live in the house for all five seasons, they all frequently appear in episodes, as the family spends time together. Over the course of the season, Sondra and Denise both get married and have children (Brooks & Marsh, 2007; Hunt, n.d.). Figure 2 is a graphical depiction of the family tree of the central characters in *The Cosby Show*.

Figure 2: ***Family Tree, The Cosby Show***



The Cosby Show is notable because it was one of the first television programs to feature an affluent black family; according to Darnell Hunt, in his "The Cosby Show" entry in the Museum of Broadcast Communication's *Encyclopedia of Television*:

> In many respects, *The Cosby Show* and its "classy" aura were designed to address a long history of black negative portrayals on television. Indeed, Alvin Poussaint, a prominent black psychiatrist, was hired by producers as a consultant to help "recode blackness" in the minds of audience members….The Huxtables were given a particular mix of qualities that its creators thought would challenge common black stereotypes. These qualities included: a strong father figure; a strong nuclear family; parents who were professionals; affluence and fiscal responsibility; a strong emphasis on education; a multigenerational family; multiracial friends; and a low-key racial pride (Hunt, n.d., para. 6).

Hunt's description of *The Cosby Show* indicates that, like *Father Knows Best*, *The Cosby Show* focused on middle-class values. Cosby's vision in creating the show was to "[find] humor in realistic family situations, in the minutiae of human behavior" (Hunt, n.d., para. 5). Thus, instead of focusing each episode on a specific moral lesson, as was the structure of *Father Knows Best*, lessons about family values were more implicit in the plotlines of *The Cosby Show*. For example, the plot of one of the analyzed episodes, "Isn't It Romantic?," involves a contest between Cliff, Elvin, and Martin in which each man tries to impress his wife with a romantic gift that costs less than $25. This plot teaches that romantic relationships aren't dependent on the amount of money one spends: it's the thought that counts (Markus, Finestra, Kott, & Singletary, 1990).

The Cosby Show was filmed in front of a live studio audience using multi-camera telefilm production. Programming that utilizes multi-camera telefilm production is filmed in a studio, recorded to tape, and edited before airing. Due to the limitations of filming in a studio in front

of a live audience, scenes from *The Cosby Show* primarily made use of a limited number of sets that represented indoor locations such as the Cosby home. Additionally, shot angles were limited to those in which the audience was located behind the camera (Butler, 2010). Benefits, such as the ability to elicit and record immediate response from a live audience and relatively low expense, have helped the multi-camera telefilm production method become the most popular method of production for sitcoms over the past 60 years (Mittell, 2010).

Reruns of *The Cosby Show* began syndication in 1988—several years before the show ceased production on new episodes. Since then, *The Cosby Show* has been syndicated on various network and cable channels in the U.S. (Gilbert, 2010; Ziegler, 1988), *The Cosby Show* has also been syndicated in other countries, including Canada, South Africa, Malaysia, and the United Kingdom (Havens, 2000; *The Cosby Show,* 2012a). As of this writing, *The Cosby Show* airs weekday evenings on Centric cable network, a subsidiary of Black Entertainment Television, LLC (*The Cosby Show,* 2012a).

Episodes from the fifth season of *The Cosby Show* (1989-1990) were chosen for content analysis because this was the season for which cable penetration rates were highest during *The Cosby Show*'s time atop the ratings charts. During the 1989-1990 season, *The Cosby Show* was ranked first in terms of viewership, with an average rating of 23.1. Episodes of *The Cosby Show* were accessed via Hulu Plus streaming.

The final episode of *The Cosby Show* that was aired in October 1989 is titled "Denise Kendall: Babysitter." The primary plotline of the episode centers on Denise's adventures as she tries to babysit Sondra and Elvin's twins. Denise thinks that taking care of twins is no more difficult than taking care of a single baby; however, Denise finds that taking care of two children is, in fact, exhausting. Denise runs into extra trouble when the power goes out and she can't remember what foods are off-limits. A second plotline focuses on Cliff's worries about his graying hair (Markus, Finestra, Kott, & Singletary, 1989). The original air date of "Denise Kendall: Babysitter" was Thursday, October 26, 1989, and the episode was #6 of 26 total episodes aired during the sixth season of *The Cosby Show* (TV.com, 2012c).

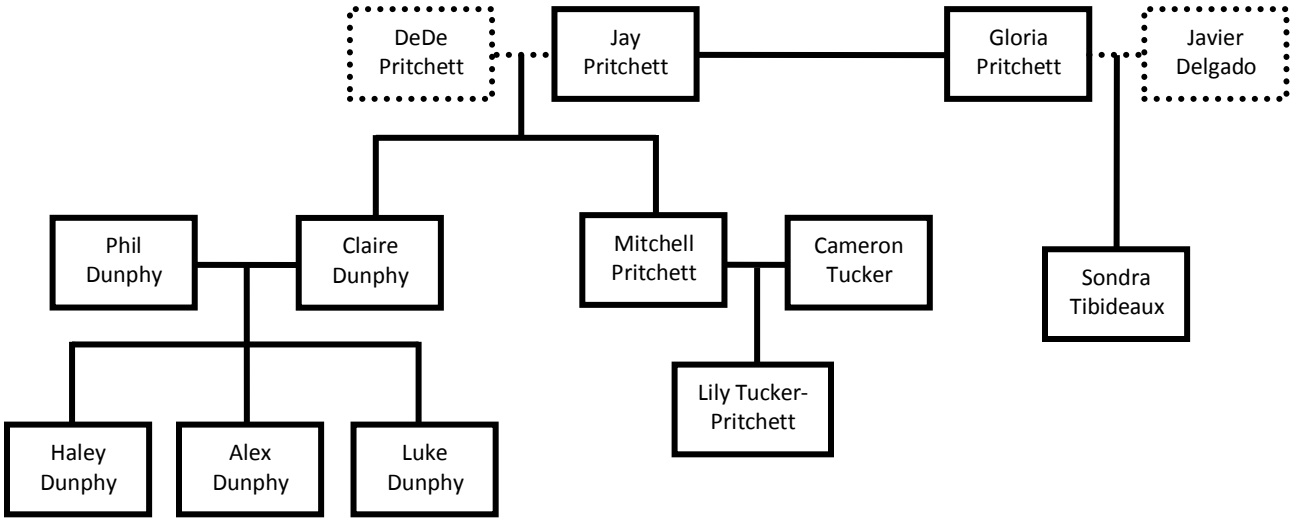
The final episode of *The Cosby Show* that was aired in February 1990 is titled "Isn't It Romantic?" The episode centers on a competition between Cliff, Elvin, and Martin. Each of the three men tries to come up with a romantic present for his wife, with a price limit of $25. The man who gets the best reaction from his wife will be crowned "the Emperor of Romance" (Markus, Finestra, Kott, & Singletary, 1990). The original air date of "Isn't It Romantic?" was Thursday, February 22, 1990, and the episode was #20 of 26 total episodes aired during the sixth season of *The Cosby Show* (TV.com, 2012c).

***Modern Family*.** *Modern Family*, in its third season as of 2011-2012, represents the current era of television, which is characterized by ever-increasing quality in cable programming, prevalence of HD broadcasts, and Internet-viewing capabilities. *Modern Family* airs in the 9:00-9:30pm time slot on ABC. The six episodes aired most recently are available online at www.abc.com; each episode becomes available online the day after it airs on television

(*Modern Family*, 2012). In its debut season in 2009-2010, *Modern Family* was ranked as the 37th-most-popular show on television, with an average rating of 3.8 (Gorman, 2010). The show rose to #24 in 2010-2011, with an average rating of 7.0 (Gorman, 2011). At the time of this writing, the show has been nominated for more than 80 awards, and has won nearly 40, including several Emmys and Golden Globes (*Awards for "Modern Family,"* 2012).

Modern Family is based on a multi-generational, ethnically diverse upper-middle-class family living in suburban California. Jay Pritchett, the patriarch, owns his own business and is on his second marriage; his new wife, Gloria, has a son named Manny from a previous marriage. Jay has two adult children from his first marriage: Claire is the older sibling, and Mitchell is the younger sibling. Both Claire and Mitchell have families and homes of their own. Claire is married to Phil Dunphy, a real estate agent, and they have three children. Haley, the eldest, is a girl; Alex, the middle child, is also a girl; and Luke, the youngest member, is a boy. Mitchell, a lawyer, is gay and in a long-term partnership with Cameron Tucker; during the first season, Cameron and Mitchell adopt a baby girl named Lily. Figure 3 is a graphical depiction of the family tree of the central characters in *Modern Family*.

Figure 3: *Family Tree, Modern Family*



As the show's name suggests, *Modern Family* portrays a progressive portrait of an U.S. family. Both Jay and Gloria were divorced before they married each other. Gloria—who is a contemporary of Jay's children—is much younger than Jay. Before she married Jay, Gloria was a single mother to her son, Manny; Manny and Gloria emigrated to America from Columbia. Additionally, Mitchell and Cameron are gay and adopt and raise an Asian baby together. Only Claire, Phil, and the Dunphy children represent the "traditional" U.S. family. Because *Modern Family* has been praised for "defying expectations about what it means to be gay…or straight" (Geddie & Walters, 2011), Barbara Walters chose actors Eric Stonestreet and Jesse Tyler Ferguson, who portray Cameron Tucker and Mitchell Pritchett, as two of the "Most Fascinating People of 2011." In their feature segment, Eric Stonestreet describes the impact he feels the characters of Cameron and Mitchell might be having on *Modern Family* viewers:

> I always say we do have a mission, and our mission is to make you laugh. We have people laughing at Mitch and Cam every week, and some of those people, I'm sure, are the same people that think that gay couples shouldn't be allowed to get married or adopt babies. Yet here they are laughing at us and relating to us because Cameron and Mitchell's sexuality, to me, is not what defines them. And the sooner we all can shovel that down the list of what we think of people, the better off we all are. (Geddie & Walters, 2011)

As in *The Cosby Show*, the lessons in *Modern Family* are implicit. These lessons are not always about tolerance toward "untraditional" family structures; the value of spending time with family, open communication, supportive behaviors, and developing strong family bonds are also emphasized. For example, in the beginning of one of the analyzed episodes, "Regrets Only," Phil and Claire are in a fight, but Phil does not know what they are fighting about; later in the episode, they finally have a conversation about what was bothering Claire. The conflict is resolved when Phil proves to Claire that her opinions have helped to shape the person he has become. In *Modern Family*, comedy takes precedence over teaching a lesson or morality, as characters do not always do the "right" thing. For example, in "Regrets Only," an interpersonal communication-based conflict between Jay and Gloria parallels the conflict between Claire and Phil. Jay does not like Gloria's singing voice, and Gloria sings all the time after having received a karaoke machine as a gift from Jay. Just as Jay is about to confront Gloria, Manny announces to his mother that she must "destroy that thing [the karaoke machine] before it destroys this family." Instead of agreeing with Manny, Jay pretends that he didn't mind Gloria's singing. Also in "Regrets Only," Haley lies to her parents about having a job at a local restaurant, and there are no consequences to Haley's actions because Haley's parents never find out about the lie (Levitan & Lloyd, 2010). In short, the majority of episodes in *Modern Family* feature an underlying message that highlights the importance of family, but plotlines are not vehicles for ethics or moral lessons at the expense of the comedic value of the show.

As in *Father Knows Best*, *Modern Family* uses single-camera telefilm production. *Modern Family* uses high-definition digital cameras, which are more advanced and offer a much higher-quality image than the cameras that were used at the time of filming *Father Knows Best*. Additionally, *Modern Family* uses a filming style that mimics hand-held camera work, with the camera frequently making small horizontal and vertical movements. The camera work in *Father Knows Best*, by contrast, was steadier and smoother. It has been suggested that the hand-held camera style adds a sense of realism because it more accurately mimics human sight (Butler, 2010). Single-camera telefilm production has seen a resurgence in popularity during recent years because of the degree of visual flexibility allowed by the technique; examples of recent sitcoms that also use single-camera telefilm production include *The Office*, *Scrubs*, and *Arrested Development* (Mittell, 2010). *Modern Family* includes neither recorded laughter from a live audience nor a prerecorded laugh track added during post-production.

Following *Modern Family*'s breakout success as the #1-rated sitcom among 18-49-year-olds, it was announced that local network affiliates will begin airing reruns of *Modern Family* in fall

2013. Additionally, USA Network, a subsidiary of NBC/Universal, will air reruns of *Modern Family* on cable beginning in fall 2013 (News Corp, 2011).

Because the second season of *Modern Family* (2010-2011) received higher ratings than the first season, and because the third season was still in progress at the time of coding, episodes from the second season of *Modern Family* were chosen for content analysis. During the 2010-2011 season, *Modern Family* was ranked #24 in terms of average viewership, posting an average rating of 7.0 (Gorman, 2011). Episodes of *Modern Family* were accessed via DVD.

The final episode of *Modern Family* that was aired in October 2010 is titled "Halloween." During the episode, Claire prepares her annual Halloween haunted house with the whole family involved; Jay and Gloria get into a fight because Gloria is defensive about her incorrect pronunciation of certain English words and phrases; a neighbor's sudden divorce makes Phil worried about the stability of his own marriage; Cameron broods over the Halloween from his past that "ruined his childhood;" and Mitchell dresses up as Spider-Man at his new office, not realizing that his boss frowns upon wearing Halloween costumes to work. All plotlines come together and are eventually resolved on Halloween night at Claire's haunted house. (Levitan & Lloyd, 2010). The original air date of "Halloween" was Wednesday, October 27, 2010, and the episode was #6 of 24 total episodes aired during the second season of *Modern Family* (TV.com, 2012b).

The final episode of *Modern Family* that was aired in February 2011 is titled "Regrets Only." In this episode, there is tension in the relationships of each adult couple. Cameron and Mitchell are at odds because Mitchell forgot to mail invitations to a fundraiser Cameron is chairing, Jay is irritated with Gloria's continuous singing on a karaoke machine, and Phil and Claire are in a fight over something Phil can't identify. Meanwhile, Haley pretends to be working as a waitress at a restaurant in the local mall and is almost caught when Alex catches on to Haley's act (Levitan & Lloyd, 2010). The original air date of "Regrets Only" was Wednesday, February 23, 2011, and the episode was #16 of 24 total episodes aired during the second season of *Modern Family* (TV.com, 2012b).

QUANTITATIVE (CODING) RESULTS AND DISCUSSION

Due to the relatively small sample, descriptive statistics were the sole method used for analysis of the coding data. Data results are organized into the following categories: pacing, sound use, visual complexity, and narrative complexity. Some of the data organized into tables included in the pacing category is also related to visual complexity (for example, average shot length), and will be categorized and discussed accordingly in the discussion section.

Pacing: Results

A comparison of the average episode length, average scene length, and average shot length, average scenes per episode, and average shots per scene is shown in Table 1, organized by program.

Table 1:
Episode, Scene, and Shot Pacing

	Father Knows Best	The Cosby Show	Modern Family
Average Episode Length (sec)	1540.5	1316.5	1279.5
Average Scenes Per Episode	7.5	6.5	34.0
Average Shots Per Episode	110.0	281.0	309.5
Average Scene Length (sec)	196.9	188.0	37.3
Average Shots Per Scene	14.7	43.2	9.1
Average Shot Length	13.7	4.7	4.1

The average length per episode has decreased over time, indicating increased time for commercials and program promotions within the 30-minute time slot. Despite the shortened length of episodes from the 1950s to the 2010s, the average number of shots per episode increased significantly over time. Notably, the majority of the change took place between *Father Knows Best* and *The Cosby Show*, as the delta between *Father Knows Best* and *The Cosby Show* was much larger than the delta between *The Cosby Show* and *Modern Family*. The average number of shots per episode increased by 155.5% between *Father Knows Best* and *The Cosby Show*, and increased 10.1% between The *Cosby Show* and *Modern Family*. There was a net increase of 181.4% between the number of shots per episode in *Father Knows Best* and the number of shots per episode in *Modern Family*.

The average number of scenes per episode decreased between *Father Knows Best* and *The Cosby Show* (15.4%), then increased greatly between *The Cosby Show* and *Modern Family* (423.1%). The increase in the number of scenes per episode between *Father Knows Best* and *Modern Family* was 353.3%.

The average scene length decreased significantly over time. Notably, the majority of the change took place between *The Cosby Show* and *Modern Family*, as the delta between *Father Knows*

Best and *The Cosby Show* was much smaller than the delta between *The Cosby Show* and *Modern Family*. The average scene length increased by 4.7% between *Father Knows Best* and *The Cosby Show*, and increased 404.0% between The *Cosby Show* and *Modern Family*. There was a net decrease of 427.9% between the average scene length in *Father Knows Best* and the average scene length in *Modern Family*.

As with the average scene length, the average shot length decreased significantly over time. The results indicate that the majority of the change took place between *Father Knows Best* and *The Cosby Show*, as the delta between *Father Knows Best* and *The Cosby Show* was much larger than the delta between *The Cosby Show* and *Modern Family*. The average shot length decreased by 191.5% between *Father Knows Best* and *The Cosby Show*, and decreased 14.6% between The *Cosby Show* and *Modern Family*. The net decrease between the number of shots per episode in *Father Knows Best* and the number of shots per episode in *Modern Family* was 234.1%.

The average number of shots per scene increased significantly between *Father Knows Best* and *The Cosby Show* (193.9%), then decreased significantly between *The Cosby Show* and *Modern Family* (374.7%), resulting in a net decrease of 61.5% between *Father Knows Best* and *Modern Family*. The increase and subsequent decrease in the average number of shots-per-scene is due to intersection of the average shot length trend and the average scene length trend, both of which are detailed above. The ratio of shot-length-to-scene-length in *Father Knows Best* and *Modern Family* are similar because in *Father Knows Best*, long shots comprise long scenes, and in *Modern Family*, short shots comprise short scenes. The ratio of shot-length-to-scene-length in *The Cosby Show*, by contrast, is much higher, because long scenes comprise short shots.

A comparison of the average lengths and percentage of the total program accounted for by story scenes, action scenes, the title sequence, and the closing credits is included in Table 2, organized by program.

Table 2:
Length of Title Sequence, Story Scenes, Action Scenes, and Closing Credits

	Father Knows Best	The Cosby Show	Modern Family
Average Total Episode Length (sec)	1540.5	1316.5	1279.5
Title Sequence			
Average Length (sec)	25.0	61.0	12.0
Average Length (% of episode)	1.6%	4.6%	0.9%
Story Scenes			
Average Length (sec)	1477.0	1222.0	1267.5
Average Length (% of episode)	95.9%	92.8%	99.1%
Action Scenes			
Average Length (sec)	1502.0	1316.5	1279.5
Average Length (% of episode)	97.5%	100.0%	100.0%
Closing Credits			
Average Length (sec)	38.5	33.5	36.0
Average Length (% of episode)	2.5%	2.5%	2.8%

The length of the title sequence increased significantly between *Father Knows Best* and *The Cosby Show* (144.0%), then decreased significantly between *The Cosby Show* and *Modern Family* (408.3%), resulting in a net decrease of 108.3% between *Father Knows Best* and *Modern Family*. The total percentage of the episode accounted for by the title sequence length followed a similar trend, increasing between *Father Knows Best* and *The Cosby Show*, then decreasing between *The Cosby Show* and *Modern Family*; this resulted in a net decrease over time.

The total percentage of the program devoted to storytelling decreased slightly between *Father Knows Best* and *The Cosby Show*, then increased between *The Cosby Show* and *Modern Family*, resulting in a net increase between *Father Knows Best* and *Modern Family*.

The total percentage of the program in which action takes place increases slightly between *Father Knows Best* and *The Cosby Show*, then remains constant—with action comprising the entirety of the program—between *The Cosby Show* and *Modern Family*.

The total percentage of the episode accounted for by the closing credit sequence saw relatively little change over time, as the average length of the closing credit segments were all within a range of five seconds. The total percentage the episode accounted for by the closing credits remained constant between *Father Knows Best* and *The Cosby Show*, then increased slightly between *The Cosby Show* and *Modern Family*. Notably, though, as mentioned earlier, in *Modern Family*, the credits are displayed while characters interact in an epilogue to the episode.

A comparison of the average number of shots and average shot length for story scenes, action scenes, and the title sequence is shown in Table 3, organized by program.

Table 3:
Shot Length and Frequency for Title Sequence, Story Scenes, and Action Scenes

	Father Knows Best	The Cosby Show	Modern Family
Title Sequence			
Average Number of Shots	5.0	23.0	4.0
Average Shot Length	5.0	2.7	3.0
Story Scenes			
Average Number of Shots	105.0	247.0	305.5
Average Shot Length	14.1	4.9	4.1
Action Scenes			
Average Number of Shots	110.0	281.0	309.5
Average Shot Length	13.7	4.7	4.1

The average number of shots in story scenes increased significantly over time, with a greater change between *Father Knows Best* and *The Cosby Show* than between *The Cosby Show* and *Modern Family*. The average shot length increased by 135.2% between *Father Knows Best* and *The Cosby Show*, and increased 23.7% between The *Cosby Show* and *Modern Family*. The net increase between the number of shots per episode in *Father Knows Best* and the number of shots per episode in *Modern Family* was 191.0%.

Like the average number of story scene shots, the average action scene shots increased significantly over time, with a greater change between *Father Knows Best* and *The Cosby Show* (155.5%) than between *The Cosby Show* and *Modern Family* (10.1%). The net increase between the number of shots per episode in *Father Knows Best* and the number of shots per episode in *Modern Family* was 181.4%.

The average shot length for story scenes has decreased significantly over time, with a greater change between *Father Knows Best* and *The Cosby Show* than between *The Cosby Show* and *Modern Family*. The average shot length decreased by 187.8% between *Father Knows Best* and *The Cosby Show*, and decreased 19.5% between The *Cosby Show* and *Modern Family*. The net decrease between the number of shots per episode in *Father Knows Best* and the number of shots per episode in *Modern Family* was 243.9%.

The average shot length for action scenes has decreased significantly over time as well, with a greater change between *Father Knows Best* and *The Cosby Show* (191.5%) than between *The Cosby Show* and *Modern Family* (14.6%). The net decrease between the number of shots per episode in *Father Knows Best* and the number of shots per episode in *Modern Family* was 234.1%.

The average length of shots in the title sequence decreased between *Father Knows Best* and *The Cosby Show* (85.2%), then increased slightly between *The Cosby Show* and *Modern Family* (11.1%), resulting in a net decrease of 66.7%.

Notably, for all three shows, the average shot length of the title sequence was shorter than the average shot length for the episode as a whole (the average shot length for action scenes is the same as the average shot length for the episode as a whole). The greatest difference was found in *Father Knows Best*, for which the average shot length for the title sequence was 182.0% shorter than the average shot length for action scenes. In *The Cosby Show*, the average shot length for the title sequence was 74.1% shorter than the average shot length for action scenes, and in *Modern Family*, the average shot length for the title sequence was 36.7% shorter than the average shot length for action scenes.

Sound Use: Results

A comparison of the presence and prevalence of auditory elements in the three programs is included in Table 4.

Table 4:
Presence of Auditory Elements

	Father Knows Best	The Cosby Show	Modern Family
Average Scenes Per Episode	7.5	6.5	34.0
Music (# of Scenes)	6.5	6.5	4.5
Music (% of Scenes)	86.7%	100.0%	13.2%
Laugh Track (# of scenes)	6.5	6.5	0.0
Laugh Track (% of scenes)	86.7%	100.0%	0.0%
Other Non-Diagetic Sound (# of scenes)	0.5	0.0	0.0
Other Non-Diagetic Sound (% of scenes)	6.7%	0.0%	0.0%

The percentage of scenes featuring background music increased between *Father Knows Best* and *The Cosby Show*, with music in all scenes in *The Cosby Show* and music in all but one scene in *Father Knows Best*, on average. In *Modern Family*, music was featured in far fewer scenes. In fact, only one of the two *Modern Family* episodes that were coded featured music. Additionally, all three shows' title sequences feature music.

The percentage of scenes featuring a laugh track, like the percentage of scenes featuring music, increased between *Father Knows Best* and *The Cosby Show*, as all scenes in *The Cosby Show* featured a laugh track, and all but one of the scenes in *Father Knows Best* featured a laugh track, on average. In *Modern Family*, a laugh track is not used in any scenes.

Non-diagetic sound is not used in *Modern Family* or in *The Cosby Show*. Non-diagetic sound is used in one scene from one episode of Father Knows Best; in the scene, Bud's voice is used to represent his thoughts. Even though Bud is on screen at the time, he is not speaking out loud; since the sound of his thoughts cannot be heard by other characters in the scene, the sound is classified as non-diagetic. Non-diagetic sound is also used in the *Father Knows Best* title

sequence, in the form of an announcer voiceover. Neither *The Cosby Show* nor *Modern Family* used non-diagetic sound in the title sequence.

Visual Complexity: Results

A comparison of the presence and prevalence of visual elements in the three programs is included in Table 5.

Table 5:
Presence of Visual Elements

	Father Knows Best	The Cosby Show	Modern Family
Average Scenes Per Episode	7.5	6.5	34.0
Text Captions (# of scenes)	0.0	2.0	8.0
Text Captions (% of scenes)	0.0%	30.8%	23.5%
Speed Manipulation (# of scenes)	0.0	1.0	0.0
Speed Manipulation (% of scenes)	0.0%	15.4%	0.0%
Animation (# of scenes)	0.0	0.0	0.0
Animation (% of scenes)	0.0%	0.0%	0.0%
Split-screen Image (# of scenes)	0.0	0.0	0.0
Split-screen Image (% of scenes)	0.0%	0.0%	0.0%
Camera Zoom (# of scenes)	7.0	4.5	27.5
Camera Zoom (% of scenes)	93.3%	69.2%	80.9%
Camera Pan (# of scenes)	7.5	6.5	25.0
Camera Pan (% of scenes)	100.0%	100.0%	73.5%
Any Camera Movement (# of scenes)	7.5	6.5	30.0
Any Camera Movement (% of scenes)	100.0%	100.0%	88.2%

At least one type of camera movement (pan and/or zoom) was used in every scene of *Father Knows Best* and *The Cosby Show*, and in the majority of scenes in *Modern Family*. On average, panning movement is used in more scenes than zooming movement in both *Father Knows Best* and *The Cosby Show*. In *Modern Family*, by contrast, zooming movement is used in more scenes than panning movement. Using a scene-by-scene basis for comparison, the amount of camera movement has decreased over time between *Father Knows Best* and *Modern Family*.

Text captions were not used during story scenes in *Father Knows Best*, but were used in story scenes in *The Cosby Show* and *Modern Family*. In both *The Cosby Show* and *Modern Family*, the sole function of the text captions was to credit cast and crew members. Text captions were also used in the title sequences of all three programs.

Neither animation nor split-screen images were used in any of the three shows. Speed manipulation was used in *The Cosby Show*, but it should be noted that speed manipulation was used in only one shot of one scene in one episode of *The Cosby Show*. Speed manipulation was

not used in *Father Knows Best* or *Modern Family*. Neither animation, nor split-screen images, nor speed manipulation were used in the title sequences of the three shows.

Narrative Complexity: Results

A comparison of the number plotlines and speaking characters in the three programs is included in Table 6.

Table 6:
Presence of Narrative Elements

	Father Knows Best	The Cosby Show	Modern Family
Number of Plotlines (per episode)	1.5	1.5	4.5
Number of Speaking Characters (per episode)	10.0	10.5	16.0

The number of plotlines per episode remained constant between *Father Knows Best* and *The Cosby Show*, and increased significantly between *The Cosby Show* and *Modern Family* (200.0%). The net increase in number of plotlines was 200.0%. For both *Father Knows Best* and *The Cosby Show*, one of the episodes in the sample had one plotline, and the other episode had two plotlines. For *Modern Family*, one of the episodes in the sample had four plotlines, and the other episode had five plotlines.

There was a slight increase in number of speaking characters between *Father Knows Best* and *The Cosby Show* (5.0%), and a more significant increase in the number of speaking characters between *The Cosby Show* and *Modern Family* (52.4%), resulting in a net increase of 60.0% in the number of speaking characters between *Father Knows Best* and *Modern Family*. For *Father Knows Best*, one of the episodes in the sample had 11 speaking characters, and the other episode had nine speaking characters. For *The Cosby Show*, one of the episodes in the sample had 12 speaking characters, and the other episode had nine speaking characters. For *Modern Family*, one of the episodes in the sample had 19 speaking characters, and the other episode had 13 speaking characters.

Changes in Pacing: Discussion

The following four hypotheses were set out in regards to changes in pacing between *Father Knows Best*, *The Cosby Show*, and *Modern Family*:

Changes in pacing

1) The average scene length has decreased
2) The total percentage of the program devoted to storytelling has increased
3) The length of the title sequence has decreased
4) The average shot length has decreased

Hypothesis 1: The average scene length has decreased. The results of the coding analysis are consistent with Hypothesis 1. The average scene length decreased significantly over time between *Father Knows Best* and *Modern Family*. The average scene length in *Father Knows Best* was found to be about nine seconds longer than the average scene length in *The Cosby Show*, and more than two minutes longer than the average scene length in *Modern Family*. The decrease in scene length between *The Cosby Show* and *Modern Family* was found to be much greater than the decrease in scene length between *Father Knows Best* and *The Cosby Show*.

Hypothesis 2: The total percentage of the program devoted to storytelling has increased. The results of the coding analysis are consistent with Hypothesis 2 for the change between *Father Knows Best* and *Modern Family* and for the change between *The Cosby Show* and *Modern Family*. The results are inconsistent with Hypothesis 2 for the change between *Father Knows Best* and *The Cosby Show*. Story scenes comprise 99.1% of *Modern Family*; the only portion of *Modern Family* that is not part of the story is the title sequence, which lasts 12 seconds. In both *Father Knows Best* and *The Cosby Show*, the title sequence and the closing credits are not part of the story. Because the title sequence in *The Cosby Show* is much longer than the title sequence in *Father Knows Best*, a higher percentage of *Father Knows Best* is devoted to storytelling as compared to *The Cosby Show*.

Hypothesis 3: The length of the title sequence has decreased. The results of the coding analysis are consistent with Hypothesis 3 for the change between *Father Knows Best* and *Modern Family* and for the change between *The Cosby Show* and *Modern Family*, but inconsistent with Hypothesis 3 for the change between *Father Knows Best* and *The Cosby Show*. *The Cosby Show* had the longest title sequence, averaging 61 seconds; *The Cosby Show*'s title sequence is more than double the length of *Father Knows Best*'s title sequence, and more than five times the length of *Modern Family*'s title sequence.

Hypothesis 4: The average shot length has decreased. The results of the coding analysis are consistent with Hypothesis 4. The average shot length has decreased significantly over time between *Father Knows Best* and *Modern Family*. The average shot length in *Father Knows Best* was found to be nine seconds longer than the average shot length in *The Cosby Show*, and nearly ten seconds longer than the average shot length in *Modern Family*. The decrease in scene length between *The Cosby Show* and *Modern Family* was found to be much greater than the decrease in scene length between *Father Knows Best* and *The Cosby Show*.

Changes in Sound Use: Discussion

The following three hypotheses were set out in regards to changes in sound use between *Father Knows Best*, *The Cosby Show*, and *Modern Family*:

Changes in sound use

5) The use of the laugh track has decreased
6) The use of music has decreased

7) The use of other non-diagetic sound has decreased

Hypothesis 5: The use of the laugh track has decreased. The results of the coding analysis are consistent with Hypothesis 5 for the change between *Father Knows Best* and *Modern Family* and for the change between *The Cosby Show* and *Modern Family*, but inconsistent with Hypothesis 3 for the change between *Father Knows Best* and *The Cosby Show*. In *The Cosby Show*, a laugh track is used in every scene, and in *Father Knows Best*, a laugh track is used in most scenes, but not all. In *Modern Family*, a laugh track is not used in any scenes.

Hypothesis 6: The use of music has decreased. The results of the coding analysis are consistent with Hypothesis 6 for the change between *Father Knows Best* and *Modern Family* and for the change between *The Cosby Show* and *Modern Family*, but inconsistent with Hypothesis 3 for the change between *Father Knows Best* and *The Cosby Show*. In *The Cosby Show*, non-diagetic music is used in every scene, and in *Father Knows Best*, non-diagetic music is used in most scenes, but not all. Notably, music is not used in every episode of *Modern Family*; when music is, it is diagetic and is used in a limited number of scenes.

Hypothesis 7: The use of other non-diagetic sound has decreased. The results of the coding analysis are consistent with Hypothesis 7. Within the sample, non-diagetic sound was used in one scene of *Father Knows Best*, and was not used in *The Cosby Show* or *Modern Family*.

Changes in Visual Complexity: Discussion

The following five hypotheses were set out in regards to changes in visual complexity between *Father Knows Best*, *The Cosby Show*, and *Modern Family*:[9]

Changes in visual complexity

8) The use of camera movement (pan and zoom) has increased
9) The use of text captions has increased
10) The use of animation has decreased
11) The use of split-screen images has increased
12) The total percentage of the program devoted to moving action has increased

Hypothesis 8: The use of camera movement (pan and zoom) has increased. The results of the coding analysis are inconsistent with Hypothesis 8. In *Father Knows Best* and *The Cosby Show*, every story scene features panning movement, zooming movement, or both types of movement. In *Modern Family*, most scenes feature camera movement, but not all. This may be

[9] As noted previously, the average shot length is a measure of visual complexity as well as a measure of pacing. Average shot length data is included in the "Results: Pacing" section. The discussion of Hypothesis 4 in the "Changes in Pacing: Discussion" section details the changes in average shot length between *Father Knows Best*, *The Cosby Show*, and *Modern Family*.

due to the short length of scenes in *Modern Family* relative to the scene length in the other two programs. Scenes in *Modern Family* average 9.1 shots per scene, whereas scenes in *Father Knows Best* and *The Cosby Show* average 14.7 shots per scene and 43.2 shots per scene, respectively. With longer scenes and more shots per scene, it is more likely for at least one of the shots to include camera movement. For the title sequence, *Father Knows Best* and *Modern Family* feature camera movement, but *The Cosby Show* does not.

Hypothesis 9: The use of text captions has increased. The results of the coding analysis are consistent with Hypothesis 9. Text captions are not used in story scenes in *Father Knows Best*, and are used in four times as many story scenes in *Modern Family* as compared to *The Cosby Show*. For all three shows, text captions are used in the title sequence and end credit sequence.

Hypothesis 10: The use of animation has increased. The results of the coding analysis are inconsistent with Hypothesis 10 because animation was not used in any of the programs in the sample.

Hypothesis 11: The use of split-screen images has increased. The results of the coding analysis are inconsistent with Hypothesis 11 because split-screen images were not used in any of the programs in the sample.

Hypothesis 12: The total percentage of the program devoted to moving action has increased. The results of the coding analysis are consistent with Hypothesis 12 for the change between *Father Knows Best* and *The Cosby Show* and for the change between *Father Knows Best* and *Modern Family*. The results are inconsistent with Hypothesis 2 for the change between *The Cosby Show* and *Modern Family*. Action scenes comprise 97.5% of *Father Knows Best*, as the only part of the episode that does not include moving action is the closing credit sequence. For *The Cosby Show* and *Modern Family*, action scenes comprise 100% of the episode.

Changes in Narrative Complexity: Discussion

The following two hypotheses were set out in regards to changes in narrative complexity between *Father Knows Best*, *The Cosby Show*, and *Modern Family*:

Changes in narrative complexity
13) The number of plotlines per episode has increased
14) The number of speaking characters per episode has increased

Hypothesis 13: The number of plotlines has increased. The results of the coding analysis are consistent with Hypothesis 14 for the change between *Father Knows Best* and *Modern Family* and for the change between *The Cosby Show* and *Modern Family*, but inconsistent with Hypothesis 14 for the change between *Father Knows Best* and *The Cosby Show*. There was no change between *Father Knows Best* and *The Cosby Show*, as both programs were found to have

an average of 1.5 plots per episode. There are three times as many plotlines in an average episode of *Modern Family* as compared to *Father Knows Best* and *The Cosby Show*.

Hypothesis 14: The number of speaking characters has increased. The results of the coding analysis are consistent with Hypothesis 15. The average number of speaking characters increased by 0.5 between *Father Knows Best* and *The Cosby Show*, and increased by 5.5 between *The Cosby Show* and *Modern Family*.

QUALITATIVE RESULTS AND DISCUSSION

Father Knows Best Decoupage

The selected *Father Knows Best* scene is from “Bud, the Millionaire” The entire scene lasts just more than 2.5 minutes, and includes 4 shots. The scene establishes a plotline that continues throughout the rest of the episode: Bud wants to receive an allowance without having to do chores.

Table 7: ***"Bud, the Millionaire" Scene Decoupage – Father Knows Best***

Scene: Shot # Scale, Length	Image	Dialogue	Action/Camera Movement
1:1 12 sec Medium close-up		*[music plays]*	Shot begins with a medium shot of Bud playing with a knife, then camera zooms out and pans up and to the left slightly to frame Jim walking out the front door and over to Bud
Long shot		*[door closes]*	
1:2 32 sec Medium shot		*[music plays]* *[audience laughter]*	Shot begins with a medium shot of Bud playing with the knife as his father looks down at him. Then, camera pans up as Bud realizes his father's presence and looks up Jim.
Medium shot			
Medium shot		Bud [off screen]: Hi Dad Jim: What are you doing? Bud: Oh, nothing, just fooling around with my knife. Jim: Oh, I thought you'd developed a new system for cutting the grass…one blade at a time. *[audience laughter]* Jim: You'd better get started if you want to earn that dollar.	Camera pans slightly to frame Jim and Bud in the shot after Bud stands up to talk to his father.
Medium shot		Bud: Hey, Dad, why do we cut the grass? It just grows right back up again. *[audience laughter]* Jim: Well, why do you eat? You just get hungry again. *[audience laughter]* Jim: I'll be home early this afternoon, but if you get through before that, you can collect your dollar from your mother.	

Scene: Shot # Scale, Length	Image	Dialogue	Action/Camera Movement
1: 3 52 sec Long shot		*[music plays]* Fred: Good morning, Mr. Anderson. Jim: Good morning, Fred. *[audience laughter]*	Camera pans to follow Jim as he walks away from Bud, then camera follows Fred as he walks over to Bud. Camera zooms in on Fred and Bud before they begin their conversation. During the conversation, Fred takes off his hat and begins playing with it. After this, Bud tries the hat on. After Fred and Bud finish talking, camera pans to follow them as they walk to the lawn mower and lie down.
Medium shot		Fred: Hi there, Bud. Bud: Hi, Fred. Fred: Got you working, huh? Bud: Yup. Bud: Hey, where'd you get the hat? Fred: Down at the variety store; pretty jazzy, huh? Bud: Yeah. Gee, I sure wish I had one. Let me try it. Fred: Get yourself one. They're only a buck.	
Medium shot		Bud: Only a buck? That's all I'm getting for mowing this whole lawn. One buck…one measly buck. Fred: That's not much. Bud: You're telling me.	
Medium long shot		*[music plays]* *[audience laughter]*	
1:4 60 sec Medium close-up		Fred: You know Ernie Winkler? Bud: Yeah. Fred: You know how much he gets a week? Bud: How much? Fred: Ten bucks. Bud: You're kidding! Fred: Nope. Bud: Ten bucks. What's he have to do for it? Fred: Nothing! That's the great part of it. Bud: Ten bucks a week. Fred: His dad's loaded. He runs an oil company or something. Ernie doesn't have to do anything; he doesn't have to mow any lawns, take out any trash. He doesn't even have to breathe if he doesn't want to. Bud: Gee, wouldn't that be the life. Fred: Yeah, money in your pockets all the time. Bud: No work, nothing to do but mosey around. *[audience laughter]* Spend a little dough here, a little dough there. Fred: Yeah.	During the conversation, Bud plays with blades of grass.

Pacing. The long scenes that comprise this decoupage are a representative sample of the typical scene length in *Father Knows Best*. Likewise, the relatively long shot length is representative of the typical shot pacing in *Father Knows Best*. Notably, virtually nothing happens in the first thirty seconds of the scene; the sole action is Bud picking at the grass and Jim walking over to Bud, neither of which advances the plot.

Sound use. Both a laugh track and non-diagetic background music are used in this scene. The laugh track punctuates jokes and cues viewers that something funny has just happened. The non-diagetic background music is played during the scene as a cue to the viewer that something visually important has just happened or is about to happen. For example, when Jim walks over to Bud in shot two, music plays as Bud is about to notice Jim's presence. The use of the laugh track and the use of background music in other scenes of *Father Knows Best* follow the same pattern; music underscores emotional and/or humorous moments, and laugh tracks are used throughout the scenes to signify humorous moments.

Visual complexity. Camera movement is used in nearly every shot to reframe the action as characters move. Panning movement is more commonly used than zoom, but both are used in the scene. Shots rarely include both pan and zoom. The majority of the shots are long and medium shots, with a few medium-long shots used in transition between medium and long shots. One close-up shot was used. This is representative of the majority of scenes in *Father Knows Best*; long shots and medium are the most frequently-used shot lengths.

The Cosby Show Decoupage

The selected *The Cosby Show* scene is from “Isn’t It Romantic?” The scene is long, and the beginning of the scene is relatively unrelated to the plotline; therefore, only the second half of the scene is included in the decoupage. The entire scene more than three minutes and comprises 38 shots. The scene establishes a plotline that continues throughout the rest of the episode—a discussion of romance that leads to an eventual competition between the three married men to see who can make his wife swoon most while spending no more than $25. The scene takes place in Cliff’s home.

Table 8: ***"Isn't It Romantic?" Scene Decoupage – The Cosby Show***

Scene: Shot # Scale, Length	Image	Sound/Dialogue	Action/Camera Movement
1:17 4 sec Medium close-up		*[audience laughter]* Theo: But Justine and I have a wonderful relationship…	
1:18 3 sec Medium close-up		Theo: …as it stands. I'm not getting married now…	Cliff listens to Theo
1:19 2 sec Medium close-up		Theo:…because I don't want to end up in the marriage graveyard.	
1:20 2 sec Long shot		*[audience laughter]*	
1:21 2 sec Medium close-up		*[audience laughter]* Martin: Marriage graveyard?	
1:22 2 sec Medium close-up		Theo: Yeah. That's where the romance goes to die. *[audience laughter]*	

Scene: Shot # Scale, Length	Image	Sound/Dialogue	Action/Camera Movement
1:23 2 sec Medium close-up		*[audience laughter]* Cliff: [Laughs]	
1:24 1 sec Medium close-up		*[audience laughter]* Elvin: Theo, what are you talking about?	
1:25 10 sec Medium close-up		Theo: I just don't see the romance with you guys anymore. Be honest. When was the last time you gave your wives a long, passionate kiss?	
1:26 2 sec Medium close-up		Martin: All the time. *[audience laughter]*	
1:27 1 sec Medium close-up		*[audience laughter]*	Cliff nods his head as he listens to the conversation
1:28 3 sec Medium shot		Theo: Not when I'm around. *[audience laughter]*	

Scene: Shot # Scale, Length	Image	Sound/Dialogue	Action/Camera Movement
1:29 5 sec Medium close-up		Martin: Am I supposed to call you every time I kiss my wife? *[audience laughter]*	
1:30 11 sec Medium shot		Theo: Martin, I was over here the other day eating. You came back from the store. You hadn't seen Denise all day. You gave her a little peck on the cheek and went in the kitchen. Marriage graveyard! *[audience laughter]*	
1:31 4 sec Medium close-up		Martin: Theo, I was carrying groceries.	
1:32 16 sec Medium shot		Theo: Put the groceries down and kiss the woman! *[audience laughter]*	Camera frames Theo and Martin while the two are talking, then camera pans to frame Theo and Elvin as Theo begins talking to Elvin
Medium shot		Theo: And, Elvin… Elvin: Hey, man, now… *[audience laughter]* Elvin: …Sondra and I don't live here so don't give me any comments about how I romance my wife. Theo: Elvin, last week I was at your house. Elvin: Yeah.	
1:33 4 sec Medium close-up		Theo: After dinner, we sat down on the couch to watch a movie.	

Scene: Shot # Scale, Length	Image	Sound/Dialogue	Action/Camera Movement
1:34 9 sec Medium shot		Elvin: Yeah Theo: You put your head in Sondra's lap. Elvin: Yeah! Theo: And you fell asleep… *[audience laughter]* Elvin: …snoring, loudly. Marriage graveyard! Elvin: I don't remember that. *[audience laughter]*	
1:35 2 sec Medium close-up		*[audience laughter]*	Cliff continues to listen to the conversation
1:36 1 sec Medium shot		Theo: And, Dad…	
1:37 7 sec Medium close-up		Cliff: Mmm-mm no, no. There's no "and, Dad." *[audience laughter]* Cliff: I have five children. I don't have to prove anything to anybody. *[audience laughter]*	
1:38 3 sec Long shot		*[audience laughter and applause]*	
		*[music plays during transition between scenes]*	Dissolve to the first shot of the next scene

Pacing. The long scenes that comprise this decoupage are a representative sample of the typical scene length in *The Cosby Show*. Likewise, the prevalence of a majority of relatively quick shots, mixed with occasional longer shots is representative of the typical shot pacing in *The Cosby Show*.

Sound use. Both a laugh track and non-diagetic background music are used in this scene. The laugh track punctuates jokes and cues viewers that something funny has just happened. The non-diagetic background music is not played during the scene, but is played at the beginning and end of the scene. The use of the laugh track and the use of background music in other scenes of *The Cosby Show* follow the same pattern; music always marks the beginning and end of a scene, and laugh tracks are used throughout the scenes to signify humorous moments.

Visual complexity. Camera movement is used only once in the selected portion of the scene. The movement occurs when Theo shifts from talking to Martin to talking to Elvin. Martin is on Theo's left side, and Elvin is on Theo's right. At the beginning of the shot, Theo is talking to Martin and the shot frames Theo and Martin; when Theo shifts his focus away from Martin, the camera pans away from Martin to frame Elvin and Theo. In this shot, the camera mimics Theo's shift in focus. Camera movement in this shot is necessary to frame the characters and keep the story action happening on screen; therefore, despite the fact that the camera movement reinforces Theo's shifting focus as he talks to Martin and Elvin, the main purpose of the camera movement is to reframe the shot and capture the action on screen. For all other shifts in conversation, a jump cut is used**.**

Modern Family Decoupage

The selected *Modern Family* scenes are from "Regrets Only." The first scene is a mockumentary-style interview that sets up the humor in the next scene. The mockumentary-style scene consists of one shot and lasts 14 seconds. The other scene consists of five shots and lasts 21 seconds. The two scenes establish a plotline that continues throughout the rest of the episode—Jay has recently given Gloria a karaoke machine as a birthday gift and Gloria's terrible singing voice (coupled with the fact that she is oblivious to her lack of vocal talent) is putting a strain on the relationship. Both scenes take place in Jay and Gloria's home.

Table 9: ***"Regrets Only" Scene Decoupage – Modern Family***

Scene: Shot # Scale, Length	Image	Dialogue	Action/Camera Movement
4:1 14 sec Medium shot		Jay: One time, I forgot to get Gloria a birthday present and I paid for it. Another time, I remembered, but she didn't like the gift. I paid for that. So you'd think when I remember to buy her a gift and she loves it, I wouldn't have to pay for it, right?	Mocumentary-style interview format; no camera movement
5:1 5 sec Long shot		*[music in background]* Gloria [singing]: Just call me angel of the morn…	Camera pans slightly, then zooms in on Gloria singing and dancing to karaoke music
Medium long shot			
5:2 3 sec Long shot		*[music in background]* Gloria [singing, off screen]: …ing, angel…	Long shot of Jay drinking his coffee in the kitchen, looking irritated. Camera zooms in to medium long shot as Jay lowers the coffee cup and makes a pained facial expression
Medium long shot			
5:3 3 sec Medium shot		*[music in background]* Gloria [singing]: …Touch my cheeks before you leave…	Medium shot of Gloria acting out lyrics. Camera zooms out to long shot as Gloria continues to sing and dance

Shot # Scale, Length	Image	Sound/Dialogue	Action/Camera Movement
Medium long shot			
5:4 8 sec Medium close-up		*[music in background]* Gloria [singing, offscreen]: …me, baby. Call me angel of the morning…	Medium close up of Jay's revolted expression. Camera zooms out as Jay reaches to turn on garbage disposal. Camera pans slightly as Jay drops a spoon into the sink. Camera zooms in on Jay's expression of relief as he listens to the spoon grind in the garbage disposal.
Medium shot		*[garbage disposal sound starts]*	
		*[sound of spoon grinding in garbage disposal starts]*	
Medium close-up			
5:5 2 sec Long shot		*[sound of spoon grinding in garbage disposal]* *[music in background]* Gloria: [Singing] …Yea-aaah	Gloria continues to sing and dance. Camera zooms very slightly.
First shot of title sequence		*[Title sequence music plays]*	Camera zooms out and image of Gloria singing is captured in the picture frame for title sequence

Pacing. The short scenes that comprise this decoupage are a representative sample of the typical scene length in *Modern Family*. Likewise, the quick shot length is representative of the typical shot length in *Modern Family*.

Sound use. There is no laugh track or non-diagetic background music used; all sound used in the scenes is diagetic. Sound contributes to the humor, but as an independently humorous element rather than as a cue for viewers to pay attention. Gloria's singing and Jay's throwing of the spoon into the garbage disposal are examples of the use of sound as humor in the scenes.

Visual complexity. There is no camera movement in the mockumentary-style interview included in the decoupage, but there is camera movement in every other shot. In several shots, both pan and zoom motion are used. A wide range of shot lengths are used; long shots, medium close-ups, medium long-shots, and medium shots are all used multiple times in the span of 35 seconds. This is different from both *The Cosby Show* and *Father Knows Best*, which use a more homogenous mix of shot lengths in scenes.

The fourth shot in scene five features camera movement that mimics the action in the scene; as the camera pans slightly when Jay moves his hand to put the spoon in the garbage disposal; such camera movement reinforces the action taking place on screen. Camera movement in this shot also serves as a visual cue to focus the viewer's attention on Jay's facial expressions; the shot starts with a medium close-up on Jay's reaction to Gloria's singing, zooms out to frame the action of Jay dropping the spoon into the garbage disposal, and then zooms back in to another medium close-up of Jay's listening to the sound of the spoon grinding in the garbage disposal.

Qualitative Discussion of Narrative Complexity

Two hypotheses were set out for the qualitative analysis of narrative complexity:

15) The necessity for viewers to both watch and listen to the program content to understand the humor in the episode has increased
16) The necessity for viewers to assimilate external information to understand the humor in the episode has increased

Hypothesis 15: The necessity for viewers to both watch and listen to the program content to understand the humor in the episode has increased. *Father Knows Best* exemplifies the utility of sound in television programs as described by Altman. Episodes of *Father Knows Best* include music to emphasize certain emotions and laugh tracks to highlight humorous dialogue. For example, in "Bud, the Millionaire," Bud finds himself alone and lonely at the movie theater without the company of his friends. The music underscores Bud's gloomy mood and the fact that he is beginning to realize that money alone does not bring happiness.

In addition to the use of sound cues, the dialogue of *Father Knows Best* serves to inform the inattentive viewer of the show's plot. One example of this is the fact that the majority of episodes end with the Jim giving a summarizing speech of the lesson that was learned by one or more characters in the episode. For example, in "Bud, the Millionaire," Jim reads a short letter from Bud regarding the lesson Bud had learned about money. The letter says,

> Dear Dad, I had to buy this with what I had left of the ten dollars, so our deal is off. But don't feel bad because I feel good. Having the money was no fun the way I thought it would be. Like you said, you can't get something for nothing…which is too bad. [laugh track] Happy birthday, Bud.

Kathy asks her father what the note means, to which Jim responds, "Maybe he [Bud] figured out that money's strange stuff. You can have a barrel of it, but it's not much good unless you work for it or you can share it with others" This dialogue is accompanied by music. Jim's expounding statement sums up the plotline in an auditory way, so that passive viewers will understand the narrative of the show without having to actually watch the screen.

Like *Father Knows Best*, *The Cosby Show* uses sound cues such as background music and a laugh track. As can be seen from the decoupage of "Isn't It Romantic?," much of the visual element in the show is expressed by medium close-ups of actors' facial expressions. In many cases, these facial expressions are accompanied by dialogue, but in a few cases they are silent reactions to other characters' dialogue. Being able to see characters' facial expressions as they speak allows the viewer a deeper level of comprehension of the humor and plotline in the story; thus, viewers are rewarded for paying visual attention to the screen. Occasionally, scenes in *The Cosby Show* are scripted in such a way that viewers absolutely must watch the show in order to get the joke. For example, in one scene in "Isn't It Romantic?" Cliff and Martin have an entire conversation via miming and hand signals; the scene is just under a minute and a half in length. Viewers who are only listening to the show and not actively watching the screen miss the action

and the resulting humor happening in that scene. However, these viewers are alerted that they are missing comedic action because of the presence of recorded laughter. As these examples illustrate, the style of *The Cosby Show* offers viewers more incentive to watch the show than *Father Knows Best*, but sound cues are still evident, as background music and the laugh track are used in *The Cosby Show*.

Another notable difference between *The Cosby Show* and *Father Knows Best* is the function of musical sound cues. *The Cosby Show* uses background music primarily to signify to viewers the end of one scene and the beginning of another. This pattern of background music serves to recapture viewer attention after commercial breaks and/or as a cue for viewers to refocus if attention has wavered during the previous scene. In *Father Knows Best*, music serves to emphasize characters' emotions rather than to cue the beginning or end of a scene.

Viewers of *The Cosby Show* are, in some cases, rewarded for actively watching the show, as some of the show's comedic elements are dependent on visual attention to the program; however, passive viewers can still understand the general plotline of the story without attentively watching the show due to the use of dialogue, music, and laugh sequences.

Modern Family features a much more televisual stylistic pattern than either *The Cosby Show* or *Father Knows Best*. *Modern Family* rewards viewers' visual attention with minimal use of sound cues. In episodes of *Modern Family*, sound played in the show is exclusively diagetic; there is no laugh track, and music is played only when it is naturally part of the scene. For example, in "Regrets Only," music is played in the background of Cameron's fundraiser for a local music society featuring harpists.

Much like *The Cosby Show*, episodes of *Modern Family* rely on characters' facial expressions for some of the show's humor. Reactionary facial expressions are very common during the show's interview segments, and a large portion of the interview segments include reactionary facial expressions that are not accompanied by dialogue. For example, in the scene depicted in the decoupage, Jay's facial expressions convey his thoughts as he listens to Gloria singing.

Scenes that rely on viewer attention for viewers to understand the joke are quite common in *Modern Family*, even in scenes that do not involve interviews. One such example is the scene depicted in the *Modern Family* decoupage. Jay's reaction to Gloria's singing, coupled with the fact that Jay purposely drops a spoon into the in-sink garbage disposal, and Jay's accompanying expression of relief are all elements that add humor to the scene. Viewers who are not actively watching the show will understand, based on the dialogue, that Jay does not like Gloria's singing voice, but a key part of the scene's comedy is lost on viewers who only listen to the scene.

In "Halloween," while Claire is on the phone with Jay discussing plans for a family-run haunted house, Luke tiptoes up to the counter and slowly reaches his hand toward the Halloween candy bowl in an effort to steal some candy, and Claire slaps Luke's hand away with a spatula. The auditory element of the scene—the dialogue between Claire and Jay—helps to establish Claire's

love of Halloween and provides context for action later in the episode. However, the subtleties of the action that is going on simultaneous to the dialogue are humorous elements of the show that passive viewers do not experience. Viewers of *Modern Family* are rewarded for actively watching the show, as much of the show's comedic elements are dependent on visual attention to the program; however, dialogue allows passive viewers to still understand the general plotline of the story without attentively watching the show.

As evidenced by examples of content from each program, the necessity for viewers to both watch and listen to the program content to understand the humor in the episode has increased between *Father Knows Best* and *The Cosby Show*, and between *The Cosby Show* and *Modern Family*.

Hypothesis 16: The necessity for viewers to assimilate external information to understand the humor in the episode has increased. No prior information about the Anderson family or their friends is necessary to understand the humor in *Father Knows Best*. Even Betty's friend, Dotty, who is a recurring character is re-introduced so viewers understand who the character is and what the character's relationship is to the main characters when Dotty appears in "An Evening to Remember."

The scene shown in the "Isn't It Romantic" decoupage, like the majority of scenes in *The Cosby Show*, does not require the viewer to fill in pertinent information to understand the jokes or the situation. All necessary information is presented to the viewer, including which characters are married and even the name of each character's wife (Cliff's wife—Clair—is not named in this segment of the scene, but is identified by name at one point).

Episodes of *Modern Family* often reference events, plotlines, or funny moments from past episodes. For example, Phil works with a man named "Skip Woosnam," and although Woosnam has yet to appear in an episode, he is occasionally mentioned. In "Regrets Only," it is Skip Woosnam who introduces Phil to the wedge salad, which eventually leads to multiple arguments between Claire and Phil. Another example of referencing other episodes takes place in "Regrets Only," when Cameron discovers that Mitchell did not remember to send the invitations to Cam's charity event to their friends. The fact that many of Cameron and Mitchell's friends have stereotypical gay names is a source of humor in a prior episode, and after that, the names are mentioned (often gratuitously) in other episodes. In the "Regret's Only" example, Luke picks up the phone and can't pronounce the caller's name. When Cameron picks up, he says "Oh, hi, Longinus." During the conversation with Longinus, Cameron runs through a list of names, asking if each has gotten his invitation, "What about Pepper, did he get his? And L'Michael? And Steven and Stefan?"

Additionally, *Modern Family*'s mockumentary format, with characters taking part in on-camera interviews, is a reference to the genre of reality television, which is formatted similarly.

Episodes of *Modern Family* involve many instances of humor that reference prior scenes and other off-screen events. Episodes of *The Cosby Show* and *Father Knows Best*, by contrast, offer

humor that remains within the confines of one episode at a time, giving viewers the ability to understand every joke even if they are not avid watchers of the program. *Modern Family* offers much humor that does not require prior knowledge of the show and the characters, but in order to fully appreciate all levels of humor in each episode of *Modern Family*, viewers are required to draw upon memories of previous episodes and knowledge of characters.

LIMITATIONS AND FUTURE RESEARCH

Limitations of the Study

The majority of the limitations of this study stem from a lack of availability and/or reliability in samples. It is impossible to know whether the version of each episode that is available on DVD or via streaming is formatted in the same way that it was when the episode was first aired on television. For example, it has been suggested that the originally aired title sequences of *Father Knows Best* are different from the title sequence used in the syndicated and DVD-distributed versions of *Father Knows Best* (*Sponsored openings*, n.d.).

It was difficult to find television shows from the broadcast-dominated era available on DVD. Many popular shows from the 1950s and 1960s are not available or are available in limited form such as "best of" DVDs containing only a few episodes, so the choices for the sample were limited.

The small sample size was another limitation of the study. As only two episodes per program were coded, it is possible that one or more of the scenes from each series was an outlier, and that some trends are exaggerated or diminished as a result. For example, "An Evening to Remember," one of the episodes of *Father Knows Best*, appeared to have only two commercial breaks. In order to determine if this was common, five other episodes of *Father Knows Best* were viewed informally; each of the other episodes had three commercial breaks, suggesting that the two-commercial-break format was unusual, if not one-of-a-kind. Another example of a probable outlier is *Modern Family*'s "Halloween," in which the third segment comprises a single scene which lasts more than 8.5 minutes. Based on patterns noticed during frequent, informal viewing of *Modern Family*, it is unusual for a scene in *Modern Family* to span an entire segment and/or to last 8.5 minutes.

In addition to the fact that a limited number of episodes were coded from each program, the fact that only one example of a sitcom from each era was included in the sample represents a limitation of the study. The styles of each of these shows may not be completely representative of the era in which they were aired.

Finally, the measurement of sound and visual elements—specifically the use pan and zoom—on a scene-by-scene basis may not accurately portray the visual and/or auditory elements present in a scene on a shot-by-shot basis, and thus may not indicate the extent of differences that exist in visual and auditory styles. One of the purposes of the qualitative analysis—especially the decoupage—is to mitigate this limitation.

Suggestions for Future Research

This study raises several questions for future research. Based on the substantive differences in television shows displayed in this study's findings, television sitcoms have been evolving for the

past six decades, and are likely to continue to evolve in the future. Further studies could take several measures to improve upon the design of this study. A wider sample of episodes for coding (including more episodes from each series as well as more series from each era of television) would help to eliminate the chance of outliers and provide a more expansive—if not a more representative—portrait of each era of television. Additionally, a more comprehensive coding method for determining the amount of camera movement should be used in future studies; perhaps, a shot-by-shot analysis of camera movement would be more appropriate than the scene-by-scene analysis that was used for this study, as the scene-by-scene analysis failed to depict the heavy use of camera zoom and pan in *Modern Family* as compared to *The Cosby Show* and *Father Knows Best*. Another change that might be useful is to distinguish between diagetic and non-diagetic music on the coding sheet. Further research, which builds and/or improves upon methods and samples offered in this study can lead to a greater understanding of the formatting and stylistic trends in television sitcom programming in the years since television's debut in U.S. society. Additionally, research of the same nature that samples genres other than sitcoms—especially news programming—may lead to a more complete understanding of the changes in television programming over time and the effects of such changes on U.S. culture and society.

CONCLUSIONS

It is important to study television because of the medium's wide reach and frequency of use in the U.S. Television programming permeates U.S. culture, playing in the background at social gatherings, in doctors' offices, and aboard airplanes, in addition to nearly every home in the country. Many households have televisions in the bedrooms, the kitchen, and the family room. Television programs play on laptops, tablets, and mobile phones. In total, the average person in the U.S. spends 33 hours per week—nearly a third of his or her waking hours—watching television.

Changes in the style and format of U.S. television's domestic sitcoms—one of the medium's most enduring program formats—echo changes in audience entertainment expectations. Though an individual show such as *Father Knows Best*, *The Cosby Show*, or *Modern Family* may not directly affect a viewer's information-processing tendencies and preferences, the television medium as a whole does have an impact, according to Postman, Mittell, and other theorists. The changes in pacing, sound use, visual complexity, and narrative complexity within the small sample reflect fundamental shifts in the content and format of television programming as a whole.

Though Postman criticized televisions dominance as a medium in the U.S., Postman was relatively untroubled by fiction programs such as the sitcoms analyzed in this study. Postman's fears were more related to television programming that operates to inform viewers. He explained, "[television] serves us most usefully when presenting junk entertainment; it serves us most ill when it co-opts serious modes of discourse—news, politics, science, education, commerce, religion—and turns them into entertainment packages" (Postman, 1985, p. 159). The trends of increasing visual complexity and accelerated pacing that were found in this study may have more adverse effects on news media consumption than sitcom enjoyment among audience members, as comprehension of news is different than comprehension of fiction entertainment.

Recent research has shown that audiences of news programming tend to remember fewer facts if the news is presented a more visually complex fashion. In *The Shallows*, Nicholas Carr cites a Kansas State University study that compared viewers' fact-retention rates for two different versions of the same CNN newscast. One version contained a scrolling text-ticker across the bottom of the screen and used info-graphics throughout the newscast; the other version did not have these multimedia enhancements. Viewers remembered more facts from the simpler newscast format. Notably, the viewers in the experiment were college-age students—members of a generation that has been exposed to multimedia throughout their lifetimes (Carr, 2010).[10] The results of this study demonstrate that visual stimulation—though perhaps engaging for

[10] CNN changed their formatting in late 2008. The goal of the change, according to SVP of current programming, Bart Feder, was to make CNN's news "easier to read, understand and absorb" (Dickson, 2008, para. 4). They got rid of banner graphics and replaced the scrolling news ticker with a static "flipper" graphic to present one piece of information at a time.

viewers of fiction programming—can have unintended negative effects on the effectiveness of programming that seeks to inform and educate viewers. Producers of news and educational-type programming must be careful not to employ attention-getting visual patterns that compromise the viewer's ability to effectively comprehend the information presented in the program.

The increase in media pacing—though it allows for a more televisual, realistic experience in fiction programs—may have adverse consequences if it is employed in programs that seek to share information and inform viewers. A trend toward faster pacing in the news media is already evident, as the average length of sound bites decreased by one fifth in just over 30 years. Accelerated pacing in news may lead to less time spent discussing each subject and thus less discussion of each subject. The potential positive of faster pacing is that if more news stories are covered, audiences may be exposed to a wider scope of news. Thus, it is unclear whether acceleration of pacing in news programs would have negative or positive effects on audience knowledge of current events.

Narrative complexity, like pacing, may act as a positive or a negative force when applied to news programming. Many television-based news organizations publish paratexts online, including text-based stories, photographs, and additional video content of interviews or event footage. If news viewers are motivated to more fully understand the stories they see on television, viewers can reference such paratexts for more detailed information. However, if viewers do not take the initiative to reference news paratexts, they may not understand the context, or the complexities, of the news that is presented on television.

Because this study focuses only on fictional, entertainment-focused television programming, the impact of changes in pacing, visual complexity, and narrative complexity on news media can only be surmised. Future study is needed to determine whether changes in television style news programming have a positive effect, a negative effect, or a combination of positive and negative effects on U.S. culture and information processing.

During the past few years, much attention has been paid to the changes in pacing of both fiction and non-fiction television shows (and media in general) that have occurred. The results of this study support trends exhibited by various genres of television programming as well as other forms of media.

Among theorists following in the tradition of Postman, there seems to be a presumption that in order to achieve greater speed in television programming, the depth of information provided must be sacrificed. Notably, the findings of this study suggest the opposite. The vast increase in narrative complexity that has occurred over the past six decades—accompanying the trend of ever-accelerating pacing—suggests that programming has become more multifaceted and full of meaning, with more plotlines, more characters, and more references to events beyond the scope of an individual episode. Changes in visual complexity and sound use, too, result in more intricate visual and aural representations of on-screen action. The changes in sound use, visual

complexity, and narrative complexity suggest that today's U.S. television viewer actively perceives and processes information in greater depth than ever before.

Throughout the history of television, technology innovation has allowed for increasingly lifelike representations of the characters and settings captured by the camera. Just as improved picture and sound quality have caused television programming to become more visually and aurally precise over the past six decades, narrative content, too, has become more authentic. The sitcoms of the 21st century offer narrative structures that are more true-to-life than the sitcoms of the past. Just as viewers must keep track of and constantly add detail to extensive social maps in their own lives, they must also do so in the lives of 21st century sitcom characters. On screen, characters' interactions reference past interactions, mimicking the complexity of real modern life. Likewise, in the off-screen world, individuals may act in a certain way or make decisions based on a variety of influences—the plotlines of our day-to-day existence are multi-threaded, just like the plotlines of popular contemporary television sitcoms.

Narrative structure is not the only facet of television style that intensifies the authenticity of programming. In sitcoms of the 2000s-2010s, increased visual complexity creates a more realistic moving image. The camera that zooms and pans with almost every shot mimics the movement of the eyeball, shifting to focus on relevant people and objects as action takes place in the scene. Similarly, the sitcom of the 21st century employs sound that is representative of the natural world. Daily life is not punctuated by musical scores and laughing audiences, nor is the sitcom of the early 21st century.

The complexity and realism of today's sitcoms—marked by changing use of sound, visual complexity, and narrative structure—heightens the artistic aesthetic of television programming and reinforces Caldwell and Butler's assertions that television programs are art and should continue to be studied as such.

Significant changes in pacing, sound use, visual complexity and narrative complexity were found in this study. The implications of these changes on U.S. culture and society are ambiguous; most likely, the changes detailed in this study cause a combination of positive and negative effects on television viewers. Three trends, however, are quite clear: contemporary sitcoms are faster, they feature more complex visuals and narrative, and they are more lifelike.

REFERENCES

Altman, R. (1986). Television/Sound. In T. Modleski (Ed.), *Studies in entertainment* (pp. 39-54). Bloomington, IN: Indiana University Press.

Antenna TV affiliates. (2012). Retrieved February 19, 2012, from http://media.trb.com/media/acrobat/2012-02/304665960-09084651.pdf

Awards for "Father Knows Best." (2012). Retrieved from IMDb.com website: http://www.imdb.com/title/tt0046600/awards

Awards for "Friday Night Lights." (2012). Retrieved from IMDb.com website: http://www.imdb.com/title/tt0758745/awards

Awards for "Modern Family." (2012). Retrieved from IMDb.com website: http://www.imdb.com/title/tt1442437/awards

Awards for "The Cosby Show." (2012). Retrieved from IMDb.com website: http://www.imdb.com/title/tt0086687/awards

Barnouw, E. (1978). *The sponsor: notes on modern potentates*. New York, NY: Oxford University Press.

Brooks, T., & Marsh, E. (2007). *The complete directory to prime time network and cable tv shows: 1946-present* (9th ed.). New York, NY: Ballantine Books. (Original work published 1979)

Butler, J. (2009). *Television style*. New York, NY: Routledge.

Caldwell, J.T. (1995). *Televisuality: Style, crisis and authority in American television.* New Brunswick, NJ: Rutgers University Press.

CBS Interactive Inc. (2012). *What is TV.com?* Retrieved from http://www.tv.com/aboutus.html

ComScore. (2011, August 22). comScore releases July 2011 U.S. online video rankings. *comScore: Press Releases*. Retrieved from http://www.comscore.com/Press_Events/Press_Releases/2011/8/comScore_Releases_July_2011_U.S._Online_Video_Rankings

Christians, C. & Carey, J. (1989). The logic and aims of qualitative research. In G. Stempel III & B. Westley (Eds.), *Research methods in mass communication* (2nd ed., pp. 354-374). Englewood Cliffs, NJ: Prentice Hall. (Original work published 1981)

de Moraes, L. (2011, January 25). 'Skins' creator bares all to try to save MTV show. *The*

Washington Post. Retrieved from http://www.washingtonpost.com/wp-dyn/content/article/2011/01/25/AR2011012506113_pf.html

Dickson, G. (2008, December 14). CNN gets new graphic look. *Broadcasting & Cable*. Retrieved from http://www.broadcastingcable.com/article/160701-CNN_ Gets_New_Graphic_Look.php

Downey, K. (2005, March 28). MTV: Network of the forever young. *Media Life magazine*. Retrieved from http://www.medialifemagazine.com/news2005/mar05/mar28/1_ mon/news3monday.html

DTV.gov. (n.d.). *DTV.gov: What you need to know about the digital tv transition*. Retrieved November 2, 2011, from Federal Communications Commission website: http://www.dtv.gov/

Fang, I. (n.d.). Videotape. In H. Newcomb (Ed.), *Encyclopedia of television*. Retrieved from http://www.museum.tv/eotvsection.php?entrycode=videotape

Finney, R. G. (n.d.). Time shifting. In H. Newcomb (Ed.), *Encyclopedia of television*. Retrieved from http://www.museum.tv/eotvsection.php?entrycode=timeshifting

Geddie, B., & Walters, B. (Executive Producers). (2011, December 14). *Barbara Walters' the 10 most fascinating people of 2011* [Television broadcast]. American Broadcasting Company. Retrieved from http://abc.go.com/watch/abc-news-specials/SH559036/VD55158106/ barbara-walters-most-fascinating-people-of-2011

Gilbert, M. (2010, June 16). Even White can't heat up Cleveland. *Boston.com*. Retrieved from http://articles.boston.com/2010-06-16/ae/29292735_1_betty-white-joke-actresses

Gitlin, T. (2007). *Media unlimited: How the torrent of images and sounds overwhelms our lives.* New York, NY: Henry Holt and Company.

Gorman, B. (2010, June 16). Final 2009-10 broadcast primetime show average viewership. *TVbytheNumbers*. Retrieved from: http://tvbythenumbers.zap2it.com/2010/06/16/final-2009-10-broadcast-primetime-show-average-viewership/54336/

Gorman, B. (2011, June 1). 2010-11 season broadcast primetime show viewership averages. *TVbytheNumbers*. Retrieved from: http://tvbythenumbers.zap2it.com/2011/06/01/2010-11-season-broadcast-primetime-show-viewership-averages/94407/

Gray, J. (2010). *Show sold seperately: Promos, spoilers, and other media paratexts.* New York, NY: New York University Press.

Hampp, A. (2011, October 17). Media mavens: Lisa Hsia, Bravo. *AdAge*. Retrieved from:

http://adage.com/article/special-report-media-mavens/media-mavens-2011-lisa-hsia-bravo/230381/

Havens, T. (2000). 'The biggest show in the world': race and the global popularity of The Cosby Show. *Media, Culture & Society, 22*(4), 371-391. Retrieved from http://myweb.uiowa.edu/thavens/cosby.pdf

Hill Street Blues. (2012). Retrieved from IMDb.com website: http://www.imdb.com/title/tt0081873/

Johnson, S. (2006). *Everything bad is good for you* (Expanded ed.). New York, NY: Riverhead Books. (Original work published 2005)

Kassel, M. B. (n.d.). Father Knows Best. In H. Newcomb (Ed.), *Encyclopedia of television*. Retrieved from http://www.museum.tv/eotvsection.php?entrycode=fatherknows

Liebman, N. (1995). *Living room lectures*. Austin, TX: University of Texas Press.

Levitan, S., & Lloyd, C. (Executive Producers). (2011). *Modern family: Season 3* [Television series]. American Broadcasting Company.

Levitan, S., & Lloyd, C. (Executive Producers). (2010). *Modern family: Season 2* [Television series]. American Broadcasting Company.

Levitan, S., & Lloyd, C. (Executive Producers). (2009). *Modern family: Season 1* [Television series]. American Broadcasting Company.

Malone, M. (2009, September 2). MyNetworkTV shifts from network to 'programming service model': Netlet will try "hybrid" model next fall. *Broadcasting & Cable*. Retrieved from http://www.broadcastingcable.com/article/173849- MyNetworkTV_Shifts_From_Network_To_Programming_Service_.php

Markus, J., Finestra, C., & Kott, G. (Writers), & Singletary, T. (Director). (1989). Denise Kendall: Babysitter [Television series episode]. In M. Carsey & T. Werner (Producer), *The Cosby show*. Retrieved from http://www.hulu.com/watch/301775/the-cosby-show-isn't-it-romantic

Markus, J., Finestra, C., & Kott, G. (Writers), & Singletary, T. (Director). (1990). Isn't it romantic? [Television series episode]. In M. Carsey & T. Werner (Producer), *The Cosby show*. Retrieved from http://www.hulu.com/watch/301787/the-cosby-show-denise-kendall-babysitter

Miami Vice. (2012). Retrieved from IMDb.com website: http://www.imdb.com/title/tt0086759/

Mittell, J. (2010). *Television and american culture*. New York, NY: Oxford University Press.

Modern Family. (2012). Retrieved February 19, 2012, from http://abc.go.com/shows/modern-family

Moore, B., Bensman, M. R., & Van Dyke, J. (2006). *Prime-time television: A complete history*. Westport, CT: Praeger.

Moore, K. (2011, July 25). *71% of online adults now use video-sharing sites*. Retrieved from Pew Research Center website: http://www.pewinternet.org/~/media//Files/Reports/2011/Video%20sharing%202011.pdf

National Cable & Telecommunications Association. (2011). *Top 25 Multichannel video Programming distributors as of June 2011 1 - 25* . Retrieved November 4, 2011, from http://www.ncta.com/Stats/TopMSOs.aspx

News Corp. (2011, January 5). *Twentieth Television sells multiple Emmy-award winning hit series Modern Family to 50% of country* [Press release]. Retrieved from http://www.newscorp.com/news/bunews_360.html

Ostrow, J. (2008, April 2). 'Friday Night Lights' lives. *Denver Post*. Retrieved from: http://www.denverpost.com/entertainment/ci_8784137

Parsons, P. R. (2003). Horizontal integration in the cable television industry: History and context. *Journal of Media Economics, 16*(1), 23-40. Retrieved from http://web.ebscohost.com.ezaccess.libraries.psu.edu/ehost/pdfviewer/pdfviewer?sid=dc69e10d-5ee7-445b-88db-b3774d00e409%40sessionmgr4&vid=2&hid=11

Postman, N. (1985). *Everything bad is good for you* (20th Anniversary ed.). New York, NY: Riverhead Books.

Rogers, R. (Writer), & Tewksbury, P. (Director). (1956). An evening to remember [Television series episode]. In E. B. Rodney (Producer), *Father knows best*. Retrieved from http://movies.netflix.com/WiPlayer?movieid=70207845&trkid=3325854

Ryan, M. (2007, March 20). Kevin Reilly of NBC talks 'Friday Night Lights' (and a little '30 Rock'). *Chicago Tribune*. Retrieved from http://featuresblogs.chicagotribune.com/entertainment_tv/2007/03/kevin_reilly_of.html

Save Friday Night Lights. (2007). Retrieved from http://web.archive.org/web/20070323102440/http:/www.savefridaynightlights.com

Skins on MTV. (2011). Retrieved from http://www.parentstv.org/PTC/campaigns/Skins/main.asp

Smith, S. (2011, October 20). Mobile screens may dilute tv engagement, kill ad attention. *MediaPost: Online Media Daily*. Retrieved from http://www.mediapost.com/publications/article/160848/mobile-screens-may-dilute-tv-engagement-kill-ad-a.html

Spigel, L. (n.d.). Family on television. In H. Newcomb (Ed.), *Encyclopedia of television*. Retrieved from http://www.museum.tv/eotvsection.php?entrycode=familyontel

Sponsored openings. (n.d.). Retrieved from http://fatherknowsbest.us/Openings.html

Stempel, G., III. (1989). Content analysis. In G. Stempel III & B. Westley (Eds.), *Research methods in mass communication* (2nd ed., pp. 124-136). Englewood Cliffs, NJ: Prentice Hall. (Original work published 1981)

Christians, C. & Carey, J. (1989). The logic and aims of qualitative research. In G. Stempell III & B. Westley (Eds.), *Research methods in mass communication* (2nd ed., pp. 124-136). Englewood Cliffs, NJ: Prentice Hall. (Original work published 1981)

Taylor, P., Funk, C., & Clark, A. (2006). *Luxury or necessity? Things we can't live without: The list has grown in the past decade*. Retrieved from Pew Research Center website: http://pewresearch.org/assets/social/pdf/Luxury.pdf

Television Bureau of Advertising, Inc. (2011, December). *TV basics*. Retrieved from http://www.tvb.org/media/file/TV_Basics.pdf

Tetzlaff, D. J. (n.d.). Home video. In H. Newcomb (Ed.), *Encyclopedia of television*. Retrieved from http://www.museum.tv/eotvsection.php?entrycode=homevideo

The Cosby Show. (2012a). Retrieved February 19, 2012, from http://www.centrictv.com/shows/cosby-show/

The Cosby Show. (2012b). Retrieved February 19, 2012, from Crossroads Television System website: http://www.ctstv.com/show.php?name=The+Cosby+Show

The Dish. (2012, January 12). Get social with the real housewives of Atlanta tonight! [Web log post]. Retrieved from http://www.bravotv.com/blogs/the-dish/get-social-with-the-real-housewives-of-atlanta-tonight

The Nielsen Company. (2011a). Nielsen estimates number of U.S. television homes to be 114.7 million. NielsenWire. Retrieved from http://blog.nielsen.com/nielsenwire/media_entertainment/nielsen-estimates-number-of-u-s-television-homes-to-be-114-7-million/

The Nielsen Company. (2011b). *State of the media: The cross-platform report: Quarter 1, 2011*. Retrieved from http://www.nielsen.com/content/dam/corporate/us/en/reports-downloads/2011-Reports/Nielsen-cross-platform-report-Q1-2011-reissued.pdf

The Nielsen Company. (2011c). *State of the media: The cross-platform report: Quarter 3, 2011—US*. Retrieved from http://www.nielsen.com/content/dam/corporate/us/en/reports-downloads/2011-Reports/Nielsen-cross-platform-report-Q1-2011-reissued.pdf

The Nielsen Company. (2010, April 28). U.S. homes add even more tv sets in 2010. *NielsenWire*. Retrieved from http://blog.nielsen.com/nielsenwire/consumer/u-s-homes-add-even-more-tv-sets-in-2010/

The Office digital shorts collection. (2012). Retrieved from http://www.nbcuniversalstore.com/the-office-digital-shorts-collection/detail.php?p=274444

TubeMogul. (2008, December 1). *How much of a typical video online is actually watched*. Abstract retrieved from http://www.tubemogul.com/research/report/18

TV.com. (2012a). *Father Knows Best: Episode guide*. Retrieved February 2012 from http://www.tv.com/shows/father-knows-best/episodes/

TV.com. (2012b). *Modern Family: Episode guide*. Retrieved January 2012 from http://www.tv.com/shows/modern-family/episodes/

TV.com. (2012c). *The Cosby Show: Episode guide*. Retrieved January 2012 from http://www.tv.com/shows/the-cosby-show/episodes/

TV Land. (2002, June 5). It's TV Land that knows best this Father's Day! Network salutes dads with four-hour showcase of 'Father Knows Best'. *PR Newswire*. Retrieved from http://www.prnewswire.com/news-releases/its-tv-land-that-knows-best-this-fathers-day-network-salutes-dads-with-four-hour-showcase-of-father-knows-best-77773712.html

Warner, K. (2011, June 9). 'Skins' won't return for season two: MTV calls the show 'a global television phenomenon that, unfortunately, didn't connect with a U.S. audience as much as we had hoped.' *MTV News*. Retrieved from http://www.mtv.com/news/articles/1665509/skins-season-two-canceled.jhtml

West, P. (1956). *Father knows best: Carnival (#3676)*. Screenplay. Retrieved from http://fatherknowsbest.us/Scripts/Script85.PDF

West, P. (Writer), & Tewksbury, P. (Director). (1956). Bud, the millionaire [Television series episode]. In E. B. Rodney (Producer), *Father knows best*. Retrieved from http://movies.netflix.com/WiPlayer?movieid=70207828&trkid=3325854

What is Antenna TV? (2012). Retrieved February 19, 2012, from http://www.antennatv.tv/about/antv-what-is-antenna-tv-120710,0,433552.story

Ziegler, P. (1988, October 2). TELEVISION: The $600-million man: Will a record syndication gamble on 'Cosby Show' re-runs pay off? *Los Angeles Times*. Retrieved from http://articles.latimes.com/1988-10-02/entertainment/ca-4862_1_cosby-show

APPENDIX

Program:
Episode Season/Number:
Episode Name:
Original air date:
Total length of episode:
Number of story lines:
Storylines:

Number of Speaking Characters:
Names of Speaking Characters:

Number of commercial breaks:
Total length of commercials:

COLD OPEN

Cold open Exists Yes No
Cold open start time

Cold open end time

Total length of cold open

Storylines in cold open

List of speaking characters in segment

Number of speaking characters in segment

COLD OPEN; SCENE 1
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

COLD OPEN; SCENE 2
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

COLD OPEN; SCENE 3
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

COLD OPEN; SCENE 4
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

COLD OPEN; SCENE 5
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

COLD OPEN; SCENE 6
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No

Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

TITLE SEQUENCE

Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Number of shots

Average length of shots

Commercial after title sequence Yes No

Length of program segment before commercial

SEGMENT 1

Segment start time

Segment end time

Total length of segment

Storylines in segment

List of speaking characters in segment

Number of speaking characters in segment

SEGMENT 1; SCENE 1

Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 1; SCENE 2
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 1; SCENE 3
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 1; SCENE 4
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No

Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 1; SCENE 5
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 1; SCENE 6
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 1; SCENE 7
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 1; SCENE 8
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 1; SCENE 9
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 2

Segment start time

Segment end time

Total length of segment

Storylines in segment

List of speaking characters in segment

Number of speaking characters in segment

SEGMENT 2; SCENE 1
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 2; SCENE 2
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 2; SCENE 3
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 2; SCENE 4
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 2; SCENE 5
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 2; SCENE 6
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 2; SCENE 7
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No

Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 2; SCENE 8
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 2; SCENE 9
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 3

Segment start time

Segment end time

Total length of segment

Storylines in segment

List of speaking characters in segment

Number of speaking characters in segment

SEGMENT 3; SCENE 1
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 3; SCENE 2
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 3; SCENE 3
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No

Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 3; SCENE 4
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 3; SCENE 5
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 3; SCENE 6
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 3; SCENE 7
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 3; SCENE 8
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 3; SCENE 9
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 4

Segment start time

Segment end time

Total length of segment

Storylines in segment

List of speaking characters in segment

Number of speaking characters in segment

SEGMENT 4; SCENE 1
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 4; SCENE 2
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 4; SCENE 3
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No

Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 4; SCENE 4
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 4; SCENE 5
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 4; SCENE 6
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No

Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 4; SCENE 7
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 4; SCENE 8
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT 4; SCENE 9
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

CLOSING CREDIT SEQUENCE

Scene(s) play during credits	Yes	No

Segment start time

Segment end time

Total length of segment

Storylines in segment

List of speaking characters in segment

Number of speaking characters in segment

CLOSING CREDIT SEQUENCE; SCENE 1
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

CLOSING CREDIT SEQUENCE; SCENE 2
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

CLOSING CREDIT SEQUENCE; SCENE 3
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

CLOSING CREDIT SEQUENCE; SCENE 4
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

CLOSING CREDIT SEQUENCE; SCENE 5
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

{EXTRA PAGES FOR SEGMENTS WITH >9 SCENES}

SEGMENT __; SCENE __
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT __; SCENE __
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT __; SCENE __
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT __; SCENE __
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT __; SCENE __
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT __; SCENE __
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No

Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT __; SCENE __
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT __; SCENE __
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT __; SCENE __
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No
Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

SEGMENT __; SCENE __
Start time

List of speaking characters:

Use of music	Yes	No
Laugh track in scene	Yes	No
Other non-diagetic sound	Yes	No
Use of text captions	Yes	No

Use of animation	Yes	No
Use of split-screen image	Yes	No
Use of speed manipulation	Yes	No
Use of camera zoom	Yes	No
Use of camera pan	Yes	No

End time

Length of scene (sec)

Number of speaking characters

Storyline(s) involved

Number of shots

Average length of shots

ACADEMIC VITA of Kelsey Bradbury

Kelsey Bradbury
90 Wellingwood Drive
East Amherst, NY 14051
kelsey.j.bradbury@gmail.com

EDUCATION

The Schreyer Honors College at The Pennsylvania State University 2008-2012
Bachelor of the Arts in Advertising/Public Relations
Bachelor of the Arts in Psychology
Honors in Media Studies
Minors in Business and English

THESIS

Title: CHANGES IN PACING, SOUND USE, VISUAL COMPLEXITY, AND NARRATIVE COMPLEXITY IN U.S. SITCOMS 1950-PRESENT
Supervisor: Matthew P. McAllister

HONORS AND AWARDS

Dean's List (2008-2012)
PSU Schreyer Honors College Academic Excellence Scholarship (2008–2012)
PSU College of Communications Donald E. Allen Memorial Scholarship (2009–2012)
PSU Presidential Leadership Academy Summer Grant (2011)
PSU Schreyer Honors College Ambassador Travel Grant (2011)
CPCVB K.A.R.E Scholarship (2010)
Phi Kappa Phi Emerging Scholar Award (2009)
PSU College of Communications Lawrence G. and Ellen M. Foster Scholarship (2008)

ASSOCIATION MEMBERSHIPS

Phi Beta Kappa
Phi Kappa Phi
Kappa Tau Alpha
Penn State Presidential Leadership Academy

PROFESSIONAL EXPERIENCE

Seevast Corporation (Pulse 360 Division) – *Buffalo, NY* – May-August 2010 & 2011
Paid Intern, Business Development
- Assisted in lead development to launch and sustain growth of CPA and CPC

products; various writing projects including "hot offers" newsletters

Travers Collins – *Buffalo, NY* – April-May 2011
Intern, Account Service
- Research for current clients' accounts; various advertising and PR projects

Foxframe Media – *Dublin, Ireland* – January-April 2011
Intern, Marketing
- Participated in launch and growth of a startup Internet advertising product, including marketing/PR efforts, competitive analysis, and product research and development

Penn State Research Communications – *State College, PA* – September-December 2010
Intern, Research Unplugged Speaker Series
- Assisted in events planning and marketing for the Research Unplugged interactive speaker series

Buffalo Niagara Convention & Visitors Bureau – *Buffalo, NY* – May-August 2009
Paid Intern, Marketing
- Participated in various web, print, and event-based tourism initiatives including writing e-newsletters and blog posts, copyediting promotional documents, working with local businesses, and compiling Visitors Guide and Group Tour Planner/Meeting Planner Guide

The Buffalo News – *Buffalo, NY* – May 2005-October 2009
Teen Correspondent
- Wrote more than two dozen articles for publication, including a cover story on the subject of censorship; interviews with award-winning authors; op-ed commentaries; restaurant reviews; and movie reviews

LEADERSHIP EXPERIENCE

Presidential Leadership Academy – *State College, PA* – April 2009-May 2012
Inaugural Member
- Selected as one of 30 rising sophomores to participate in a three-year critical thinking and leadership-development program led by the University President and Schreyer Honors College Dean
- Conducted extensive research analysis of culture in relation to the alcohol consumption habits of college students and presented proposed strategies for decreasing incidences of high-risk drinking on campus to University officials

ComRadio News – *State College, PA* – August 2008-May 2012
Newscast Producer; Morning Show Co-Host; State of the Media Co-Producer and Host

- Select news stories for weekly half-hour live news broadcast, run sound boards during broadcast, prepare web content, and train and manage newscast team
- Co-host Monday edition of the ComRadio Morning Show
- Co-produce and co-host "The State of the Media," a weekly talk show examining events and trends in the media

Penn State College of Communications – *State College, PA* – April 2009-May 2012

Peer Mentor

- Serve as a resource for incoming freshmen in the College of Communications and participate in orientation and scheduling events to provide guidance about academic, extracurricular, and social aspects of campus life.

Penn State Schreyer Honors College – *State College, PA* – December 2009-May 2012

Lead Career Peer Mentor, Career Development Office

- Coordinate Peer Mentoring events to assist students in searching for, researching, and evaluating potential employment and internship opportunities; serve as a resource for SHC scholars, providing guidance in résumé-writing, cover letter-writing, interviewing, and other career-building skills