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PRESENTATION OF FORENSICS PROGRAMMING
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GREGORY G. JUSTIS

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IMAGES OF LEGITIMACY: PRESENTATION OF FORENSICS PROGRAMMING IN CONTEMPORARY NEWS PUBLICATIONS

By

Gregory G. Justis

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ABSTRACT

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Gregory G. Justis

The *CSI Effect*, as it is referenced in mainstream media, is a purported effect on public perception caused by the portrayal of forensic science and criminal investigations in popular entertainment programming. Despite the obvious popularity of the programs (a common source of blame for such effects), perception alteration by way of media content is most certainly a product of multiple internal and external factors, rather than popularity and viewership alone. By examining the portrayal of programming within the context of contemporary news publications, this project focuses on the value and context of presentations of forensics television programming across media genres, highlighting the bidirectional flow of popular media cues, and outlining the potential for resulting public effects.

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INTRODUCTION

Media, in all of its forms and outlets, is often viewed largely as a vehicle for cultural commodities. Just as commercial, physical goods are bought, sold, and consumed by the public, so too are the images and ideas presented by media organizations (McManus, 1994). Each individual genre and segment of media (as a whole) may be considered a commodified product: from entertainment programming to news reporting, from television to news print, media content is generally intended to be marketed to and consumed by a specific population. Further still, if one delves deeper into these unique media forms, he/she would find further commodified topics: prototypical dramatic storylines, common themes and subjects (Graber, 1993; Surette, 1998). In essence, media may be defined as a tool for conveying commercial texts to a population; of course, this idea hold true for both entertainment media *as well as* news media, despite the apparently-competing goals of each (entertainment vs information). News media, like all other media genres, must be marketed and sold to an audience; it is only through subsequent market-based consumption that imbedded commodities are conveyed.

In efforts to market news content to an audience at-large and to attract viewers from a broad national public spectrum, news organizations often pull from external cultural outlets in addition to standard, "straight" news reporting. These cultural cues are typically images from popular entertainment programming or literary sources, and subsequently, news articles often reference contemporary television programs or films to both capture images (to create recognizable, accessible connections for readers) and to market stories (to inject dramatic images into reported text). Conversely, such

entertainment programs may pull from current headlines (the "ripped from the headlines" approach) for plot construction (Surette, 1998). Thus, there has appeared a virtual *merging* of pop culture entertainment images and news reporting; the exaggerated realities of entertainment programming have become almost inseparable from the news context in which they are presented. Although much research has shown the tendency of entertainment media to pull from popular news stories (Chermak, 2002), it appears that this tendency may indeed be a two-way street, with thematic images moving between news and entertainment outlets (rather than from news to entertainment only). In essence, just as entertainment media pulls from headline news, news media may pull from popular programming in an attempt to sell programming, adding a new, more complex facet to the popular conception of the docudrama.

From a social constructionist perspective, the potential implications of this blending of reality and informative content are quite dramatic. Prior research has certainly highlighted the ability of the media (and the infotainment mix) to influence public perception regarding certain social entities (Chermak, 2002); images presented as informative content are typically viewed as such by a receptive population. Of course, as previously noted, this idea is typically described when referencing entertainment programming; however, when viewing this blending as the aforementioned two-way street, the implications may be even more profound. A powerful example of this may be seen when examining the use of references to the popular television program *CSI* (and related forensics programming) in contemporary news: as viewers consume images of *CSI* and forensic programming in news reporting, they are caused thereby to assume a personal knowledge base formed by the implied truth of the relationship between said

programming and the news. Indeed, this potential "forensic awareness" in the public sphere may take on a new dimension of salience when a reciprocal relationship develops between contemporary dramatic and news programming.

Of course, the effect of a particular media genre and outlet on an audience is truly multidimensional; one cannot point to a singular item, inherent in such programming, as the source of viewer impact and subsequent alteration of public perception. Thus, research into the role, characteristics, and perception of programs must be similarly multidimensional, focusing on a number of issues, which in combination may ultimately result in an audience effect. For this project, a step back from audience perception has been taken, in an effort to focus on the role of CSI programming in media outlets *other than* the typical fictional entertainment context. By focusing on this shift in context and presentation, this project will address the use of references to *CSI* and forensics programming in news media articles, examining how such themes are drawn into contemporary news reporting.

The ability of the news media to act as a socializing agent is certainly not a new concept. Prior research has noted that news media content (presented as factual and real-time), does indeed have significant impacts on public worldviews, particularly when the programming depicts a facet of social life with which the public has little interaction (Graber, 1980; Hawkins & Pingree, 1983; Sacco, 1995; Shrum, 2002; Romer, 2003). This idea holds particularly true with the perceived reality of crime and justice in the United States, as the realm of crime and justice remains a backstage behavior in contemporary society. This idea of social construction based upon images of a specific social entity creates the potential foundation of the purported "*CSI* effect." As the image

of *CSI* (with its inherent unrealistic nature and makeup) becomes synonymous with forensics and investigations within the realm of news media, this legitimization of the programming may occur: the general public places an image of legitimacy and reality upon news media's presentation of *CSI* programming.

The root of this entertainment-laced news (and its potential effects) is, as noted above, the commodification of media, the selling of news reporting by way of dramatic content pulled from both reality (informational news reporting) and popular cultural cues (entertainment programming). As crime news has historically fit such a prototypical entertainment-structured mold, it has proven particularly susceptible to this restructuring, and thereby potentially-influential in the public sphere as a result of the apparent reciprocal relationship (Chermak, 2002). Such is the case when images of *CSI* and related programming are drawn into news reporting; as the popularity of the show (and related programming) has increased over time, so too has the likelihood that references will be drawn into news reporting, causing the lines between reality and entertainment to grow increasingly nondescript.

As noted above, the impact of a program(s) is not simply that it is popularly presented; it is the overall context and value placed upon the shows by media outlets and, subsequently, by consumers. To effectively research the potential effect of the addition of *CSI*-style entertainment programming, one must first research the ways in which the public is exposed to related images, specifically those presented in an informative context. It is the focus of this project to provide a longitudinal analysis of print media, examining the relationship between *CSI* and forensic programming and contemporary news texts, and highlighting the flow of popular media cues between entertainment and

news outlets. After a discussion of the history and growth of the police procedural in popular American culture, as well as the nature of news creation and reporting, the project shall examine the growing addition of *CSI*-style programming to news media content, how and when references to forensics programming are used in news content, and who is using them. After analyzing the results of this research, the implications of the news/entertainment mix shall be highlighted, discussing the potential effects in the public sphere.

LITERATURE REVIEW

Procedural History

To understand the formulaic foundation of today's forensics programming (*CSI* included), one must first examine the historical background of the genre, commonly referred to as the *police procedural.* Simply put, a police procedural is a variation of the classical mystery fiction genre, springing from the writings of authors Edgar Allan Poe, Charles Dickens, Sir Arthur Conan Doyle, and Eugene Vidocq (Dove, 1982). However, unlike the preceding classical form (which focused on the characters' use of astute observation and exceptional logical analysis), the procedural focuses on the systematic process of solving crimes by the police or teams of police officers; in such storylines, the law enforcement detective and rigid methodology are central (Branston & Stafford, 2002; Roberts, 2003). In essence, the police procedural is actually an offspring of the mystery genre of Sherlock Holmes, Inspector Bucket, et al (the classical detective) (Dove, 1982; Roberts, 2003). In a shift away from the classical school of mystery/detective fiction,

police procedurals highlight the regulations, methods, techniques, and apparent standards of crime-fighting, replacing prior detective style emphases (heightened capacity for deduction vs. technique/method). Unlike the classical formula, procedurals focus on both the lawman *and* the system/process; the emphasis on police procedure is so great that an in-depth understanding of the law enforcement system/process is paramount to the genre, and a firm adherence to these methods is canon for the genre (authors emphasize knowledge of investigative systems themselves) (Roberts, 2003).

Although the popularity of contemporary procedural (forensics) programming is particularly exceptional, the general procedural style is certainly not without precedent. Like all media genres, to appreciate the contemporary style of procedural presentation, an examination of the historical growth and progression of the police procedural as a mass media style, and the migration of content focus onto literal law enforcement and investigative procedures, must take place. Resulting from the historical growth of the genre, two basic archetypes of law enforcement exist within the police storytelling text: the tough guy law enforcer (the Dirty Harry character, fighting crime at all costs) and the procedural character (the Sherlock Holmes character, fighting crime by use of investigative abilities/procedures) (Dove, 1982; Roberts, 2003). It is the stylistic progression of this second type of enforcer, the *investigator*, which proves to be the subject of the police procedural. The procedural genre can be traced to Vidocq (early 1800's) and his historical, fictional storylines involving (though minimally-so) legitimate French police procedure (Roberts, 2003). Vidocq's works, particularly *Memoires*, published between 1828 and 1829, served to inspire other subsequent authors and publications, including Charles Dickens (often regarded as the "most legitimate claimant

to the title of author of the first police procedural [Roberts, 2003, p. 35]"). As the 19th century waned and the 20th century came to be, the growth of the police procedural continued, with characters like Dick Tracy (C. Gould) taking the stylistic reigns. In fact, the first procedural stories wherein literal police procedures were both detailed and central to the storyline were those appearing in Chester Gould's strip; as Roberts (2003) describes, "from its earliest days, *Dick Tracy* consciously incorporated and utilized up-to-the-minute police procedure (p. 38)." Treat's *V as in Victim* (1945) is often regarded as yet another turning point, playing off of the concept of literal procedure made popular by the Tracy style; added emphasis was placed on methodology and systematic technique rather than exceptional powers of ratiocination (Dove, 1982). The police procedural genre, although finding its origin in print media and increasing in focus on law enforcement procedure itself, made its way into radio and television media as the popularity of each began to increase dramatically. *Dragnet*, a procedural which began as a radio program (1949), was transformed into a successful NBC television program in 1952; as the first of its kind in the new media of broadcast television, the program truly built the framework for subsequent broadcast procedural programs (Dove, 1982). As the popularity of broadcast media grew, other shows of this type found their way onto television screens nationwide, expanding the consumption base across the country. This continued into the 1970's and 1980's, where the procedural genre itself splintered into an array of variations, from *Miami Vice* to *Red Dragon* (Roberts, 2003). The 1990's saw the birth of the popular *Law and Order* series (1990-present) and a trend to even further emphasize the procedure of law enforcement (particularly investigations, leading into prosecution). The growth of this type of programming, often employing "ripped-from-

the-headlines" premises, also coincided with the growth of the news-dependent True Crime genre, a cousin to police procedural programming (Wilson, 1997; Roberts, 2003).

Birth and Growth of *CSI*

As the 20th century came to a close, the police procedural was enjoying extraordinary levels of popularity in the realm of broadcast media. In 2000, a new program hit the television airwaves, a police procedural that shifted focus still further onto the process of law enforcement investigative/forensics technique and procedure, paving the road to unprecedented forensics/entertainment media popularity: *CSI: Crime Scene Investigation* (CBS, 2000). *CSI*, a procedural focusing almost entirely on the forensics/investigative process, has shown that crime *does* pay for networks: *CSI: Crime Scene Investigation* marked its 100th episode with all-time high ratings; the program attracted 31.5 million viewers and an 11.6 rating/28 share in the adults 18-49 demographic, based upon Nielsen Media Research data (Nielsen, 2004). In addition to the immediate popularity of the show itself, *CSI* is credited with launching a new wave of TV crime programs; (one season pre-*CSI*, only three procedurals remained in the top 40; post-*CSI*, procedurals make up 1/3 of shows in top 40) (Mendoza, 2005). The program launched a string of parallel series (*CSI: Miami*, *CSI: NY*), and has inspired a plethora of additional marketing, including board games, novelizations, computer games, and science lab kits that editorial reviews claim beckon users to "be [their] own pathologist (Boynton, 2005)." In addition to the newfound popularity of the procedural, *CSI* has also placed increased emphasis on forensics and crime scene investigations, focusing on the process

itself (technology, technique, method, etc.); high-tech crime analysis is at the forefront of the program, with dramatic storylines extant during the process (Boyle, 2005).

Nature of Crime News Reporting

Contemporary news media is often described as crime-saturated, sensational images with particular emphasis on homicide and violence (Graber, 1980; Hamilton, 1998; Lichter & Lichter, 1994; Klite, Bardwell, & Salzman, 1995, 1997; Romer et al, 2003). The growth in crime news has been seen in both television *and* print media; indeed, crime has become what Dennis & LaMay (1992) describe as "the most common and least studied staple of news (p.xi)." Network television's coverage of homicides grew by approximately 600% between 1990 and 1998 (despite a national drop in homicide rate (Westfeldt & Wicker, 1998), and research by Chermak (1995), Kaniss (1991), Sherizen (1978) and others have noted that crime stories are among the most prevalent in news print. Mass media, through such crime saturation, has grown to be the primary outlet for crime and criminal justice news information in society (Ericson, Baranek & Chan, 1989; Graber, 1980; Barak, 1994; Warr, 1995; Potter & Kappeler, 1996).

The prevalence of crime-related news in contemporary mass media may be founded in several causal factors, the most highly-visible being the entertainment value of crime news reporting. Just as entertainment media strives to maintain wide viewership and mass public appeal (thereby driving up consumer ratings), so too does news media struggle to sell its product of informational content to a viewing audience. Crime news contains all of the features of prototypical dramatic content: images of protectors,

villains, and victims; non-complex storylines; and immediate, seemingly-personal connection to a viewing audience (Sacco, 1995; Gilliam & Iyengar, 2000; Hiebert & Gibbons, 2000; Lipshultz & Hilt, 2002). News organizations have, in fact, adopted formats and storylines similar to that of entertainment programming, further adding to the dramatic nature of reporting; in effect, news content becomes the episodic drama, feeding heavily on an expectation of informational news coverage (Chermak, 2002; Sacco, 2005). The crime news story often fits within the boundary of the standard news frame, simplifying the contextual foundation of the story, and highlighting the traditional themes of individual responsibility, statement of moral boundaries, and capture/punishment of the individual offender (Cole, 1995, 1996; Surette, 1998). The assigned roles of "good guy" and "bad guy" are also translated into non-incident stories, as well; profiles and organizational news stories feature similar structural cues (particularly profiles of law enforcement and criminal justice system officials).

Coupled closely with this dramatic appeal and simplified content is the inclusion of popular cultural themes in news reporting. A prime example of this thematic inclusion in crime news is the referencing of entertainment programming in such stories. As Chermak (2002) notes, the desire to pull from the exaggerated realities of fictional content in news media accounts of real-world incidents is exceptionally strong; such is the case when popular images of crime and law enforcement are pulled into the traditional news structure. For example, many contemporary crime incident stories include references to fictional television and literary images (characters, programs, etc.), further blurring the line between reality and fiction through the marketing device of cultural cues (Altheide, 2002).

In addition to the aesthetic content (drama, pop cultural appeal) that crime news offers, logistical features of crime news reporting also add much appeal to an already popular topic. Ease of access by reporters to routine sources of crime news appeals to the efficiency-oriented news agency; information regarding incidents and the justice system is readily available to reporters and the media generally from public officials, law enforcement, criminal justice system participants, etc. (Reese & Buckalew, 1995; Sacco, 1995; Lipschultz & Hilt, 2002). Thus, law enforcement officials have become the primary source of crime news information, with the police acting as the authoritative news source (Tuchman, 1978; Ericson et al, 1989; Beckett & Sasson, 2000). The relative periodicity of crime news also appeals to news organizations' required structure: since incidents occur at specific dates, times, and places, news organizations are able to apply such content to the daily image of news reporting (Sacco, 1995). In essence, yesterday's crime news is replaced by a batch of fresh incidents, consumed by an audience that has come to expect current/daily news reports.

As a result of the aforementioned source foundation of news reporting (source of authoritative information), crime news content has traditionally remained "limited" in nature. The operational details of criminal cases (i.e. forensics/CSI use) are commonly left out of such reporting, per the traditional model of efficient news production and the source structure present for news reporting (Tuchman, 1978; Fishman, 1980; Chermak, 2002; Surette, 1998). Within this structure, journalists attempt to produce news stories in an efficient manner: sources that permit ease of access and act as authoritative sources are those most frequently cited in news stories (Sacco, 2005). Law enforcement often fills this role of "expert," due to the seemingly-impartial and authoritative position they

occupy, as well as the established relationship between the police and the media by way of easy access routes (Tuchman, 1978; Ericson et al, 1989; Beckett & Sasson, 2000). Of course, sources outside the law enforcement realm do appear in news media (academic experts, other journalists, etc.), but in regards to crime stories, the range of sources tends to be remarkably narrow, often limited to journalists and the police (Welch, Fenwick, & Roberts, 1998; Chermak, 1995). The general structure of news stories also tends to be extremely simplistic, rarely expanding from limited reporting; in crime news, this formation of narrative is often limited to the crime, the offender, and law enforcement, ignoring both detail and context (McChesney, 2004; Sacco, 2005). By this definition, crime news stories have been traditionally formed with this limited structure, emphasizing good guy vs. bad guy, limited-scope, episodic storytelling. This episodic formula has long proven simple, straightforward, and easy to fit into a news outlet's in-between-commercial-breaks programming (Surette, 1998).

Expansion of Crime News Structure

Recently, it has appeared that this trend of limited-nature reporting may have shifted, with the presence of criminal investigations beginning to appear in the news. As the "middle ground" of investigations has been added to the traditional simplistic, limited-scope crime news story, forensics use and criminal investigations are more visible than ever. This addition of investigations and forensics, likely based on the cultural popularity and visibility of such techniques in popular entertainment media (i.e. *CSI* and related programs), marks an interesting intersect between entertainment themes and news

content. Prior research has shown the tendency of entertainment media outlets to draw themes from popular or celebrated cases into programming; this is often described as the "ripped from the headlines" approach. In his 2002 publication, Chermak describes how images from popular news events in the world of criminal justice (Oklahoma City bombing, O.J. Simpson trial, World Trade Center/Pentagon attacks) are drawn into the plot lines of entertainment outlets ranging from cartoon publications to television and film programming. As Chermak (2002) notes, these entertainment outlets often exploit the facts of the case, allowing the viewing audience to revisit the real-life news story. This exploitation by way of the addition of popular themes is, of course, a tool for the marketing of entertainment media outlets (allowing for, as noted above, the relationship between the consumer and the product). Television shows and films pull from contemporary headlines for plot construction, and the cultural myths surrounding the criminal justice system are perpetuated; by drawing sensationalistic themes from these popular news stories, entertainment media serves to further solidify stereotypes and myths surrounding the criminal justice system, emphasizing common themes that resonate across genres (Chermak, 2002).

Interestingly enough, prior research on the thematic intersect between entertainment in news media tends to maintain a unidirectional focus; often times, entertainment media is emphasized as the thematic borrower, while news media is viewed as an independently-functioning entity. However, this perspective is terribly limited and wholly inaccurate; just as with entertainment media, news media too feels pressure to employ cultural themes in its presentations. As such, one cannot view the flow of themes as unidirectional; rather, it is a virtual two-way street, with thematic

content flowing between entertainment and news media outlets. As news media outlets are constantly engaged in an effort to sell their product, images are often derived from the pop cultural lexicon and from how individuals maneuver within the media window with a remote control (McManus, 1994; Surette, 1998; Chermak, 2002; Sacco, 2005). Thus, media outlets may pick up on and employ the use of easily-accessible pop cultural images in the text of news stories, including images from popular entertainment media. It appears there may be no exception in the case of criminal investigations and the popularity of *CSI*-style programming; because the commodity of crime news is advertised and sold to an audience base, journalists must employ narratives that recall the outside forces of popular images and context (Epstein, 1974; Altheide, 1976; Gans, 1979; Tunnell, 1992, Chermak, 1995). This appears to be true of forensics and investigations in the news, images of which have begun to appear with increased frequency in news stories. Interestingly, with this move towards investigations in news media, it appears that *CSI* and its related programming may often be mentioned within the context of news articles that reference criminal and crime scene investigations: cases are referred to as "just like an episode of *CSI*," as "real-life *CSI* stories," or as "cases out of a *CSI* script." The desire of the media to pull from entertainment outlets and the popularity of *CSI* and related programming in crime stories, coupled with a simple application to already-common crime news stories, makes the inclusion of forensics and criminal investigations in the news quite desirable as a method of selling the news product; however, as experts such as crime lab technicians are outside the traditional path of news gathering, the pressure to pull from *CSI* and other programs is heightened.

As much prior research highlights, the news construction process is most heavily marked by its need for efficiency in production and dissemination (Chibnall, 1977; Fishman, 1980; Ericson et al, 1989; Chermak, 1995, 1997). Emerging from this need are strong, mutually-beneficial relationships between source organizations (the primary providers of information regarding crime and justice; typically public social control organizations, most commonly local police departments and their spokesmen, or court officials) and news outlets. In crime news, the most common form of source organization is law enforcement agency; it is this group that controls most of the information regarding a particular case, agency, or initiative (Ericson et al, 1989; Chermak, 1995). This concept holds true across news story types: when topics of crime and justice are the focus of a news story, law enforcement will likely be the primary source of expertise within the article's text. As a result, most of the referenced factual information in a news story will be based upon direct or indirect statements from law enforcement officials. This standard media/police relationship, aside from its mark of efficiency, is often viewed as both organizationally-positive and reciprocal, serving the needs of the organization and the media outlet (Chermak, 1995).

The problem with the typical source organization, particularly when examining contemporary stories of crime and justice, is that the individual acting as spokesman for the organization is typically a public information officer (chosen to represent the department) or a street cop tipster (often providing information either anonymously or personally). Chermak (2002) describes how these representatives, or "claims-makers," "provide the facts, descriptions, summaries, and opinions" regarding an event or topic (pp. 79). As such, as media organizations clamor to gain criminal justice information,

they are funneled into a common path, that which exists between the police and the reporter. Unfortunately, the expertise of the law enforcement officer, as strong as it may be, is limited: both the beat cop and the information officer are providing information based upon the perspective of the *law enforcement official*, often in a way quite specific to police organizations.

Difficulty arises when expertise is required in an area outside the expertise of the beat officer, yet within the realm of law enforcement; such is the case with the current upward trend in the popularity of forensics and criminal investigations. As public interest in investigations and forensics programming increases exponentially, the desire to include such themes in news reporting is profound (selling the story by tying in popular themes). Of course, the difficulty arises when approaching the typical claims-makers and source organizations, as information regarding forensics is typically out of the range of expertise of these sources. As a result, references to *CSI* and similar programs may have begun to replace quotes and sound bytes from real-world experts, filling the demand for forensics reference (demanded via cultural popularity) without moving outside the process. In this way, CSI programming and real-world cases involving forensics/investigations use may become virtually inseparable; each is allowed to become a reflection of the other. By this equation, real-life crime scenes are "just like *CSI*," and *CSI* is "reflective of reality." Just as entertainment media tends to pull from popular cultural themes, so too may news media be drawing in the popular image of the criminal investigation (via the thematic two-way street), despite the process' inherent inability to effectively handle such a demand. This CSI image is thereby consumed by a public audience, a population that turns towards news media for social communication.

Perceptions may be altered thusly, as images of real-world criminal investigations and related expectations would be increased to fit with the constructed image of *CSI*. This image of forensics programming as accurate, or as equated with real-life forensics and investigations, opens the door to the formation of viewer effect(s), commonly referred-to as the "*CSI* effect."

Crime News Expansion and the *CSI* Effect

It is upon this theoretical foundation that the *CSI* effect has the potential to occur within a population; while research has shown that entertainment media alone has limited effects on public perceptions, news media presentations of social institutions may duly alter said perceptions of institutions in a manner that reflects the image portrayed within the news media window. *CSI*, as a police procedural alone, may not have a widespread impact on public opinion regarding real-world CSI; the *CSI* effect cannot stand on simple anecdotal claims of ties between social construction and CSI programming. Rather, the ties between the news media genre and CSI programming lay the foundation for solid theoretical research in the *CSI* effect, and open the doors to empirical analysis, something gravely needed in the area of study. It is with ample suspicion that some of those involved in media effects research approach the *CSI* effect, and with good reason; as noted, both theoretical connection and methodological analysis have been minimal. It is the purpose of this project to examine the use of references to *CSI* and forensics programming in news media articles, focusing on the idea of the potential "legitimizing" of such programming through the external source of factual news media, and opening up

the possibility of application of concepts of news media social construction to CSI television programming.

The *CSI* Effect

The *CSI* effect, which has appeared recently as a relatively new concept in both criminal justice academia and pop culture, is an idea focusing upon altered perceptions of real-life criminal investigations for an audience based upon presentations of CSI and forensics in television procedural programming. This effect is marked by the idea that popular programming regarding forensics has a visible effect on viewers, endowing them with unrealistic expectations of real-world investigations. These images are hardly based upon reality; the public is simply subjected to images of false practices, which are often presented as true-to-life (Willing, 2004). As a result, it has been surmised that viewers have equated the images portrayed via entertainment procedurals with real-world investigations, causing a negative effect on the administration of crime and justice, as well as undue pressure on forensics scientists, investigators, and criminal prosecutors. The presented images, of course, stand in stark opposition to the nature of the reality of criminal investigations and crime lab operations: Horvath and Messing found that "most criminal cases do not involve the use of any physical evidence and that such evidence, even when available, is seldom seen by the police detectives as having any intrinsic value (Horvath & Messing, 1996, p. 963)." Further still, the use of many techniques in criminal investigations proves overtly subjective and untested (Roberts et al, 2004). Heavy caseloads worked by law enforcement agencies inhibit the ability to involve investigative services and often, the ability of departments to actually employ the use of forensic

techniques is rare, due to situational factors related to individual cases themselves (ie, lack of testable evidence, etc.) (Horvath & Messing, 1996; Lovgren, 2004). Of course, the portrayal of the CSI system is far different within the confines of police procedural programming; forensic science is deemed a "juggernaut" or an "infallible object," above reproach and a harbinger of inevitable conviction for an offender (Boyle, 2005).

CSI, News Media, and Social Construction

Methodological studies of the *CSI* effect and its impact on the public are virtually nonexistent; while many involved in both the criminal justice system and the scholarly community point to the existence of the effect and its impacts, the concept thus far proves only anecdotally sound, without empirical support and little theoretical foundation for solidification. Of course, superficially, the *CSI* effect may appear to be an obvious occurrence, particularly to those involved in the CSI and criminal justice systems. Reliance on forensics evidence has grown in recent years, and the demand for use of CSI services has increased substantially (Peterson & Hickman, 2005). But can the blame for such occurrences truly be placed on *CSI* and its related entertainment programming?

Proponents of the *CSI* effect believe that the connection does, indeed, exist; they point to the concept of television media and social construction as the foundation of the effect and its subsequent impacts. However, recent research in media effects and social construction has pointed to the fact that genre-specific traits and presentation styles are paramount when determining programming impact; it is a vast overgeneralization to claim that viewers respond to all forms of media in the same way. Rather, it is the content of the programming itself that determines the level of constructionism impact: the

media text must be presented in such a way that an audience is virtually *convinced* of its authenticity and application to daily life (Anderson et al, 2001). In essence, for theories of social construction to be applicable to a media outlet, the outlet and portrayal of information must be considered realistic to an audience member (Hawkins & Pingree, 1983; Romer et al, 2003; Segrin & Nabi, 2002; Shrum, 2002). The news, be it on-screen (in the form of broadcast media) or on the page (in the form of print media), is often considered the most-real and unbiased outlet of events as they occur (Fiske, 1987). As images of real-world situation and institutions are presented in the news media, as noted by the above research, public perceptions, expectations, etc. shall be thereby impacted. For the purposes of this project, this concept is of particular import: as previously noted, because references to CSI and related programming are made citing the program as essential authoritative texts (in addition to the lack of real-world sources in story construction), this image of legitimacy within the news context may well be placed upon the CSI programming *itself.*

The Present Research

It is the focus of this paper to examine the presentation of *CSI* in news media and to empirically ground the possible legitimization of forensics programming that may occur as a result of the merging of popular entertainment programming images and informative content (the thematic two-way street). This legitimization is, as noted above, based upon the blurred relationship between news articles and references to said television programs (popular cultural images); if quantity and substance of *CSI* references in news articles legitimates the fictional CSI as reality, prior media effects research

dictates that the inherent communicative value of the news would thereby serve to influence perceptions in the direction of presentation.

This project proposes the following research questions: 1) has there been an increase, over time, in references to *CSI* and related programming in news print media? 2) what is the nature of crime news articles that reference forensics and crime scene investigations (when are references used, and how is the programming is treated)? 3) what sources are adding CSI programming to stories in the realm of crime news? It is hypothesized that there exists an increase, over time, in the amount of references to CSI and forensics in crime news stories, as the popularity of forensic science and its visibility in pop culture has also increased (while the "two-way street" of cultural reference allows the passage of themes from one genre to another); in addition, as the source of forensic lab technician or expert is beyond the range of the typical news gathering process, it is also hypothesized that an increase in forensic references will also be marked by an increase in references to *CSI* and related programming, using these references as authoritative citations. The above research question #1 addresses the increase of forensics programming reference use in the news. Research questions #2 and #3 address the nature of how *CSI*-style television programming references are used, as well as who is referencing the programming (authoritative source).

METHODOLOGY

To address the research questions of quantity and treatment of CSI programming in news media contexts, the author has examined articles published in print media sources over a period of five years (2001-2006), beginning in proximity with the first year of *CSI* broadcast. News print media was used for this project, as print media lends itself well to this type of analysis: news print is readily-obtainable, and logistics such as layout, article length/size, and the time frame of the project make print media conducive to this type of study. In addition, news print also provides more in-depth coverage of such stories, and this type of long journalism is particularly desirable for the content analysis, as it often contains deeper coverage of crime stories. Other types of media (particularly television news media) are also more difficult to study, particularly retroactively over time. As in-text searches will be used, print media shall be a reliable source of historical article sampling since the entire text can be searched. Television and other forms of news media would be valuable sources of future study; however, as this project is the first content analysis to address the relationship between the news and CSI programming, print media is an appropriate place to begin.

For this content analysis, the sample was drawn via a regional Lexis-Nexis search (Northeast, Midwest, Southeast, West). A Lexis-Nexis search was used as the search tool, as it allows for keyword search within national newspaper publications over time. In order to examine all major publications across the nation, regional searches were used, as these allow for the gathering of articles from both large local and regional publications (*Chicago Tribune*, *Indianapolis Star*) as well as large national publications (*New York Times*, *USA Today*, etc.). Isolating the date-range at five years, a Lexis-Nexis search of

all text of stories was performed, with established keywords including the terms "CSI," "crime," and "forensics" within all-text of stories, allowing for in-context analysis of the term(s) (Weber, 1990).

From the pool of articles referencing the above three keywords, the author pulled only crime stories for analysis, and excluded all others (entertainment stories, program reviews, etc.). Guidelines for the definition of crime story type as set by Graber (1980) and Chermak (1995) were followed, including incident stories, editorials, profiles, etc., but excluding articles less than 3 paragraphs in length and letters to the editor. All sections of the publications were searched, and all types of stories were examined (features, editorials, news stories, etc.), as Chermak (1995) notes that crime news may be found in many sections of news print. It is useful to note here that education articles (those highlighting college courses, high school programs, community education classes) were omitted from this population. Because the nature of such articles were so widely varied (from college courses to law enforcement/community groups), it was the decision of the author that education articles may ultimately dilute the sample, and the articles were therefore removed. Included story types included incident stories as well as profiles, policy stories, etc., as all contained informational focus on the criminal justice system, and all types of articles are widely used to construct the popular image of crime and justice (Chermak, 1995). Entertainment-specific stories (i.e., film/television reviews) were not included.

After keyword-referencing stories focusing on crime and the criminal justice system (henceforth referred-to as "crime stories") were noted via the Lexis-Nexis search, they were pulled from the overall pool. The crime stories were specific to publications in

each region; Northeast contained 136 stories, Midwest contained 110 stories, Southeast contained 188 stories, and West contained 223 stories. From this total (657 stories), a 25% simple random sample was pulled to represent all major US news publications, marking 173 stories for final examination. These 173 stories were used as the basis for the project's content analysis. Within this core pool, 38 (22%) stories were from the Northeast region, 35 (20%) from the Midwest, 54 (31%) from the Southeast, and 46 (27%) in the West. A count of articles from core pool was used to address the first question (rise in forensics programming reference over time).

To address the second and third research question (nature of CSI programming reference; source of CSI programming reference), detail coding of all programming-referencing crime stories was performed. From the 173-article representative sample, each story was coded by way of two separate datafiles. In one file, the story was the unit of analysis (N=173); data recorded here represents basic features of the article stories. In the other, the source(s) referencing forensics programming was the unit of analysis (N=307); this data represents basic features of the aforementioned sources. Each source referencing forensics programming was coded.

The story datafile included variables related to the details of the story itself, including such items as length (number of paragraphs), which forensics program mentioned, salience, type of crime(s) noted, etc. These variables speak to the characteristics of the kinds of crime stories that mention *CSI*-style programming. The second datafile, which identified characteristics of the sources who reference forensics programming within the news media context, included variables related to sources that mention forensics programming, including type of source (reporter, investigator,

prosecutor, etc.), context, and tone. For the purposes of this project, context is defined as the substantive theme surrounding the mention of the program. Table 1 describes the context variable in further detail.

Table 5. Context Variable

Illustrative	"Luminol was used to find the victim's blood spatter, which many people have seen first-hand on programs like *CSI* and *Crossing Jordan.*"
Emerging Technology	"DNA analysis has grown to be the 'gold standard' of today's forensic scientist, as seen in *CSI: NY.*"
Color / Dramatic Impact	"*CSI*: Rhode Island"
Comparison	"The local sheriff's office detectives worked like *CSI* sleuths for several weeks."
Contrast	"This homicide, unlike your average *CSI* case, took 15 years to solve."
Popularity Growth	"We're seeing far more applicants for lab technician openings as a result of *CSI*'s popularity."
Consultation	"We try to base the show as much on reality as possible', said Dr. Jane Smith, consultant for television's *CSI: NY.*"
Cautionary	"Our office has seen a trend towards people believing in the reality of *CSI.*"

Tone is defined as whether the statements sources make regarding programming can be regarded as positive, negative, or neutral (Grey et al, 1965). Table 2 describes the tone variable in further detail.

Table 2. Tone Variable

Supporting / Equating	"Dr. Smith, the head of the state police crime lab, heads Rhode Island's very own version of *CSI*."
Refuting / Negating	"Unlike what the public sees on television shows like *CSI*, the detectives in Little Rock were forced to work with limited resources and personnel."
Neutral	"'I think there's definitely a *CSI* effect; whether or not that's good or bad remains to be seen,' said Mark Smith, an Oakland County public defender."

Because detail coding of the articles in this project was performed by a single coder, a number of precautions were undertaken to ensure reliability. First, halfway through coding, the author went back and recoded the first few stories, comparing them against the original coding to ensure consistency. Second, the author had several peers experienced in content analysis review the coding scheme at various stages throughout the process, confirming face-value.

FINDINGS

Research Question #1: Programming Reference over Time

To address the first research question, a count of articles was performed. The count of crime stories pulled (those that reference CSI programming) varied quite significantly over time; the year 2001 (incomplete year, as the five-year search only allowed partial inclusion of 2001 and 2006) contained 9 stories (5.2%), 2002 contained 18 stories (10.4%), 2003 contained 34 stories (19.7%), 2004 contained 35 stories

(20.2%), 2005 contained 61 stories (35.3%), and 2006 (incomplete year) contained 16 stories (9.2%). As noted, although stories were only pulled for the first two months of 2006, they contained almost as many stories as the entire year of 2002. Needless to say, a clear rise in the use of *CSI* and related programming as a reference point in news media can be seen since the beginning of *CSI*'s broadcast.

Research Question #2: Nature of Programming Reference

To address the second research question, the core articles were detail coded by way of a story variable codebook, in which the story itself was the unit of analysis. This codebook included variables such as impact level, type of story, type of crime, program mentioned, etc.

Story Variables

The distribution of stories across impact level – local, state or regional, and national – was fairly evenly distributed. Thirty-seven percent (N= 61) of stories had a local focus, 32 percent (N = 56) had a state or regional focus, and 30 percent (N = 51) were national in scope. One story had an international focus and one story was undefined. Eighty percent (N = 35) of incident stories that referenced forensic programming were local stories, whereas 75 percent (N = 21) of stories in which the main focus related to crime programming or the *CSI* effect in particular had a national impact level. Sixty-three percent (N = 26) of organizational stories had a state or regional impact level while 29 percent (N = 12) were of a local nature. About two-thirds (N = 8) of policy stories were state or regional compared to 4 of a national nature. Interestingly, profile stories were distributed quite evenly across impact level with local and state/regional each accounting

for 33 percent of the total (N = 11 for each) and 30 percent (N = 10) were determined to be of national interest.

For incident stories the stage of case or investigation was recorded. Eighty-six percent (N = 38) of incident stories in which forensic programming was mentioned were either in the investigation (N = 20) or prosecution stage (N = 18). Two cases were stories about the commission of the crime or arrest of the suspect and another two cases were stories written in the sentencing phase of a trial.

Every story examined referenced *CSI.* In all but one story, *CSI* was either the only or the first forensic related program mentioned. In 84 percent of stories *CSI* was the only show referenced. *Quincy* was the second most frequently cited forensic related show, referenced in seven stories, but always in addition to *CSI.* The second most frequently cited forensic program in addition to *CSI* was *Forensic Files* (N = 5) followed by *Cold Case Files* (N = 4) and *Crossing Jordan* and the *New Detectives* (N=3 each).

Salience

It was desirable to examine whether or not there were any significant differences between the type of crime story and salience of forensic programming references within stories. A salience score was developed for each story representing the proportion of paragraphs within the story that contained a reference to forensic programming. Table 3 presents the average salience score for each type of story. As would be expected, stories referencing forensic programming whose main subject was crime shows or the *CSI* effect in particular, had the highest average salience score. In these stories an average of 54 percent of the paragraphs included references to forensic programming. This average salience score was significantly higher than for all other types of stories at $p < .01$.

Table 3. Mean Salience Scores by Type of Story

Type of Story	N	Mean	Std. Deviation
Incident	43	.0965	.15038
Organizational	41	.1588	.20700
Profile	30	.2150	.05879
Shows/CSI Effect	28	.5379	.21079
Other*	14	.1000	.06906
Policy	12	.0875	.21259
Total	168	.2061	.23588

*Includes editorial stories

Table 4. Mean Number of Sources by Type of Story

Type of Story	N	Mean	Std. Deviation
Incident	44	1.1364	1
Organizational	41	1.5610	1
Profile	33	1.7273	1
Shows/CSI Effect	28	3.6786	3.5
Other*	15	1.2667	1
Policy	12	1.1667	1
Total	173	1.7746	1

*Includes editorial stories

Because crime show and *CSI* effect stories would be expected to have dramatically higher salience scores than other stories, a one-way ANOVA was performed with those stories excluded, as well as stories classified as "other," since there was too much variation within that category for it to be meaningful. There were no overall significant differences in mean salience between types of stories, except for profile stories which had a higher mean salience than incident stories at $p < .05$.

Prominence was measured by recording the paragraph number in which the first reference to forensic programming occurred. In 36 percent (N = 61) of stories the first or

only forensic programming reference came in the first paragraph. *CSI* was referenced in the headline of 33 percent of stories (N = 57). But there was significant variation regarding headline references depending on type of story. While no policy related stories (N = 12) and 91 percent (N = 40) of incident stories with forensic programming references included a headline reference, 93 percent of crime show/*CSI* effect stories did (N = 26). About 40 percent (N = 13) of profile stories and 27 percent of organizational stories (N = 11) contained headlines that referenced *CSI* specifically.

Research Question #3: Source of Programming Reference

To address the third research question, the articles were detail coded using a second codebook. This codebook included such variables as type of source, tone, context, etc.

Sources

Almost 65 percent of all stories only included one source that referenced forensic programming. The number of sources referencing forensic programming ranged from 1 to 9. The average number of sources for all types of stories was 1.77 with the median and mode both equally one. Table 4 presents the mean number of sources referencing forensic programming by type of story. As would be expected, crime show/*CSI* effect stories, which also have the highest salience scores, had the greatest mean number of sources referring to forensic programming per story. A one-way ANOVA was significant. The mean number of sources for crime show/*CSI* effect stories was significantly higher than for all other types of stories at $p < .01$. None of the other types of stories showed means with a significant difference.

The author of the story accounted for 38 percent of the references to forensic programming (N = 118) in the sample. Nearly all of those authors, 113 total, were reporters, while the remaining 5 were academics or public officials. Fifty-seven percent of the references to forensic programming resulted from an interview performed by the reporter (N = 176), while the remaining 13 sources of forensic programming reference resulted from the reporter quoting a statement or document that could not be considered an interview. For example, in one story, the reporter quoted a prosecutor's statements to a jury concerning *CSI.*

In this sample of crime stories with references to forensic programming, the type of source that most frequently referenced such programming were crime scene technicians or investigators. In fact, nearly a third (N = 61) of the sources in this sample were CSI technicians. Medical examiners accounted for another eight sources, bringing the total percentage of sources with a relation to the field of forensics to nearly 37. The second largest category of sources, 21 percent, referencing forensic programming was prosecutors (N = 40). Law enforcement officers, chiefs, sheriffs, or detectives accounted for 15 percent (N = 28) of sources. Overall, actual forensic professionals, prosecutors, and law enforcement officials accounted for 73 percent of the total sources in this sample.

Most sources, 52 percent (N = 162) that referenced forensic programming did so with an overall tone that refuted or negated the content of the programming. However, nearly 31 percent (N = 95) of sources referenced forensic programming with a positive tone, such as equating forensic programming with reality. The remaining 16 percent (N = 50) of sources used a neutral tone in their references to forensic programming.

Not surprisingly, there was variation among the type of source and the context and tone of their references to forensic programming. Authors were fairly evenly distributed across positive, negative, and neutral tones. Forty-one percent of authors (N = 48) referenced forensic programming in a supporting/equating manner, 32 percent (N = 38) used a refuting/negating tone, and 27 percent (N = 32) referenced such programs in a neutral manner. Seventy-two percent (N = 50) of forensic professionals referenced forensic programming with a negative, refuting tone. Eighty-percent of prosecutors (N = 32) and all of the judicial sources (N = 3) referenced such programming with a negative, refuting tone. Law enforcement sources were also overwhelmingly negative in their references to forensic programming (68 percent). Of the six defense attorney sources in this sample, tone was equally distributed across positive, negative, and neutral. Program affiliates (producers, writers, etc), not surprisingly, had more positive tone references than any other source type, with 75 percent of these sources referring to forensic programming in a positive manner (N = 9).

In addition to tone, the context of each source's reference was recorded. For example, did the source reference forensic programming in a context that contrasted such programming and reality? Did the source reference forensic programs to caution against their influence such as in a story on the *CSI* effect? Or, did the source reference forensic programming by drawing a comparison or to illustrate a point? The most frequent type of context (N = 96) used by sources was a reference to forensic programming that was then contrasted with reality. Sources contrasting forensic programming and reality accounted for 31 percent of the total. Seventy-one sources, or 23 percent, referenced forensic programming with cautionary statements. A little over 13 percent (N = 41) or sources

compared forensic programming to reality, while almost 13 percent (N = 39) made statements that simply referred to the growth in popularity of forensics, and a little over 12 percent (N = 38) made references to forensic programming for color or dramatic impact. Almost all, 97 percent, of references to forensic programming for color or dramatic impact were attributed to reporters. When only considering the context in which sources used by reporters reference forensic programming, 71 percent of sources either contrasted forensic programming with reality or made cautionary statements concerning the effect of such programming (N = 77 and 58, respectively). About 11 percent (N = 21) drew comparisons, and 10 percent (N = 19) discussed popularity growth.

Source by story

Almost half of those referencing forensic programming in incident stories, 24 out of 50, were reporters. When the sources *used by* reporters (see Table 5) who referenced forensic programming in incident stories are considered, nearly 70 percent of references to forensic programming in incident stories that were not attributable to the reporter were garnered from official sources, either a law enforcement official, prosecution official, or a forensic professional such as a CSI technician or a medical examiner.

Like incident stories, reporters accounted for slightly less than half of the references to forensic programming for organizational stories overall. However, while the majority of sources used by reporters in incident stories were rather evenly spaced across law enforcement, prosecution, and forensic professionals, 56 percent (N = 19) of the sources used by reporters in organizational stories were forensic professionals. The percentage of forensic science professionals, who referenced forensic programming in profile stories when reporters were excluded, was even higher, at 66 percent. In *CSI*

effect stories, prosecutors had the highest percentage of non-reporter references, while forensic professionals were the second most cited.

Table 5. Type of Source by Type of Story

Type of Story		Frequency	Percent
Incident	Law Enforcement	7	26.9
	Prosecution	6	23.1
	CSI Tech	5	19.2
	Victim/Victim Family	3	11.5
	Other	3	11.5
	Community Members	2	7.7
Total		26	100.0
Organizational	CSI Tech	19	55.8
	Law Enforcement	6	17.6
	Prosecution	5	14.7
	Other	4	11.7
Total		34	100.0
Policy	Prosecution	4	44.4
	CSI Tech	2	22.2
	Law Enforcement	1	11.1
	Actor	1	11.1
	Academic	1	11.1
Total		9	100.0
Profile	CSI Tech	23	65.7
	Investigator	3	8.6
	Program Affiliates	3	8.6
	Other	3	8.6
	Prosecution	1	2.9
	Defense	1	2.9
	Academic	1	2.9
Total		35	100.0
Show/CSI Effect	Prosecution	23	30.3
	CSI Tech	15	19.7
	Program Affiliates	9	11.8
	Law Enforcement	8	11.8
	Other	5	6.6
	Defense	4	5.3
	Academic	4	5.3
	Judge	3	3.9
	Jury/Former Jury	2	2.6
	Public Official	1	1.3
	Actor	1	1.3
Total		76	100.0

CONCLUSION

The purpose of this project was to examine the use of references to *CSI* and forensics programming in contemporary news contexts, highlighting the way in which references to CSI programming are used to color articles when no ready access to expertise is available (per the prototypical news construction process). Indeed, the longitudinal analysis has shown that the use of references have increased quite substantially over the time frame between the premiere of *CSI* and today; the analysis of each successive year determined that the last full year examined (2005) had over three times as many references to the program as the first available full year (2002). As popularity and cultural visibility have increased, so too has the frequency of reference in news stories.

In addition to the overall growth in frequency of forensics programming reference over time, the analysis has also shown a tendency of local incident stories to reference the program, particularly during the investigation or prosecution stages, and for state or regional stories regarding organizations (labs, law enforcement divisions, etc.) to reference the program. Many regional (particularly state police) crime labs as well as specific lab divisions, such as ballistics specialists (Thalji, 2006) and forensic linguists (Geracimos, 2006), were likened to their television counterparts, while local incident stories ranging from homicide (Quigley, 2001; Keeshan, 2004; Baird, 255; et al) to the slaying of local pets (Brulliard, 2006) and elk poaching (Hodge, 2005) reference the shows. As seen here, it is the tendency of the publications to tie in images of *CSI* to local or regional entities, again creating a frame of reference upon which to base the public's perception of their neighboring investigator or organization.

CSI was, by far, the most frequently-mentioned program (which was to be expected, given both the popularity of the program and the search keywords used for the project), followed by such programs as *Quincy*, *Crossing Jordan*, and *Cold Case Files*. Apart from *CSI* effect-focused stories, salience remained quite balanced between story types, although profiles did have a higher salience score than incident articles. Notably, the visibility/prominence of the references to CSI-related programming was relatively strong: many stories had either a headline or first paragraph that mentioned *CSI*-style programs. Articles with such titles as "Police to unveil *CSI*-style unit (Smalley & Ranalli, 2006)" and "*CSI*: Buffalo (Rey, 2003)" were quite common in the sample pulled for this analysis. This application of *CSI* to headlines was true of profile and organizational stories in particular; again, the use of such references in these types of storied are used to create immediate, recognizable references for a reader, in order to create a basis of comparison or equation between a person or organization and the pop cultural image of CSI. In essence, not only do the references exist within the stories themselves, but readers are also subjected to the *CSI* image *immediately*, even before reading a story's text.

As noted in the literature review, personnel such as crime lab technicians, supervisors, etc. are outside the standard news making process. This concept was reflected in the percentage of outside sources cited in stories, with fewer outside sources used in incident stories and policy stories, both of which are often considered "news-oriented" (as opposed to features highlighting local departments or individuals). This was also seen in the percentages of sources referencing *CSI*, particularly in incident stories and organizational stories. While a large percentage of sources referencing *CSI* or

related programs in the analysis were interviews, the percentages were higher for stories such as profiles (as the profile article is essentially a large-scale interview).

In addition to the growth in commonality of references to *CSI*-style programs and the nature of sources cited in news articles, it is important to the theoretical foundation of this project to examine the manner in which such references are made, including traits such as context and tone, which speak to the spin that is placed upon images of the television programs for a given audience. In the examined news articles, tone of reference to *CSI*-style programming was measured and recorded, noting the way in which the source compared or contrasted *CSI* or related programs and reality. It was found that most sources cited in-text referenced forensics programming in a negative/refuting manner, citing the difference(s) between the program and the reality of forensic science and criminal investigations. However, almost 31% of sources referenced such programming with a positive tone, often equating *CSI* with reality. As discussed in the literature review, it is not only the growth in the frequency of programming mention that may prove to have an effect on public perception, but also the manner in which the program is mentioned. In this case, although the majority of the stories referencing the programs do so in a negative fashion, a fairly high percentage still use *CSI* references in a positive/equating manner, particularly reporters themselves (who also make up approx. half of the sources referencing the programming in news-oriented stories). Experts did so, often equating their job with the popular television show images, such as when a forensic agronomy expert stated that his expertise is "'like *CSI*, only for plants (Fredrix, 2005),'" and reporters added a similar spin when referring to investigative personnel and their "*CSI* moments" of discovery or epiphany (Laukaitis, 2004).

When context of forensics programming reference was examined, again a majority of references were made in a contrasting fashion. Even still, a substantial percentage of articles contained a comparison context, in which the program was compared with (as similar to) reality. The percentage of comparison context articles was equal to those exhibiting a cautionary context, which was divided between positive and negative tone (typically citing rise in popularity, *CSI* effect, etc.). Of outside sources, the majority referenced *CSI*-type programs in a contrasting fashion, while slightly less than a third still drew comparisons between the programs and real-world investigations and forensics. These comparisons often occurred after a description of the show's nature; for example, a 2002 article highlighting a recent employment opening in the Omaha Police Department crime lab, after the program description was outlined, the comparison of the team in Omaha and those that "hoped to be the next Gil Grissom or Catherine Willows" were noted (Proskocil, 2002). Again, it is this comparison-oriented context that may prove particularly impacting in the arena of public perception; as news articles are viewed as unbiased, straightforward summation of factual information, the reporting of incidents, profiles, or policy stories that contain equations between *CSI* and reality may have particularly strong impacts on a public that consumes the images thereby presented.

As this analysis has shown, the use of references to *CSI* and forensics programming in news print is certainly varied in both content and context. As the longitudinal examination highlights, references to *CSI* and other programs have increased in frequency since the approximate date of opening broadcast of the program itself. After viewing the count of articles for the partial year 2006, this frequency appears to be moving in an upward trend. In addition, when stories of local crime incidents were

reported, it was often this image of popular forensics programming that authors chose to invoke, drawing readers in with easily-recalled and visualized points of reference. Further still, although the majority of sources cited in-text did so in a manner negating the similarity between television programming and reality, a relatively large percentage still referenced *CSI* and other programs as comparisons or equations with real-life investigations; reporters, who proved to be one of the widest bases of news-oriented CSI reference, did so with a particularly high frequency. This was particularly apparent in stories describing cases involving forensic science as "unique" from typical investigations, and equating the nature of *CSI*-style programming and real-world forensic science.

Contemporary news reporting has, indeed, created a strong sub textual connection between television programming and the "new science" of forensics and CSI. As highlighted in the literature review, this inclusion and equation of programming and reality, as dictated by prior research, has the potential to form the basis of subsequent construction of public perception.

RECOMMENDATIONS

This analysis provides a foundation for further research regarding the relationship(s) between crime news reporting, the news making process, forensics programming, and the *CSI* effect. As the longitudinal analysis has shown, the rate of forensics programming reference within news media contexts will likely increase in the near future; often times, these references are used as equations, binding together the television image of criminal investigations and reality. It is imperative that studies of the

CSI effect (generally, the impact of television programming on public perceptions) include cross-medium analyses, particularly when considering the nature of social construction and media consumption. As a given population is subjected to the almost unavoidable consumption of multiple media types at any given time, it is only logical that a review of genres *other than* the entertainment programming itself take place. News media is of particular import, as the very manner in which news media is viewed implies an atmosphere of objectivity and truthfulness.

As discussed in the literature review, while media construction and effects studies are numerous, prior empirical reviews of the *CSI* effect are virtually nonexistent. This project serves as an introductory analysis of the use of such programming references in popular culture, specifically within the context of news stories: as noted, this study provides a general image of the nature of *CSI*-style programming references that are consumed by the public within said news contexts. Prior research dictates that this news content and context may have significant impacts on public perception; in this case, because the equation between programming and reality is often present, the readers' image of real-world forensics and criminal investigations may be inescapably merged with that of related television programming.

In addition to the aforementioned multiple-genre analyses, the next step in the study of the *CSI* effect will likely be tests of public perception and programming consumption rates within a given population. For effective media effects research, one must focus on both the consumed media types (and the content therein), *as well as* the nature of public exposure and consumption. This project has highlighted the pervasion of *CSI*-style programming in news media, and while further multiple-genre media analyses

are needed, direct examinations of public perceptions will certainly prove equally important. While the project has provided a descriptive analysis of *CSI*-style programming references in news print media, its relationship to the *CSI* effect is heavily tied to prior research and theory, rather than literal examinations of public perceptions. A direct analysis of these perceptions must take place, verifying the impact of such an effect, and building upon these concepts of social construction and media consumption.

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