

Fifty years of media and forensic science

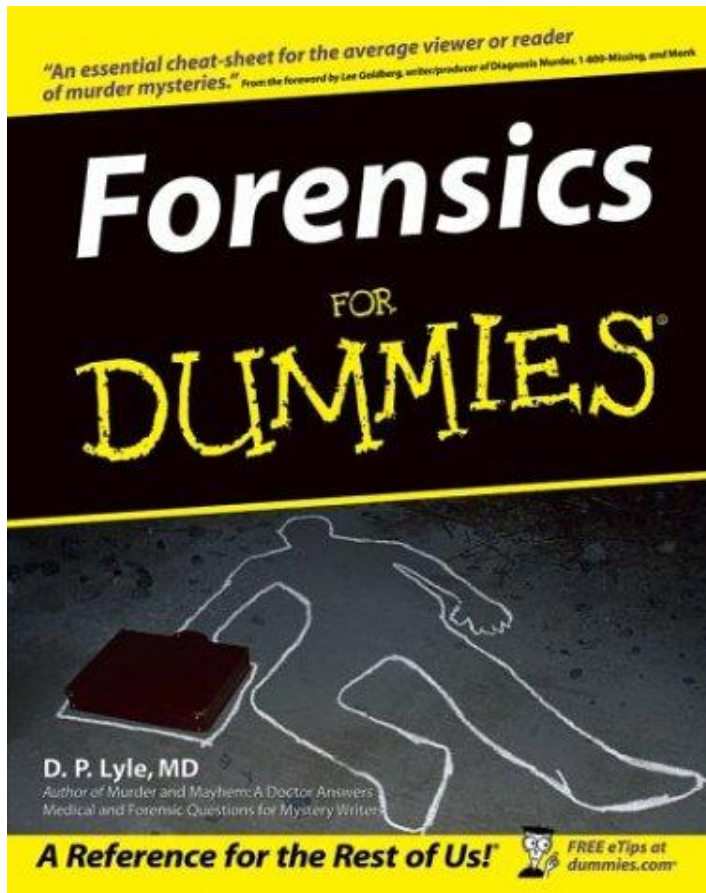
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Fifty years of media and forensic science – *is there really a CSI effect ?*

Prof Niamh Nic Daeid
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50 Years of Forensic Science – editorial commentary
from the Journal of the Forensic Science Society/Science
and Justice.

Forensic Science Oral History project



What do we know about the effect of the media on the understanding of Forensic Science ?

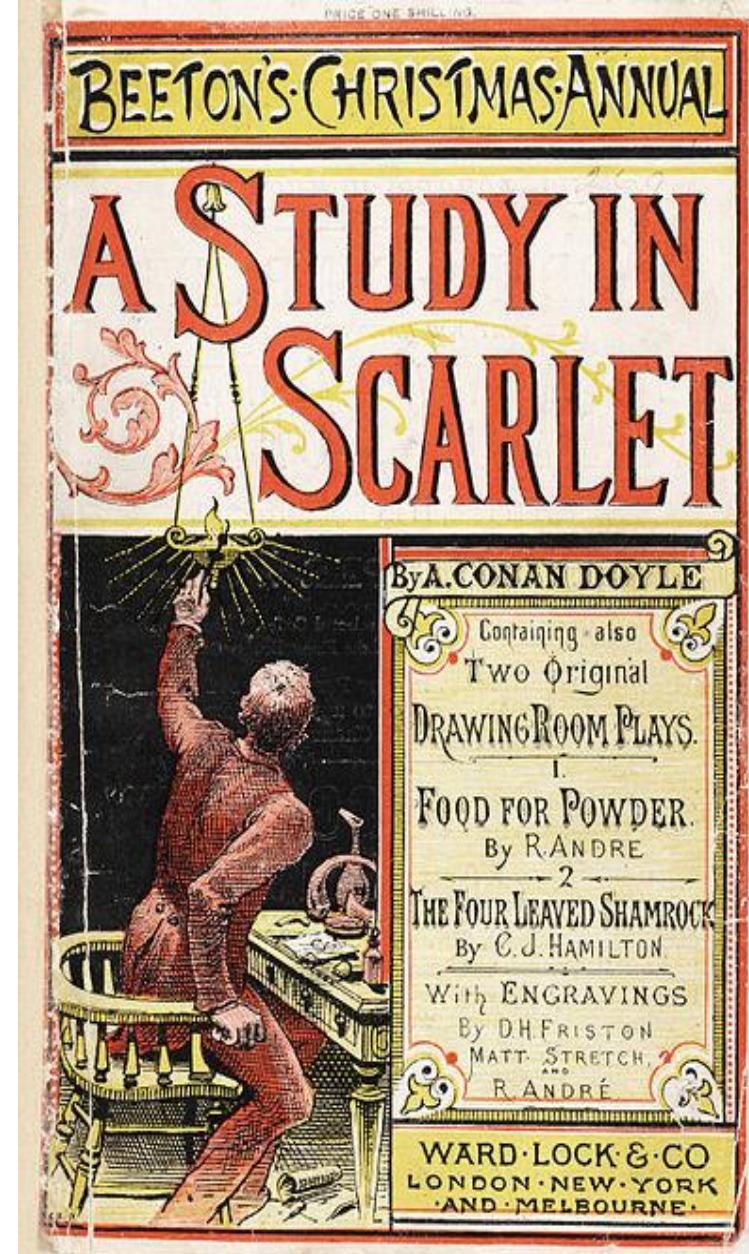
The idea of TV ‘influence’ is nothing new

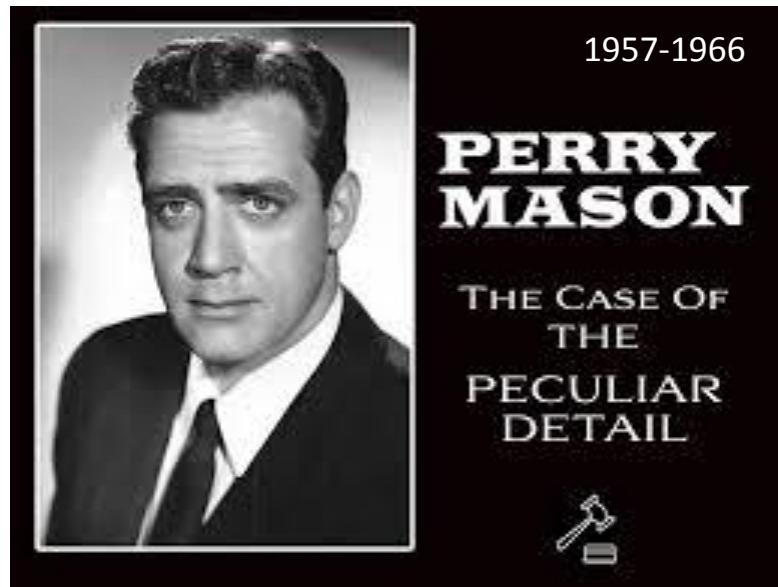
There is a suggestion that TV programs such as CSI have an influence on jurors in terms of their expectations of the police, the legal professionals and the science presented.

"Sir Arthur Conan Doyle had a considerable influence on popularizing scientific crime-detection methods through his fictional character Sherlock Holmes.

It was Holmes who first applied the newly developing principles of serology, fingerprinting, firearm identification, and questioned document-examination long before their value was recognized and accepted by real life criminal investigators."

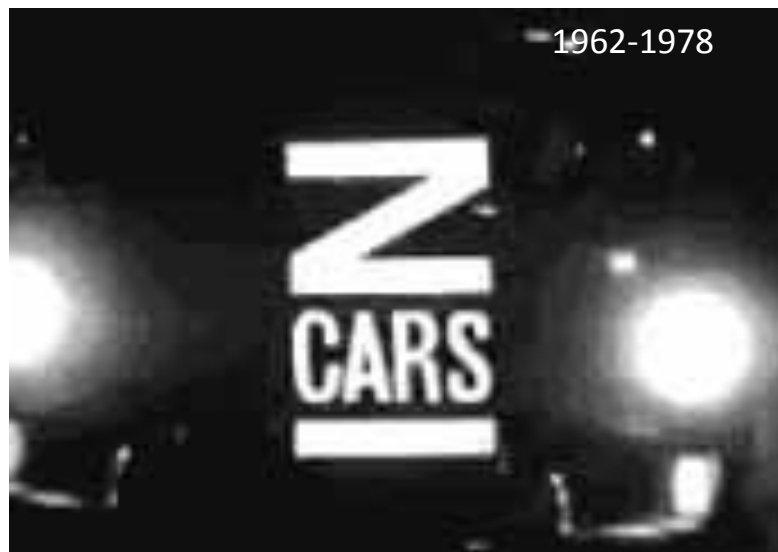
The Hounds Collection Vol. 10, May 2005





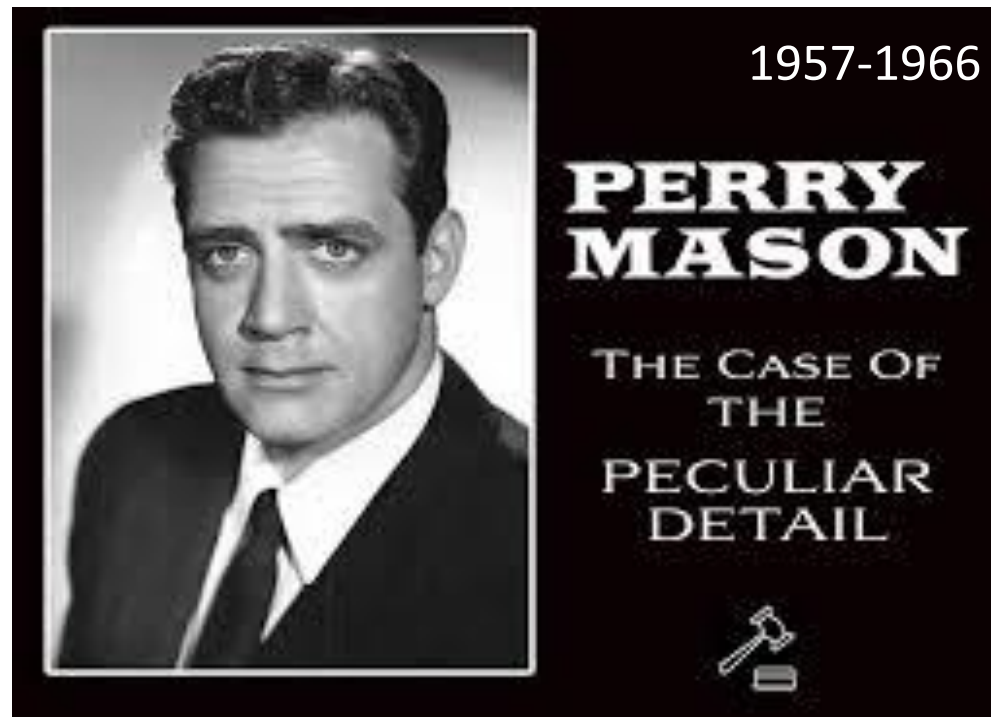
“ Nurtured by novels, radio, television and the newspapers, the forensic scientist is almost always an omniscient university pathologist, who pronounces with authority on all subjects ”

D. Patterson, 1965

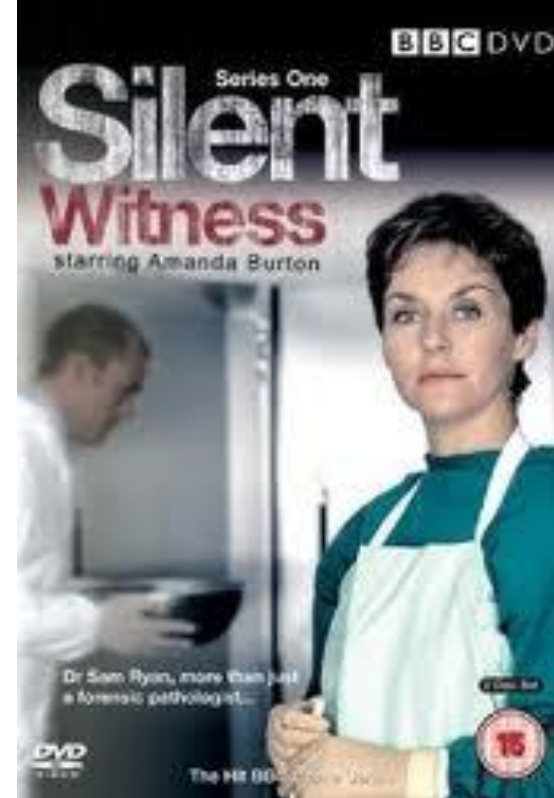


“Perry Mason Syndrome” - defense attorneys claimed that jurors no longer came to court requiring the prosecution to prove guilt beyond a reasonable doubt...

.....but expected the defense to prove the accused's innocence.

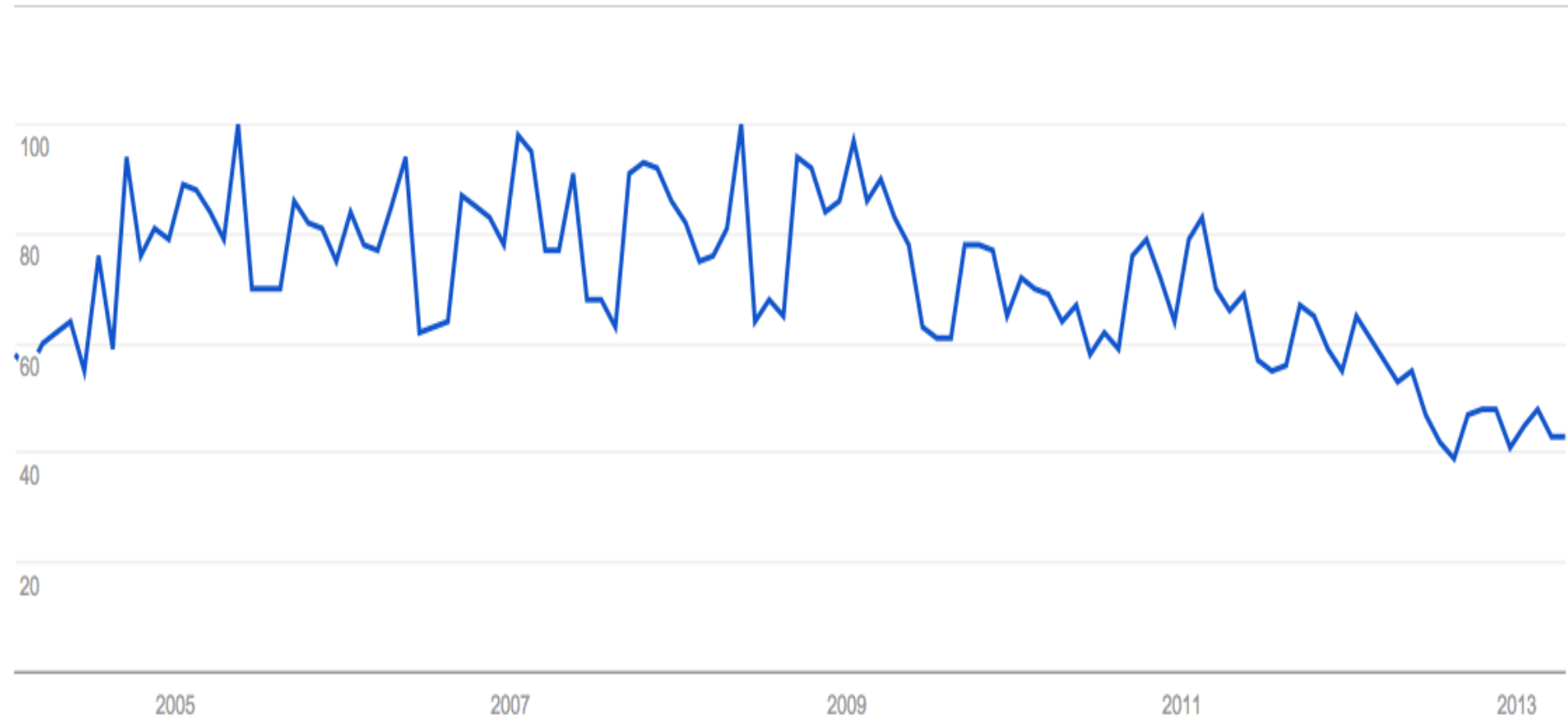






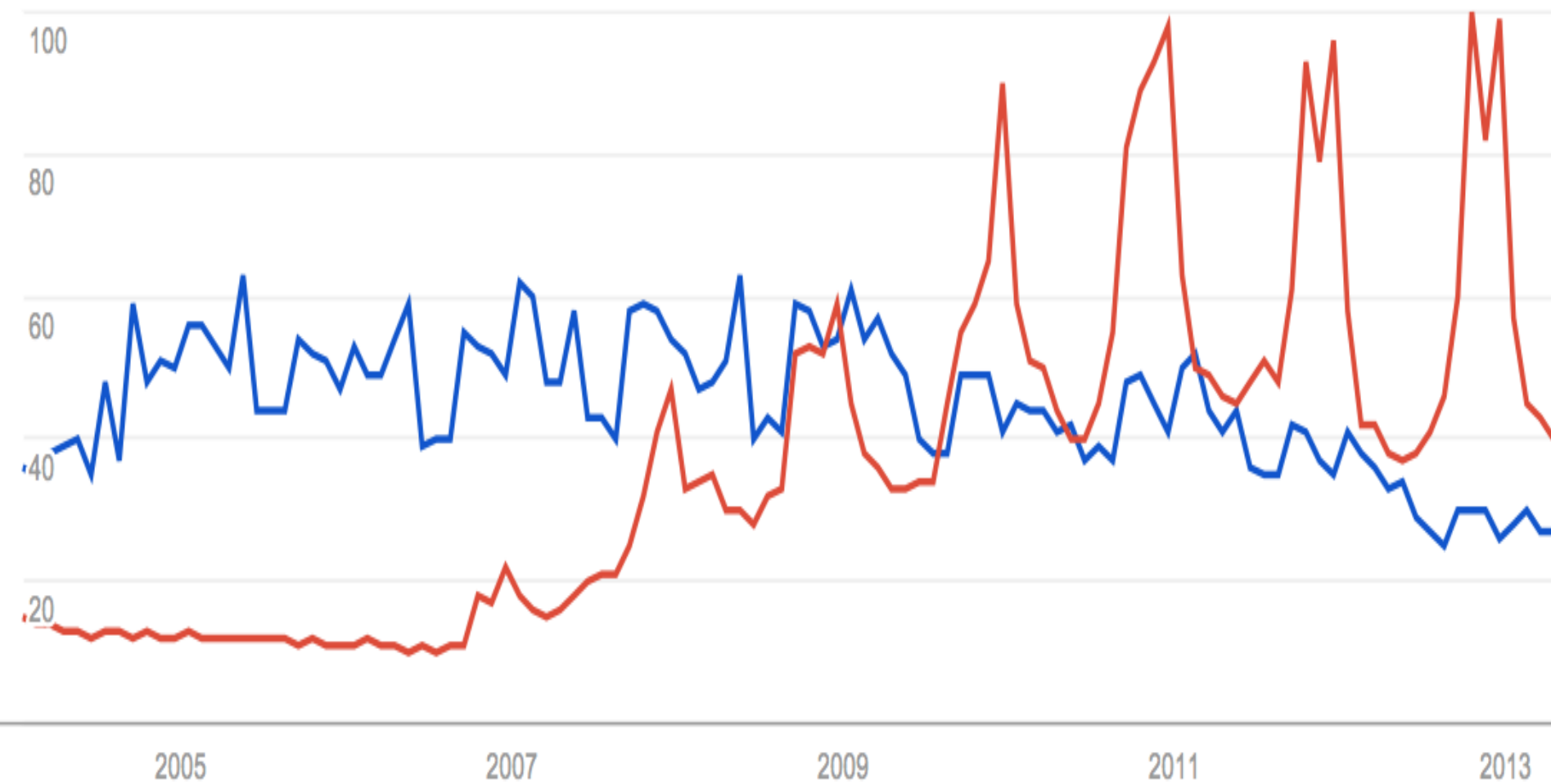
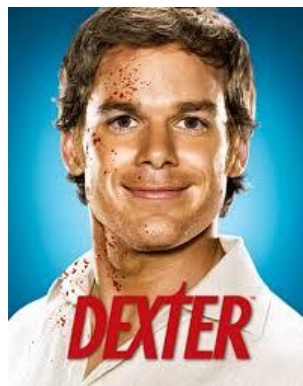


Google trends : CSI



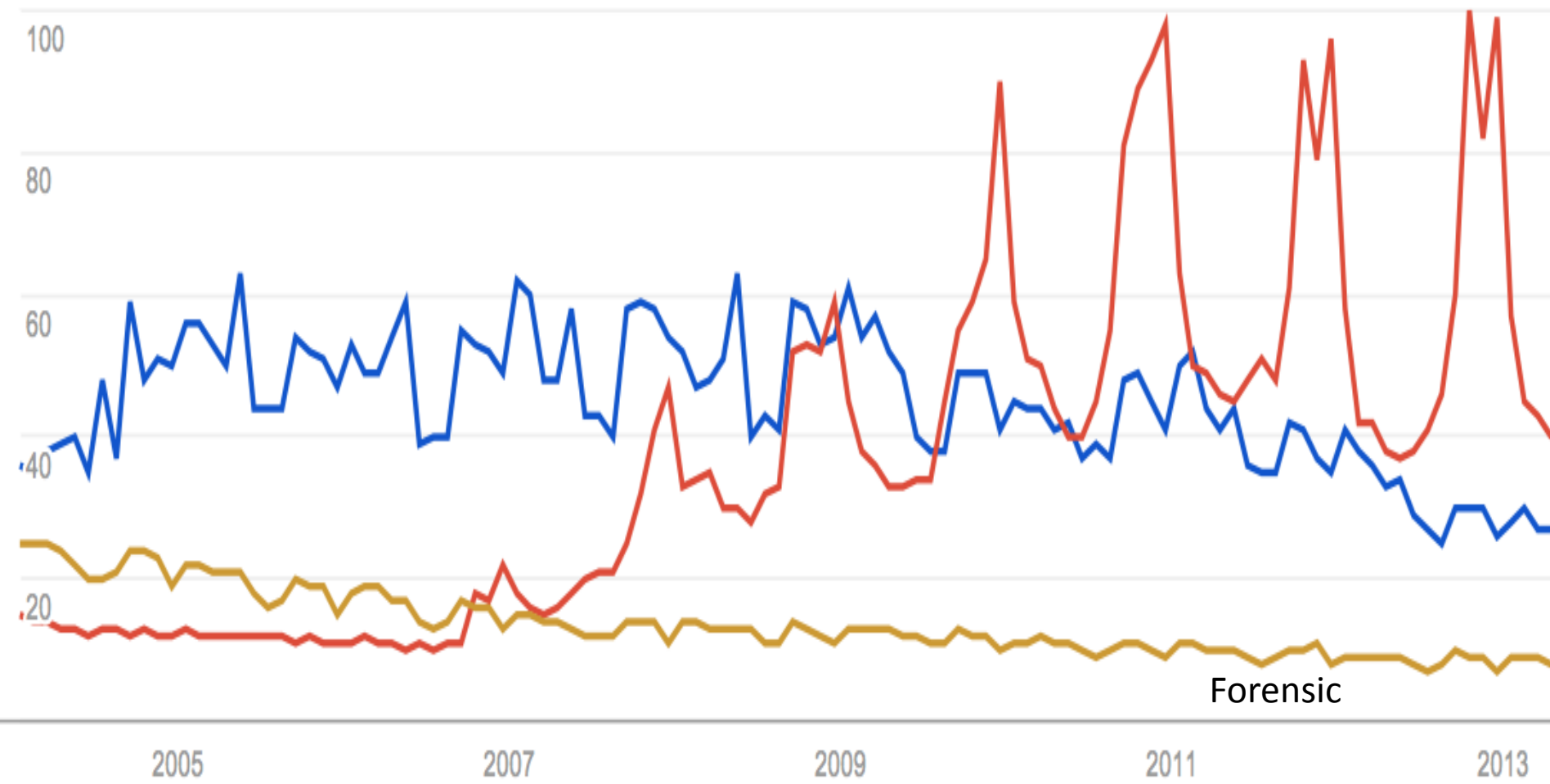
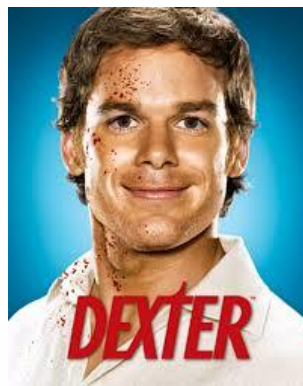


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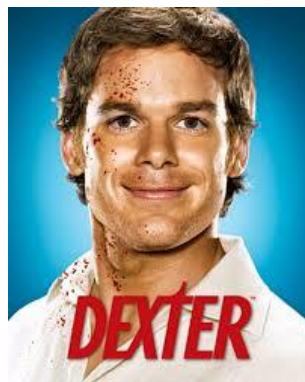


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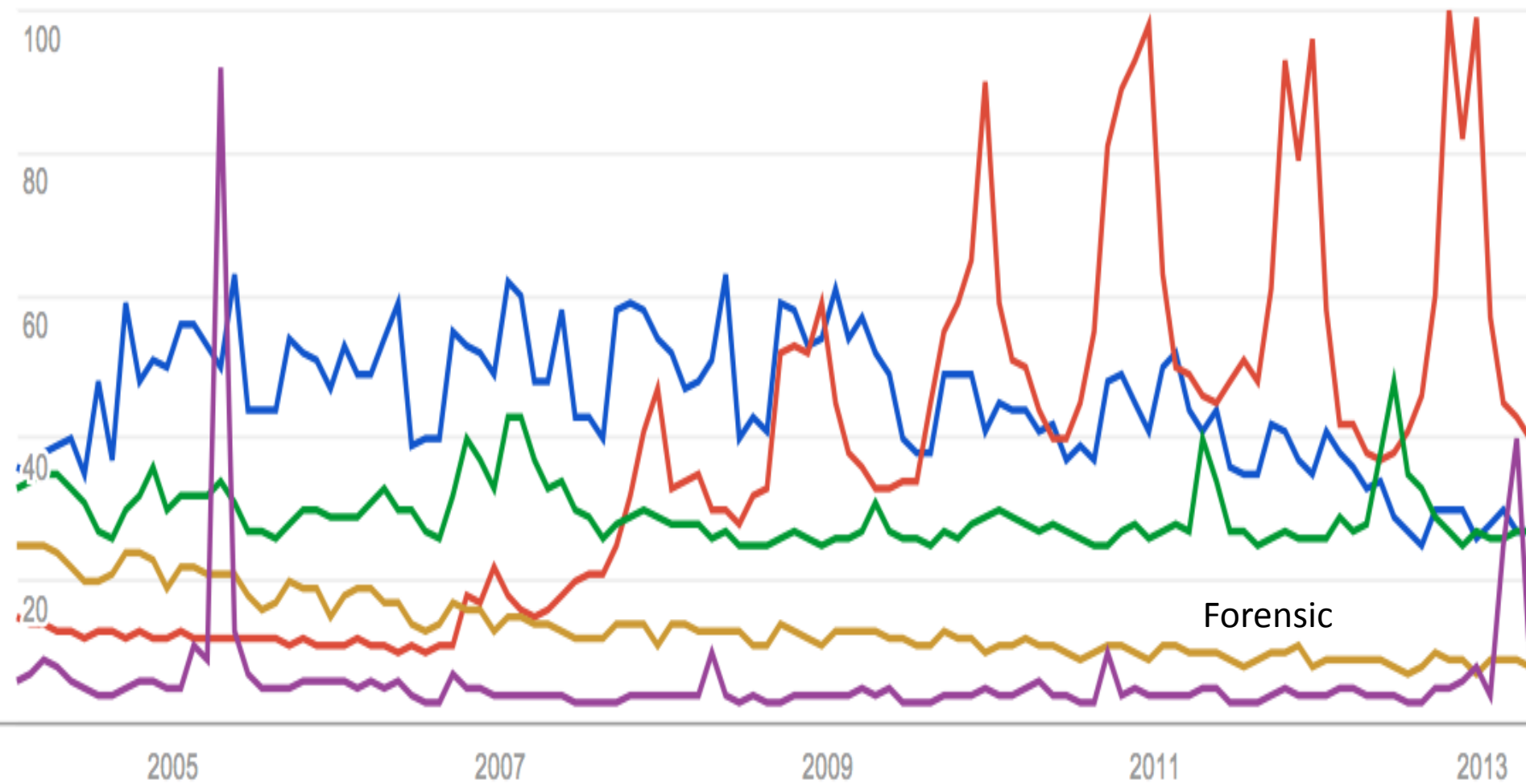
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CSI effect

From Wikipedia, the free encyclopedia

The **CSI effect**, also known as the **CSI syndrome**^[1] and the **CSI infection**,^[2] is any of several ways in which the exaggerated portrayal of [forensic science](#) on crime television shows such as *CSI: Crime Scene Investigation* influences public perception. The term most often refers to the belief that [jurors](#) have come to demand more [forensic evidence](#) in [criminal trials](#), thereby raising the effective [standard of proof](#) for [prosecutors](#). While this belief is widely held among American legal professionals, some studies have suggested that crime shows are unlikely to cause such an effect, although frequent *CSI* viewers may place a lower value on [circumstantial evidence](#).^[3] As technology improves and becomes more prevalent throughout society, people may also develop higher expectations for the capabilities of forensic technology.^[4]

There are several other manifestations of the CSI effect. Greater public awareness of forensic science has also increased the demand for forensic evidence in police investigations, inflating workloads for [crime laboratories](#). The number and popularity of forensic science programs at the university level have greatly increased worldwide, though some new programs have been criticized for inadequately preparing their students for real forensic work. It is possible that forensic science shows teach criminals how to conceal evidence of their crimes, thereby making it more difficult for investigators to solve cases.

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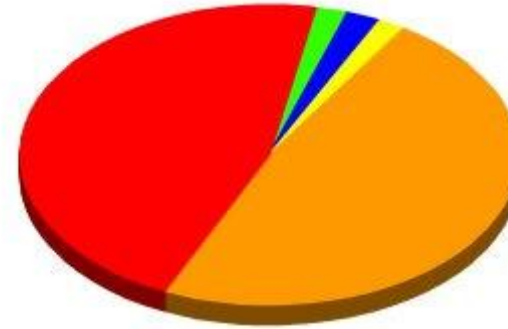
Background

[\[edit\]](#)

The CSI effect is named for *CSI: Crime Scene Investigation*, a television program which first aired in 2000. In *CSI*, a fictional team of crime scene investigators solve murders in the [Las Vegas metropolitan area](#). In each episode, the discovery of a dead body leads to a criminal investigation by members of the team, who gather and analyze forensic evidence, question witnesses, and apprehend suspects.^{[5]:ch.IIA} The show's popularity led to two [spin-offs](#): *CSI: Miami*, which debuted in 2002, and *CSI: NY*, first aired in 2004. The *CSI* franchise's success resulted in the production of many similar shows;^[6] in turn, the "CSI effect" has been associated with other crime shows, including *American Justice*, *Bones*, *Cold Case*, *Cold Case Files*, *Cold Squad*, *Criminal Minds*, *Crossing Jordan*, *Exhibit A: Secrets of Forensic Science*, *Forensic Files*, *NCIS*, *Numb3rs*, *Silent Witness*, *Waking the Dead*, *Wire in the Blood*, and *Without a Trace*.^{[1]:ch.2}^{[6][7]} Based on the [Nielsen ratings](#), six of the top ten most popular television shows in the United States in 2005 were crime dramas, and *CSI: Crime Scene Investigation* reached the number one ranking in November 2007.^{[1]:ch.2}



Things I Learned From Watching CSI



- How to take a fingerprint sample.
- How to tell which direction the blood splattered from.
- How to think out of the box when faced with problems.
- All female CSIs can double as supermodels.
- You can kill someone with anything.

GraphJam.com

Forensic science portrayed as high-tech magic, solving crimes quickly and unerringly

One estimate suggests that 40% of the “science” on *CSI* does not exist, and most of the rest is performed in ways that are unrealistic.

Jury have unrealistic expectations of the science presented in court

Police also may have unrealistic expectations of forensic science

“omniscient university pathologist, who pronounces with authority on all subjects”



THE **CSI EFFECT**

Fact v. Fiction

The popular TV shows portray scientists working in labs and solving crimes at rapid speeds, with technology that isn't yet available. We take a look at the difference between how real forensic scientists work and how they are shown on TV.

HOW LONG DOES IT TAKE TO PROCESS DNA SAMPLES?

REAL LIFE

**A FEW WEEKS
TO SEVERAL MONTHS**

ON CSI

APPROXIMATELY **33**
SECONDS

"This TV show comes on and everyone starts watching it - including the cops and prosecutors - and submissions to forensic laboratories go through the roof"

Max Houck to the BBC

200,000-300,000
BACKLOGGED DNA SAMPLES
IN U.S. LABS AS A WHOLE

"On television, the toxicology results are available almost instantaneously. But when people find out that it can take several months, they can find that very difficult."

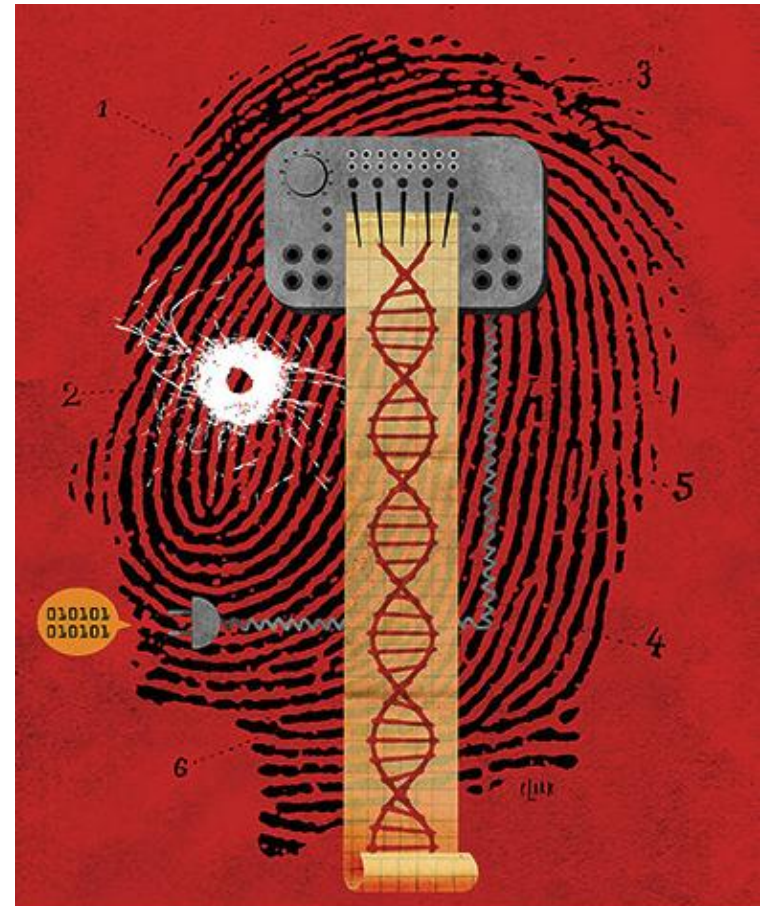
Forensic pathologist Dr Patricia McFeeley to the BBC

But..
what evidence is there
that there really is an
effect ?

Forensic Science Education

Science within the Criminal Justice System

Science in “Forensic Science”



“ we heard that the growth [in University courses] was a result of student interest in forensic science, which was, at least in part, stimulated by television dramas featuring forensic scientists and high profile coverage of forensic science in books and by the media.”

“ undergraduate courses were a shocking waste of young peoples time and their parents money”

..... employers wanted an undergraduate course in science and a post graduate course in Forensic Science.

20 September 2012

The CSI effect, or the perils of the unfettered free market in education

Alicia Weston

Researcher, Economic and Business Policy



We must find a way of balancing student and job market demand for university courses.



In 1987, when I was considering what course to do at University, I considered forensics.

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 Tweet

There wasn't much on offer in those days, I don't recall any courses at any of the leading universities, but I did apply for some toxicology degrees. Certainly as far as toxicology (the study of poisons) goes, there were probably only two or three courses in the whole country. In fact, even by 1997 there were only 5 science degrees in the whole country with Forensic in the title.

Which is what makes it even more odd that by 2003, there were over 350 science degree courses with Forensic in the name. What caused this explosion in courses? Three letters – C.S.I. CSI first aired in the US in 2000 and probably came to our TVs in the UK in 2001. By 2003 there were approximately 3,000 people studying for Forensic Science degrees in the UK. This despite a total stock of Forensic jobs in the UK at the time of only 4,680 – meaning that in all likelihood that the vast majority of these students would never work in their area of study. The main reason given by universities for the development of the courses was "student interest".

"by 1997 there were only 5 science degrees ... with forensic in the title"

...by 2003 there were over 350 science degree courses with forensic in the name. What caused this explosion...CSI..."

CSI fuels forensic science degree rise

Television dramas such as CSI and Silent Witness are helping to fuel a boom in forensic science degrees, despite fears many courses fail to prepare students for the job, according to research.



The number of undergraduates studying forensic science and crime scene science has more than doubled over a five year period Photo: EDDIE MULHOLLAND



By **Graeme Paton**, Education Editor

10:00PM BST 16 Oct 2009

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Education

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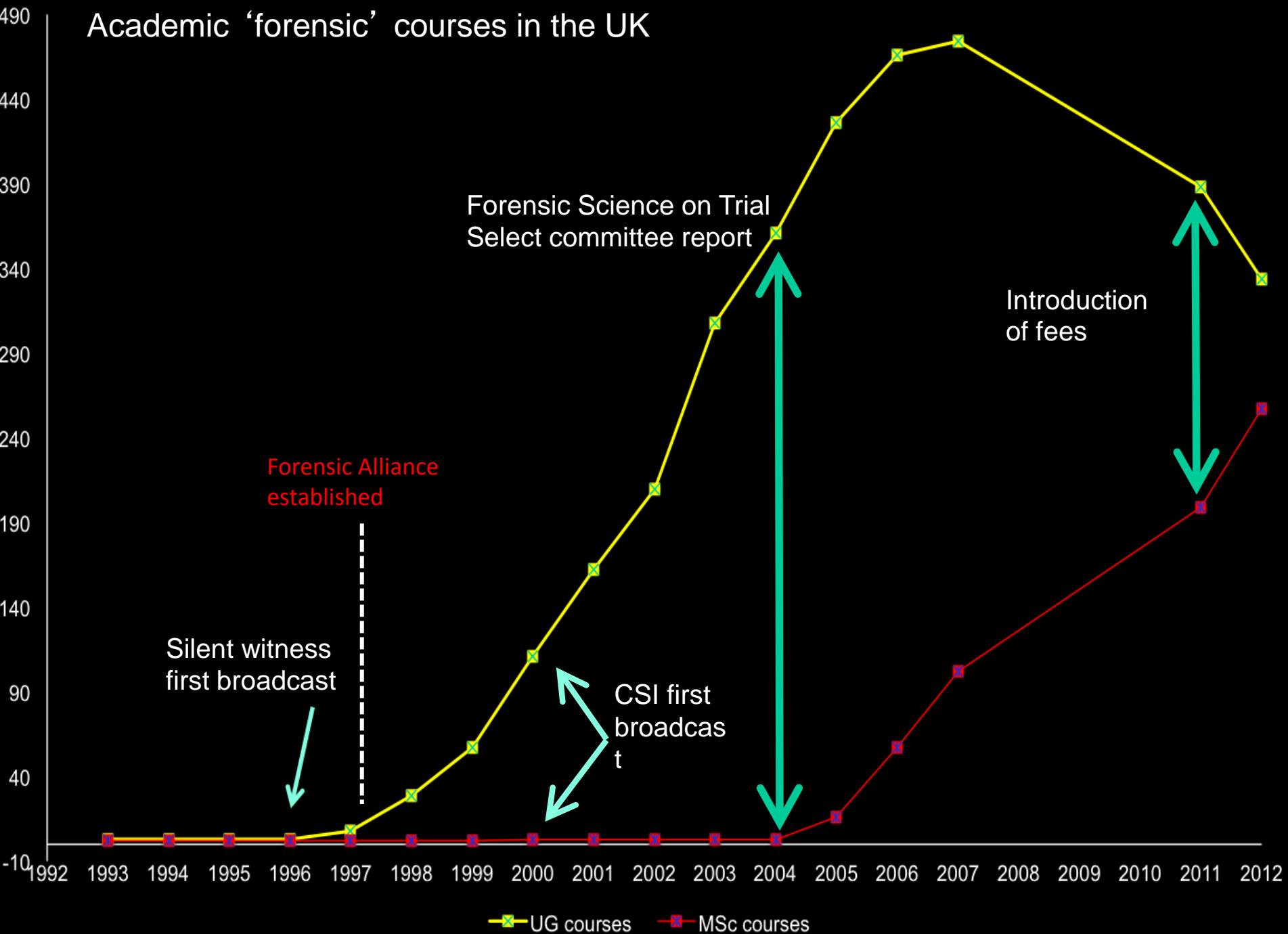
In Education



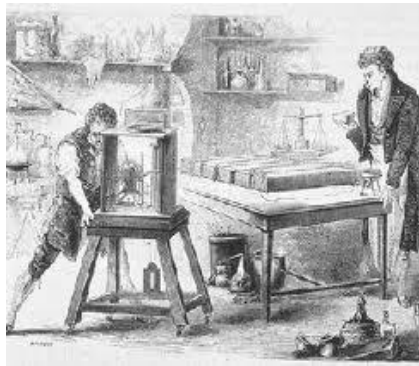
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Academic 'forensic' courses in the UK



Criminal Justice System



CRIME SCENE → ← LABORATORY → ← COURT

Evidence

Examination

Analysis

Interpretation

Presentation

Interface between Science and the Humanities

Complex community ... complex requirements

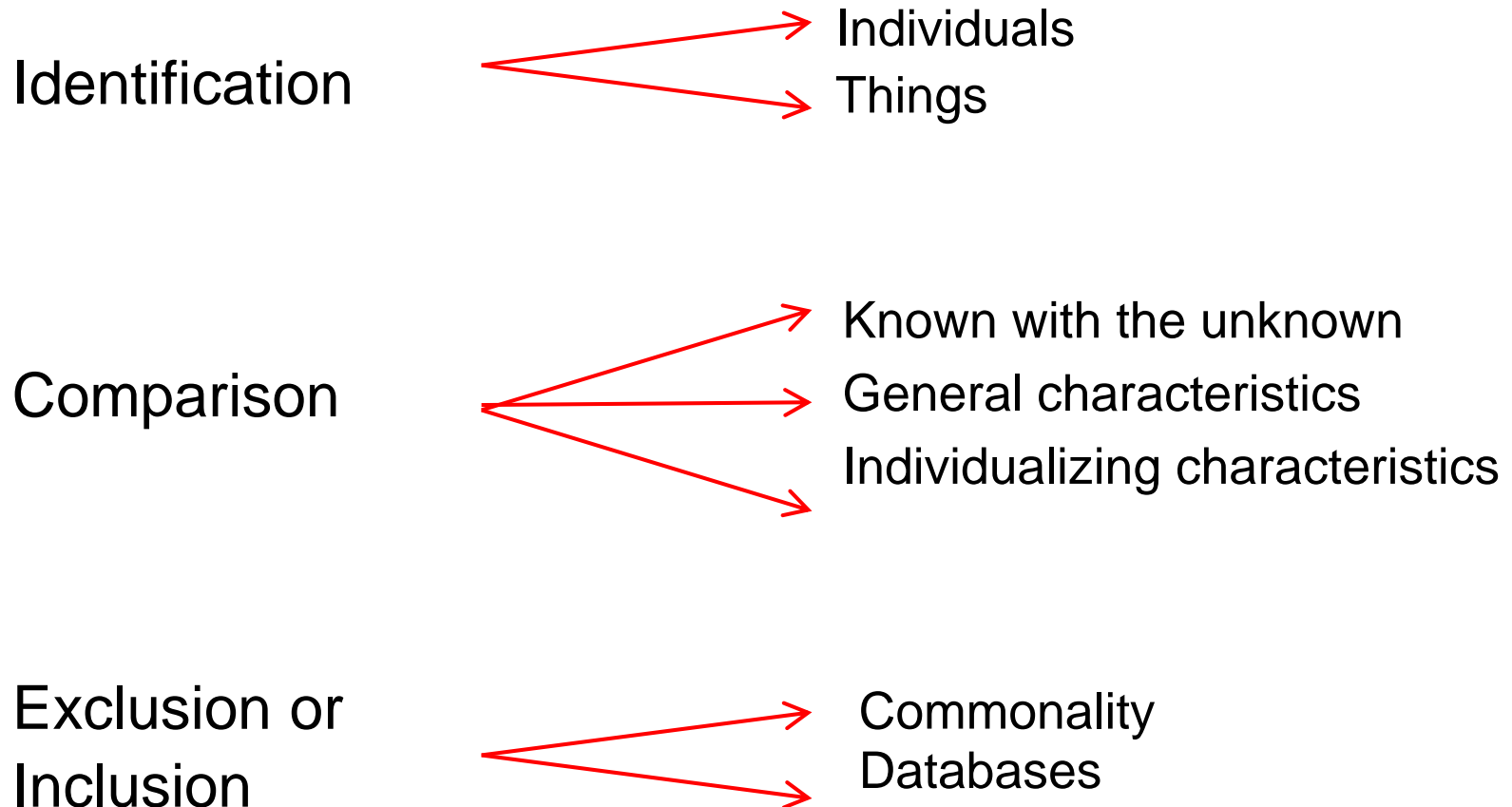


Investigator, information
gatherer

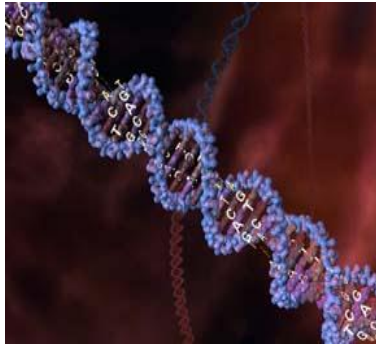


Trier of Fact
Confidence in the expert witness
Confidence in the science presented

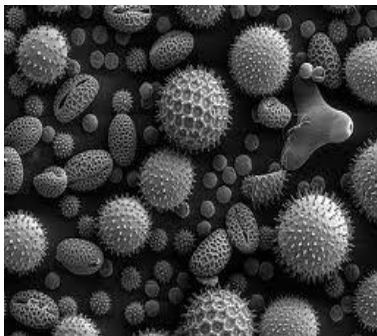
Scientific analysis, appropriate technology,
attention to detail, appropriate
contextualised evaluation



Identification of individuals



Identification of things...



• Laminated Glass shatter pattern



I: THE PROFESSIONAL DEVELOPMENT OF FORENSIC SCIENCE

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they do not indicate a revolutionary cascade of events signifying the eagerness of the legal system to capitalise on the benefits of scientific and technological advance. The detective propensities of Sherlock Holmes, created in 1887 by Conan Doyle, remained in the category of science fiction for a period approaching half a century before forensic science institutions were established in this country. We might, therefore, identify a further indication of the reticence of the law, and society, to come to terms with science.

Clearly, there was what we might call an “incubation period” before scientific innovations found practical application in the field of criminal investigation.

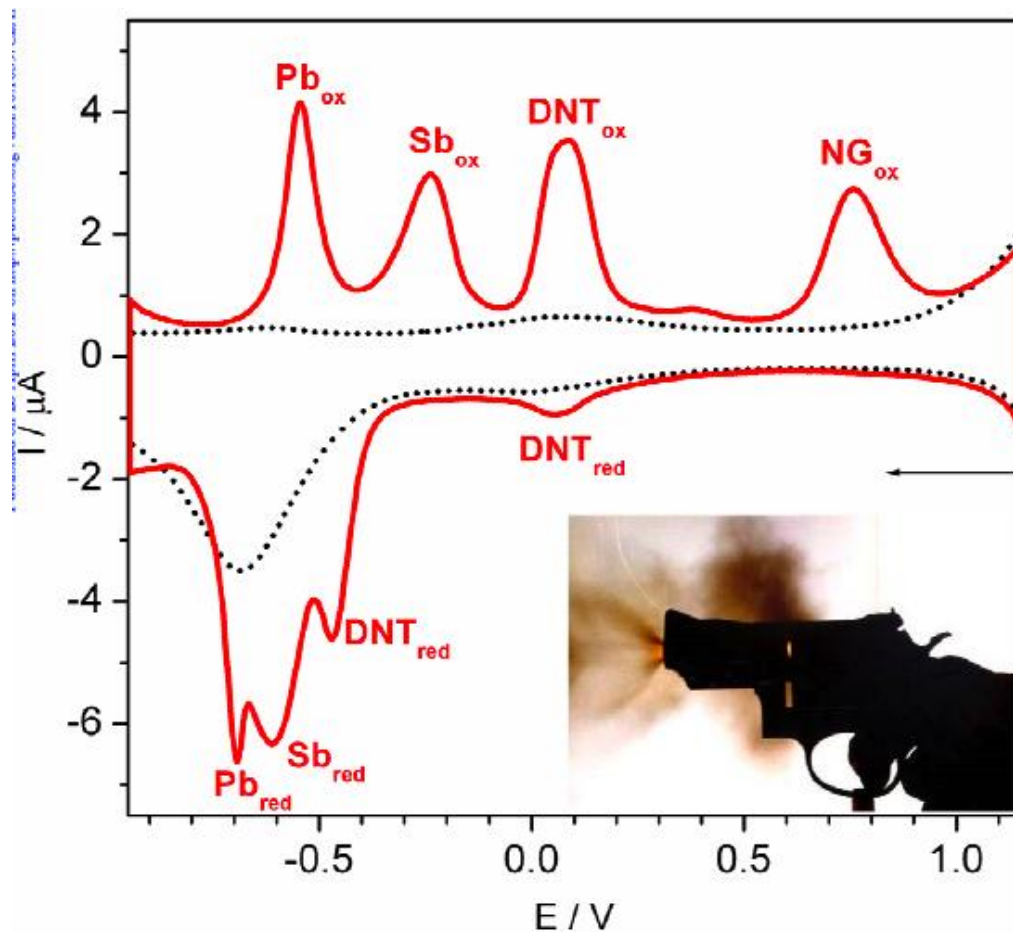
It is, of course, cardinal that any technical advances be validated before introduction into the court of law, but we might wonder as to the justification for incubation periods measured in units of quarter- and half-centuries. The members of the criminal fraternity have never been slow to exploit new technology; their incubation period might aptly be described as an immaculate conception.

Simultaneous Electrochemical Measurement of Metal and Organic Propellant Constituents of Gunshot Residues

Maika Vuki,^{a,b} Kwok-Keung Shiu,^{a,c} Michal Galik,^a Aoife M. O' Mahony^a and Joseph Wang,^{*a}

Received (in XXX, XXX) Xth XXXXXXXXX 20XX, Accepted Xth XXXXXXXXX 20XX

DOI: 10.1039/b000000x



No actual gun shot residues were analysed.

Forensic Electrochemistry to Detect Firearms Use

May 10, 2012



Printer Friendly



Forward to a Friend



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A group led by Joe Wang at the Univ. of California-San Diego, USA has developed a new forensic technique that can detect gunshot residue at the scene of the crime.

Gunshot residue consists of a large mix of compounds including both inorganic metals from the cartridge, bullet and the gun, and more complex organic compounds from the primer and gunpowder.



“ The general public really does not understand how long it takes to get prints, DNA, handwriting, and that no magic button focuses on some small part of a video frame, for that matter, we can’t even really clean it up to make it clearer.

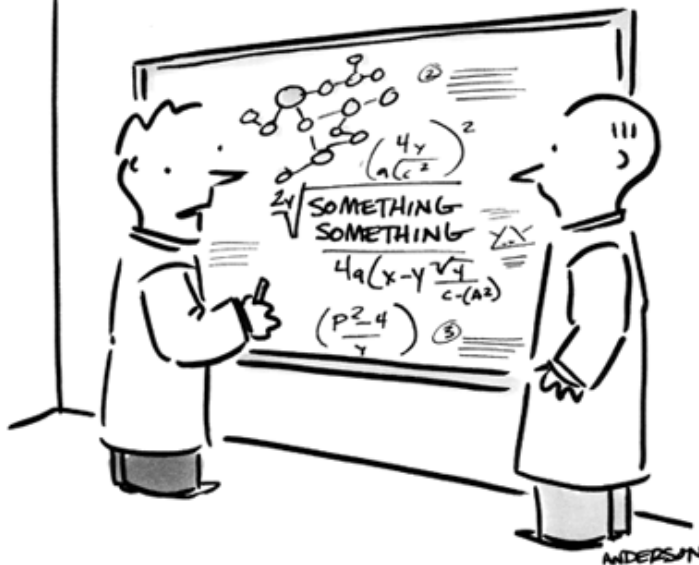
There is no appreciation for the overburdened labs and the fact that every piece of evidence can not be printed or tested for DNA.

They get the ideas from television so television is probably the best way to “re-educate” the public “

Who took the 'Science' out of 'Forensic Science' ?

© MARK ANDERSON

WWW.ANDERSTOONS.COM



"It's an inexact science."



"I didn't know you could get an actual *degree* in junk science!"



ditz1981

Resolved Question

[Show me another »](#)

Is Forensicate a real word?

I just heard the word being used on The Bill, a Police Drama in the UK. As in "take that gun and get it forensicated" or "forensicate that room". Me and My Husband fell on the floor laughing as it doesn't seem a real word.



Dr W:.... Forensic science traditionally has combed the academic world and to some extent the industrial world for advances that we can **forensicate** and DNA was a prime example of that.

Chairman: What was that, forensicate?

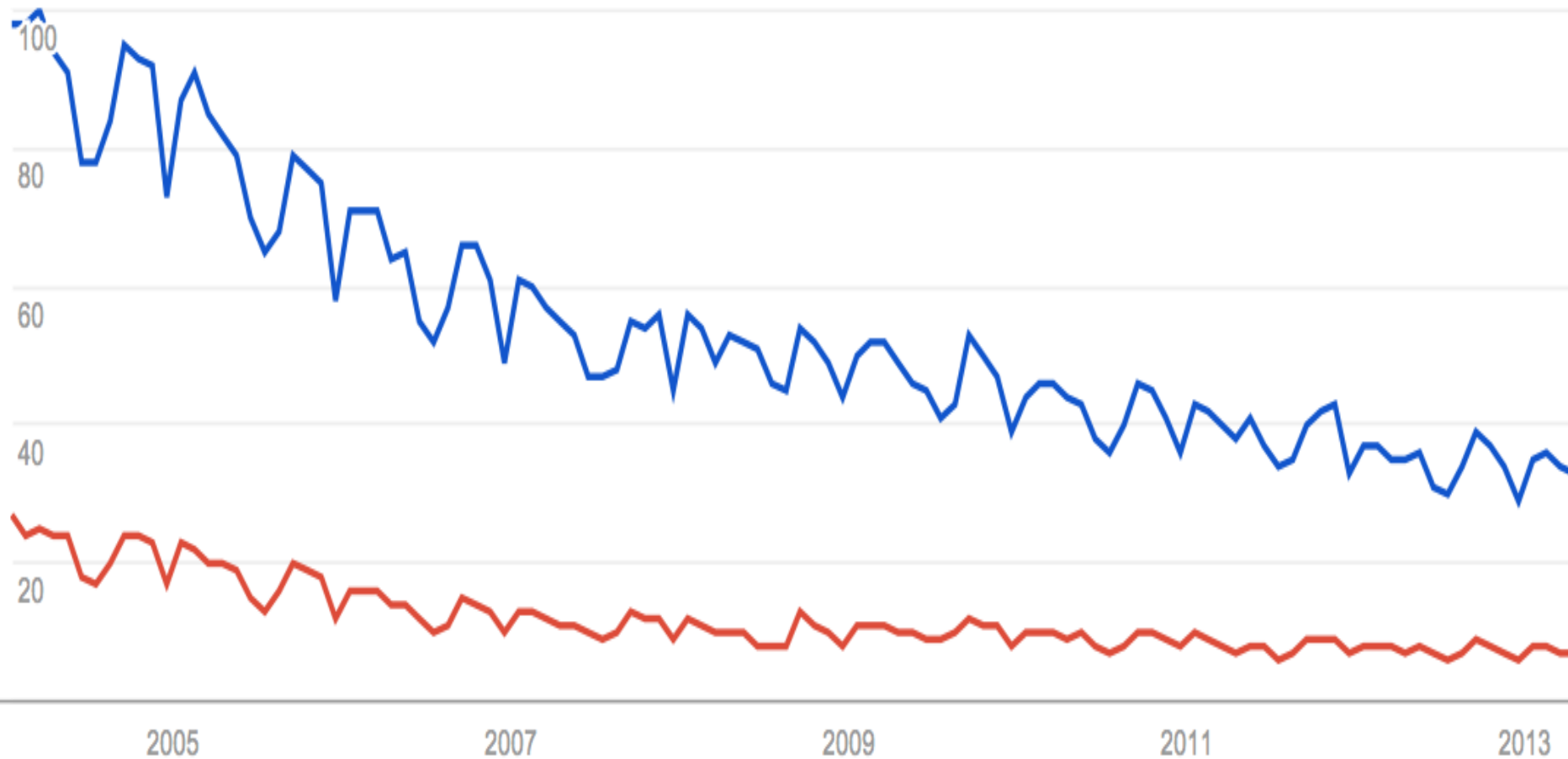
Dr W: Yes, a new word.

Chairman: Is that in the Oxford English Dictionary?

Dr W: I have been to America too often. I am sorry.

Chairman: No wonder you are blushing.

Who took the 'Science' out of 'Forensic Science' ?



Google trends **Forensic** : **Forensic science**

A Study of Juror Expectations and Demands Concerning Scientific Evidence: Does the “CSI Effect” Exist?

Hon. Donald E. Shelton, *Eastern Michigan University*

Gregg Barak, *Eastern Michigan University*

Young S. Kim, *Eastern Michigan University*



1027 persons called for jury duty in a State court looked at jurors’ television viewing habits, their expectations that the prosecutor would produce scientific evidence, and whether they would demand scientific evidence as a condition of a guilty verdict.

Expectations and demands for scientific evidence, there was **little or no indication of a link between those preconceptions and watching particular television shows.**

Jurors have **significant expectations and demands for scientific evidence has more to do with a broader “tech effect”** in our popular culture rather than any particular “CSI effect.”

CSI Effect” Exist?” *Vanderbilt Journal of Entertainment & Technology Law* 9.2 (2007): 331-368.

Portrayal in the media

May aid the prosecution by exaggerating the value of some scientific evidence, viewing it as overly conclusive.

May raise the perceived probative value of the evidence.

Raises the game in terms of the presentation and explanation of forensic evidence within the courtroom.

Requires better education about science for the police and legal profession.

“Why is it that you have no memory of stabbing Travis ?”

“Sharp direct out of the box – watching crime shows is teaching people to ask these types of questions ...”

Were you mad at Travis while you were stabbing him ?

“Pretty specific .. Jury is really trying to get inside her head much like in criminal minds ...”



showbiz
*tonight

Monday-Friday

HLN On Air | See all 3184 items

Are Arias jurors suffering from the 'CSI effect'?

By HLNtv.com Staff
updated 10:57 AM EDT, Thu April 11, 2013

NEED TO KNOW

- Showbiz Tonight is counting down the ways TV crime shows may influence the Arias trial
- Do crime shows lead to more guilty verdicts or acquittals like Casey Anthony?

THE SHOWBIZ COUNTDOWN

embed

The *CSI* effect has become an accepted reality by virtue of its repeated invocation by the media.

No existing empirical research shows that it actually occurs

Tyler – The Yale Law Journal, Viewing CSI and the Threshold of Guilt: Managing Truth and Justice in Reality and Fiction, 2006

THE CANADIAN JOURNAL OF POLICE & SECURITY SERVICES
VOLUME 5 ISSUE 3/4 FALL/WINTER 2007

The CSI Effect: Reflections from Police and Forensic Investigators

Thank You

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