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# Forensic fictions: Science, television production, and modern storytelling

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ABSTRACT

This essay uses interviews with television creators, writers, and producers to examine how media practitioners utilise, negotiate and transform forensic science in the production of televisual stories including the creation of unique visuals, character exploration, narrative progression, plot complication, thematic development, and adding a sense of authenticity. Television as a medium has its own structures and conventions, including adherence to a show's franchise, which put constraints on how stories are told. I demonstrate how television writers find forensic science to be an ideal tool in navigating television's narrative constraints by using forensics to create conflicts, new obstacles, potential solutions, and final solutions in their stories. I show how television writers utilise forensic science to provide the scientific certainty their characters require to catch the criminal, but also how uncertainty is introduced in a story through the interpretation of the forensics by the show's characters. I also argue that televisual storytellers maintain a flexible notion of scientific realism based on the notion of possibility that puts them at odds with scientists who take a more demanding conception of scientific accuracy based on the concept of probability.




## 1. Introduction

> That is why you see in early TV shows, 'Got the report from the lab and they say x, y and z or Che Fong down at the lab says whatever'. You know like on *Hawaii Five O*. But now what used to be exposition has now become the entertainment, and it has changed the way we are telling stories. Now you are expected to find a way to integrate science into your storytelling.
>
> —Lee Goldberg, Television Producer and Writer[1]

Science would seem to be at odds with the process of storytelling used in the creation of entertainment texts. Science is perceived as 'truth' while entertainment storytelling resides in the imagination. For this reason many people believe that science and storytelling make each other uncomfortable. Julian Petley claims, 'Fact plus fiction equals friction'.[2] Yet, as television producer Lee Goldberg's quote above shows, science has become a common narrative element across contemporary entertainment media including television, movies and computer games. Many of the most financially successful, influential and provocative films of the past 20 years have science and technology at their cores including *Jurassic Park* (1993), *Twister* (1996), *Spider Man* (2002), *Finding Nemo* (2003), and *Avatar* (2009). Similarly, a significant number of the most popular television shows of the last decade are immersed in science including *CSI* (2000–), *NCIS* (2003–), *Bones* (2005–), and *The Big Bang Theory* (2007–).

The fact that science has successfully been employed for storytelling purposes in numerous popular texts shows how science and storytelling not only can co-exist together they can also thrive. This synthesis of science and fiction raises questions about how those who create these entertainment stories effectively grapple with science. Combining science and fiction can create a 'friction' that hinders storytelling, but that same friction can also be used by storytellers to keep their stories grounded. In order to understand science's role in modern storytelling this essay will examine how entertainment media practitioners utilise, negotiate and transform forensic science in the production of televisual stories. Using inter-

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[1] Unless noted otherwise all quotes from Lee Goldberg come from **Lee Goldberg, interview by David Kirby, 5 April 2010**.

[2] Petley (1996).

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views with television creators, writers, and producers I show how these storytellers maintain a flexible notion of scientific realism and balance forensic science's sense of certainty alongside the uncertainty that is required for narrative progression.

To initially get at the question of how writers contend with forensic science in televisual storytelling we can perform a *gedanken* experiment of the Hollywood variety. Imagine that you are a television scriptwriter in Los Angeles who writes for an episodic police procedural show. Your showrunner has just given you the following story setup:

> A man on vacation in Mexico wins a contest where the prize is one free sky diving session. During this free session something goes wrong with the man's parachute. His friends on the ground watch in horror as he hurtles towards the earth and hits the ground with a thump. Whether or not there is foul play involved, the cause of death seems certain. At the coroner's office, however, we learn that the man did not die from the impact of his landing. The coroner insists that the man's death was actually caused by drowning in mid-air.

What kind of televisual story could you create with this setup? What role will forensic science play in the story? Will the story hinge upon forensic science or will it play a minor role? How might forensic science constrain the story in both problematic and beneficial ways? Do we even need forensic science to tell a story with this setup?

I have used this exercise in seminars to get audiences thinking about the role of science in modern storytelling. Most people approach the exercise by focusing on how to keep the science 'real' while maintaining an interesting story. Meaning, they concentrate primarily on the problems of combining science and fiction. However, this exercise is not as simple as merely considering how science might be utilised in a fictional story. The exercise also requires you to think about the way stories are told through visual mass media. To create an effective story for a police procedural out of this hypothetical setup, you first need to consider that this is a *television* story.

There is a growing body of academic work detailing how storytelling has evolved since the development of visual mass media.[3] Television is a relatively young storytelling medium. Experimental broadcasts began in the 1930s, but television did not become a major broadcasting outlet until the late 1940s.[4] By the end of the 1950s, it had developed the well-established narrative structure and conventions for dramatic televisual stories that are still the standard today. Television emerged in the shadow of radio broadcasting. This is why, despite being a visual medium like cinema, television predominantly shares its narrative structures and conventions with the medium of radio. Like radio, television was broadcast directly into the home, programmes followed a set schedule, shows had commercial sponsors, and, for early television, episodes were performed live in front of the cameras.[5] Modern visual storytelling in television combines the creation of a story structure, character interactions and a narrative drive in a media environment that includes a visual focus, temporal constraints, an episodic or serial nature, and an established set of character dynamics. In addition to the general characteristics of television, we also need to consider that this hypothetical story setup is for a police procedural being produced for commercial television in the United States. All of these elements need to be considered when we think about what role science could play in a television story.

Forensics in fictional television provides an ideal subject by which to explore science's role in modern storytelling. Forensic based television dramas have been a popular genre for over ten years with no sign that that their popularity is waning. Forensic science represents a practical application of both empirical research and clinical work, involves professional cultures outside the scientific community including law enforcement, and has controversial aspects such as behavioural profiling which all must be take into account in televisual storytelling. Forensic science provides both advantages and challenges to storytelling in this media environment. The visuality of contemporary forensic science fits the need for visual splendour in television stories. A desire for scientific authenticity, however, can impact the narrative direction of the stories being told. Most significantly scientific certainty can help writers with narrative closure, but the unambiguous nature of forensic science on television can also derail a narrative by providing answers too quickly.

I will begin the essay by discussing why forensic police procedurals have come to dominate the television landscape over the last ten years. I will then demonstrate how the structures and conventions of the television medium impact the way storytellers utilise forensic science especially the role that a television programme's franchise plays in the development of televisual stories. I will finish the essay by exploring the specific ways in which entertainment professionals utilise forensic science in telling stories on television including for the creation of unique visuals, character exploration, narrative progression, plot complication, thematic development, and adding a sense of authenticity.

## 2. The historical development of forensic fictions

The challenges and opportunities of using forensic science in fictional storytelling are not new to the development of visual mass media. In fact, the origin of modern crime fiction is intimately connected to the growth of forensic science.[6] Many forensic techniques were being developed in the nineteenth century including fingerprints, mug shots and crime photography, lie detectors, forensic profiling, and forensic pathology. In his study of early detective fiction, Ronald Thomas points to the authority fictional detectives secure through these scientific 'devices of truth'.[7] However, Thomas argues that the novels themselves functioned as devices of truth. While the novels gained validity by including forensic science, the emerging field of criminalistics itself gained legitimacy through the fact that fictional detectives were using its methods to solve crimes. Fictional detectives never failed to discover a criminal's identity through the application of science, technology and reasoning which enhanced public faith in science's ability to solve crimes. Pioneering French forensic scientist Edmond Locard even instructed his colleagues and students to read Sherlock Holmes stories to understand the principles of forensic science.[8]

Edgar Allan Poe's 1841 short story 'Murders in the Rue Morgue' is generally accepted as the first modern detective story. Yet, this story would not seem out of place as an episode of *CSI* with its eccentrically committed crime that can *only* be solved through forensic analysis of physical evidence. In Poe's story, witnesses overhear a murder but cannot come to a consensus as to what language the perpetrator was speaking. Despite this lack of conclusive evidence, the constabulary puts a man in jail for the crime. Rather than rely on unreliable witness accounts, the detective Auguste

[3] See Ryan (2004).
[4] See Abramson (2003).
[5] See White (1989).
[6] See Thomas (2004), Caudill (2011), and Littlefield (2011).
[7] Thomas (2004), p. 10.
[8] *Ibid*., pp. 4,5.