Only in America?

A History of Lie Detection in the Netherlands in Comparative Perspective, ca. 1910—1980

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Acknowledgements

The subject of this thesis compels me to be honest and so I must admit that writing it was one of the most difficult things I have ever done. It took a year longer than I had intended and it required me to work through some personal issues that I had not needed to confront before. I have had the good fortune to receive the support of several people who had confidence in my abilities even when I did not. I especially owe a debt of gratitude to my supervisor for this project, prof. dr. Floris Cohen, for his guidance and patience and to my partner Alie, who put up with me through it all. Thank you both very much.

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Introduction.
A History of Absence

Writing a history of lie detection in the Netherlands is, at first glance, absurd. It is generally agreed that the success of lie detection and the machines known as lie detectors is unique to the United States of America. At the start of this project, I had no indications whatsoever that I would find previously undiscovered widespread use of lie detection in the Netherlands. I set out, in other words, to write the history of a scientific technique and an instrument that was virtually absent from the context under investigation. What could possess a person to attempt such a thing?

First, lie detection is actually well known in the Netherlands. Though the practice has not taken root in the country, its citizens imagine the instrument in much the same way as Americans do. This is not surprising; "American culture has permeated Dutch Society in the 20th century, especially in the post-World War II era."[1] From the 1930s onwards, the Dutch could regularly read about lie detection in the newspapers. In addition, research conducted in the 1970s (and since) has demonstrated the dominant position of American fictional programmes on European television.[2] The Dutch might have seen lie detection portrayed in police dramas such as *Law and Order: Special Victim's Unit* and *CSI Miami*, thrillers like the Dutch director Paul Verhoeven's *Basic Instinct* (see image 1), and comedies such as the Robert DeNiro movie *Meet the Parents* and beloved cartoon *The Simpsons*, to name but a few relatively recent examples.[3] Knowledge about the use of lie detection (especially in law

[1] Doeko Bosscher, Marjo Roholl and Mel van Elteren, *American Culture in the Netherlands* (Amsterdam: VU University Press, 1996), 1
[2] Els De Bens and Hedwig de Smaele, "The Inflow of American Television Fiction on European Broadcasting Channels Revisited," *European Journal of Communication,* 16, no. 1 (2001), 51–53
[3] *Law and Order: Special Victim's Unit,* "Privilege," 83. Directed by Jean de Segonzac. Written by Patrick Harbinson. NBC, February 21, 2003; *CSI: Miami,* "Dispo Day," 18. Directed by David Grossman. Written by Elizabeth

enforcement contexts) managed, then, to travel from the United States to the Netherlands, but this did not result in the technique *actually being used* in its new environment. In other words, the technique is only absent on the level of practice.

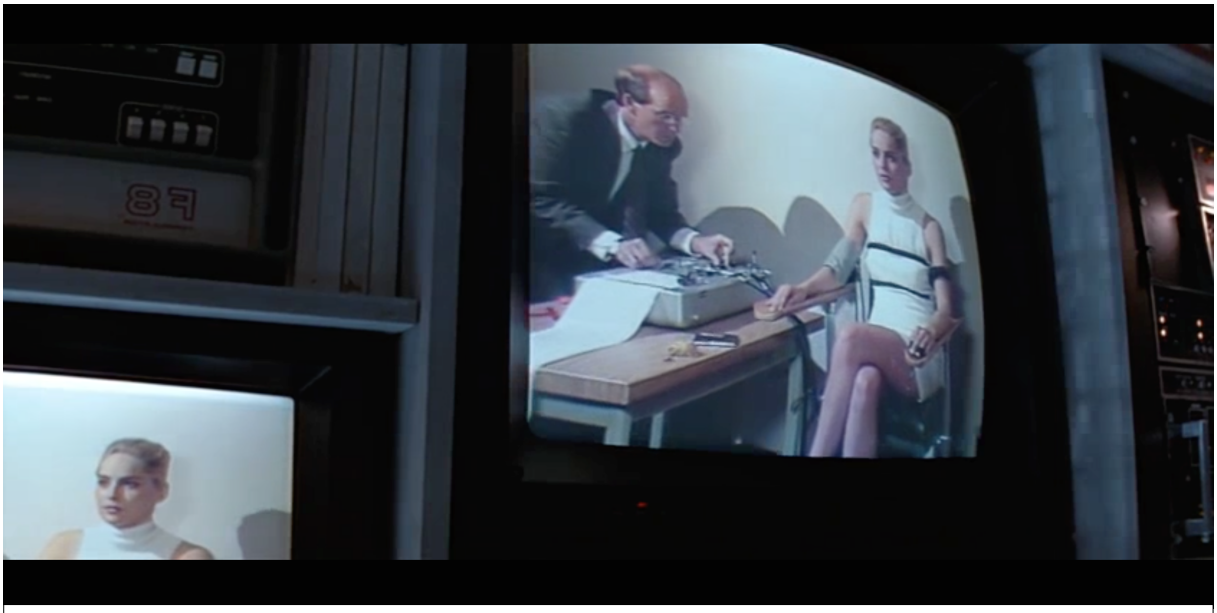

Image 1. Lie detector scene in *Basic Instinct*

A second reason why I wanted to write this "history of absence" is to fill a gap in the existing literature about lie detection. The "Americanness" of the lie detector has been problematised in various histories. So British historian of psychology Geoffrey C. Bunn has shown "why and how the lie detector was finally "invented" in the United States, even though all the important technological innovations had been developed by European criminologists prior to the start of the twentieth century."[4] The American historian Ken Alder, in *The Lie Detectors,* picks up where Bunn left off: "Why," he asks, "does the United States—and only the United States—continue to make significant use of the lie detector?"[5] In Alder's history, the lie detector — "an artifact with no stable function of its own"— becomes the lens through which to "track American political culture."[6] Even histories which

Devine, Ildy Modrovich and Laurence Walsh. CBS, March 10, 2003; *Basic Instinct.* Directed by Paul Verhoeven. Carolco Pictures and
StudioCanal: 1992; *Meet the Parents.* Directed by Jay Roach. Universal Pictures, DreamWorks, Nancy Tenenbaum Films and Tribeca Productions: 2000; *The Simpsons*, "Who Shot Mr. Burns (part 2)," 129. Directed by Wes Archer. Written by Bill Oakley and Josh Weinstein. Fox Broadcasting Company, September 17, 1995; *The Simpsons*, "The Springfield files," 163. Directed by Steven Dean Moore. Written by Reid Harrison. Fox Broadcasting Company, January 12, 1997

[4] Geoffrey C. Bunn, *The Truth Machine. A Social History of the Lie Detector,* (Baltimore, MD: The Johns Hopkins University Press, 2012): 5–6

[5] Ken Alder, *The Lie Detectors. The History of an American Obsession.* (New York, NY: Free Press, 2007): xiv

[6] Ken Alder, "America's Two Gadgets. Of Bombs and Polygraphs," *Isis,* 97, no. 1 (2007): 126

do not explicitly problematise the instrument's "Americanness," still focus on its hold on the "*American* cultural imagination."[7] Although each of these analyses does an excellent job of highlighting the various mechanisms that made lie detection a widely known and used technique in the United States, no one has as yet directly addressed the flip side of that question: Why did it fail to make any significant inroads in other national contexts? This question has to be answered before we proclaim the technology to be *essentially* American.

More generally, I believe histories of absences, failures and non-occurrences are worth studying and ought to be studied in the same way as presences, successes and occurrences. This attitude, of course, is nothing new; most notably, proponents of the "strong programme" of the sociology of scientific knowledge (SSK) in the 1970s called for a symmetrical treatment of retrospectively "correct" and "incorrect" theories and "successful" and "non-successful" technologies. The main result of such calls for symmetry has been that historians generally take social and cultural factors seriously in their study of "successful" theories and technologies, but "historians of science (like general historians) [still] select their subject matter with an eye on those views which have proved triumphant."[8] Dedicated histories of "failed" sciences and technologies are still relatively sparse — despite the fact that they could give us important insights into how science and technology gets made and unmade.

Lie detection is particularly interesting from this perspective, because the question of its failure and success is appealingly complex. Before getting into this I would like to clear up some of the terms that will be used throughout this thesis. When I use the term "lie detection," I have in mind the use of a physiological measurement apparatus with the explicit aim of identifying when someone is lying. This typically comes with specific protocols for questioning the subject, and the output is graphically represented. Lie detection is most often understood as a forensic technology, but it also has uses outside the sphere of criminal investigation, including in employee screening, therapeutic interventions and entertainment.

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[7] Melissa M. Littlefield, *The Lying Brain. Lie Detection in Science and Science Fiction* (Ann Arbor, MI: The University of Michigan Press, 2011), 10. Italics mine.
[8] Ken Alder, "Chapter Fifteen. The History of Science, Or, an Oxymoronic Theory of Relativistic Objectivity," *A Companion to Western Historical Though,* eds. Lloyd Kramer and Sarah Maza (Oxford: Blackwell Publishing, 2002): 301

"A lie detector" is any "hardware" used in the procedure, while the interrogation protocol is the "software."[9] Among the hardware that was used in the early years of lie detection are galvanometers (which detect electric currents and can thereby be used to measure changes in a person's electrodermal activity or heart rate), pneumographs (which measure changes in respiration), sphygmographs (which measure changes in heart rate), plethysmographs (which measure changes in blood volume in a particular part of the body) and sphygmomanometers (which measure blood pressure). In the 1970s lie detectors based on voice stress analysis (VSA) came in use and in recent years investigators have begun looking at the possibility of using positron emission tomography (PET), electroencephalography (EEG), functional near infra-red spectroscopy (fNIRS) and functional magnetic resonance imaging (fMRI) for "brain based" lie detection. The most familiar instrument used in lie detection, however, is the polygraph. This "many-writer" is a combination of a few of the above-mentioned instruments (typically the spygmomanometer, galvanometer and pneumograph).

Most historical, sociological and cultural studies of lie detection focus on the polygraph. If such studies do cover other instruments, it is typically as part of the "pre-history" of the polygraph. This narrow focus is perhaps justifiable in the US context (given that the polygraph is certainly the most widely used lie detector there), but in the Dutch context this explanation cannot stand. Only a couple of lie detectors have ever been used here and, so far as I was able to establish, not a single polygraph.

As we will see, however, the conflation of lie detectors and polygraphs is common among Dutch actors, just as it is among Americans. This is related to the fact that most of the time, when people refer to the lie detector, they are not referring to an actual instrument, but rather to an imagined or idealised apparatus. To highlight this fact Melissa M. Littlefield, a scholar of literature and science, distinguishes between a lie detector and *the* lie detector. *The* lie detector refers to "an imagined instrument, an accumulation of the lore, desires, hopes, and dreams of the scientific, journalistic, and lay communities."[10] It is infallible, produces outcomes independent of the subjective judgement of the operator, is non-coercive and so forth. This myth is bound in culture; though much of it survived the journey, a transformation did take place as knowledge about *the* lie detector travelled from the US to the Netherlands. In other words, *the* Dutch lie detector is distinct from *the* American lie detector.

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[9] The "hardware—software" analogy is borrowed from Ken Alder, "To Tell the Truth: The Polygraph Exam and the Marketing of American Expertise," *Historical Reflections/ Réflexions Historiques,* 24, no. 3, (1998): 495

[10] Melissa M. Littlefield, *The Lying Brain*, 9

Excluded from the discussion that follows is the kind of non-instrumental deception detection that we all engage in somewhat frequently; relying on verbal and physical clues to identify whether we are being lied to. To give an example, I am absolutely sure that my secondary school teacher was able to figure out by watching my shifty eyes that I was lying to him when I claimed my puppy had peed on my homework — I did not, in fact, have a puppy. In a similar vein, much of the deception detection done by police officers, judges and juries is distinctly low tech. Lies are laid bare by a combination of gut feeling, folk psychology, empirical evidence and logical reasoning ("If the suspect says he was in the bar at the time of the offence, but the bar was, in fact, closed, the suspect must be lying") and clever mind games designed to make the suspect (accidentally) give away the truth. These common-sense techniques may be elaborated in a (pseudo-)scientific way. Some methods, for example, set out criteria and scoring systems to assess verbal cues (relating to the content of a statement). A few of these may stand on sturdy scientific footing, while others are dubious.[11] Because such methods rely on different principles than instrumental lie detection; the former concerning itself with the content of a statement, the latter focusing on physiological cues, they fall outside the scope of this thesis.

Also excluded from my usage of the term "lie detection" are what one might call lie *prevention* methods. Examples are the so-called truth serum and hypnotherapy. These techniques do not identify lies at all, but are intended to stop a person from lying in the first place. The compounds that have been used as "truth serums" are either sedatives or hypnotics, which lower consciousness to the extent that — in theory — people would give up information they were previously trying to keep hidden. Their disinhibited state would prevent them from lying. Hypnosis is meant to achieve the same. These techniques are generally seen as ethically and legally problematic, as well as unreliable. In particular, they seem to increase suggestibility, so that subjects can easily be made to "admit" to whatever the examiner wants them to. In additions, memories may become jumbled or be fabricated. Truth serums make the odd appearance in this thesis, as the historical actors often discuss lie detection and truth serum in conjunction, but I have not investigated them beyond this.

Even with these limitations clearly defined, it can still be difficult to discern whether something should, or should not, be classified as lie detection. By extension, it can be difficult to know when to

[11] Glynis Bogaard, Ewout H. Meijer, Aldert Vrij, and Harald Merckelbach, "Scientific Content Analysis (SCAN) Cannot Distinguish Between Truthful and Fabricated Accounts of a Negative Event," *Frontiers in Psychology*, 7 (2016): 2

start a history of lie detection. Many authors cannot resist beginning their histories with examples of ancient non-mechanical "lie detection;" so the famed Greek physician Erasistratus (300–250 B.C.) apparently used manual pulse measurements to identify deception. A particularly popular example of lie detection *avant la lettre* is an ancient test (said to be either Chinese or Indian) in which suspects of a crime had to chew rice while being confronted with facts of the case: if the rice came out dry, you were guilty.[12] It is easy to see how these ancient practices might be considered analogous to modern day lie detection. After all, these inquisitors were using observations of physiological phenomena (e.g. the lack of saliva flow) to decide whether a person was guilty of some crime or another. However, these tests were typically couched in religious practice and the link to physiology was not at all explicit. Besides, no instrumentation was involved.

Perhaps, then, it would be better to begin in the second half of the nineteenth century, when researchers in European laboratories began approaching the study of emotions in a new way, hooking subjects up to (newly-invented) physiological instruments to find out "how the brain writes when it guides the pen itself."[13] Among those drawing inspiration from this new approach, was the Italian physician and criminologist Cesare Lombroso (1835–1909), who turned the physiologists' methods to

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[12] Paul V. Trovillo, "History of Lie Detection, pt 1.," *Journal of Criminal Law and Criminology,* 29, no 6. (1939): 849, 852–853; Don Grubin & Lars Madsen, "Lie detection and the polygraph: A historical review," *The Journal of Forensic Psychiatry & Psychology,* 16, no. 2 (2005): 358–359; Benjamin Kleinmuntz and Julian J. Szucko, "Lie Detection in Ancient and Modern Times," *American Psychologist,* 39 no.7 (1984): 766; Alder, *The Lie Detectors*, xii; Elizabeth B. Ford, "Lie detection: Historical, neuropsychiatric and legal dimensions," *International Journal of Law and Psychiatry,* 29, no. 3 (2006): 165; Yvonne Koontz Sening, "Heads or Tails: The Employee Polygraph Protection Act," *Catholic University Law Review,* 37, no. 1 (1989): 259; Richard A. Leo, *Police Interrogation and American Justice*, (Cambridge, MA: Harvard University Press, 2008), 81; Leonarde Keeler, "Scientific Methods of Crime Detection with a Demonstration of the Polygraph," *Polygraph,* 23, no. 2 (1994): 156, reprinted from *Kansas Bar Association Journal,* 12 (1933): 22–31

[13] Angelo Mosso, *Fear*, trans. E. Lough and F. Kiesow, (London: Longmans, Green, and co., 1896): 77. For more about the work of Mosso, whose work provided a mayor impetus for the development of this research programme, see Stefano Sandrone, Marco Bacigaluppi, Marco R. Galloni and Gianvito Martino, "Angelo Mosso (1846–1910)," *Journal of Neurology,* 259, no. 11 (2012); Marcus M. Raichle, "Modern Phrenology: Maps of Human Cortical Function," in "Great Issues for Medicine in the Twentieth Century: Ethical and Social Issues Arising out of Advances in the Biomedical Sciences," special issue, *Annals of the New York Academy of Sciences,* 882 (June, 1999): 107–108; David G. Horn, *The Criminal Body: Lombroso and the Anatomy of Deviance,* (New York, NY: Routledge, 2003): 107–131. For more about this new approach to emotions more generally see especially the work of Otniel E. Dror; Otniel E. Dror, "Seeing the Blush: Feeling Emotions," in *Histories of Scientific Observation,* ed. Lorraine Daston and Elizabeth Lunbeck (Chicago, IL: University of Chicago Press, 2011); Otniel E. Dror, "The Scientific Image of Emotion: Experience and Technologies of Inscription," *Configurations*, 7, no. 3 (1999); Otniel E. Dror, "The Affect of Experiment. The Turn to Emotions in Anglo-American Physiology, 1900–1940," *Isis,* 90, no. 2 (1999). An interesting article about the physiology of emotions from that era is Ferdinand Papillon, "Physiology of the Passions," *Popular Science Monthly,* 4, (March 1874).

the study of criminals. Some have even suggested that it was he who conducted the first lie detection procedure.[14]

But what Lombroso was doing differs substantially from the practice that we have come to know as lie detection. As David G. Horn phrases it, "the goal of Lombroso's experiments was not to distinguish truthful from untruthful utterances (…), but rather to identify the physiological and psychological states that might or might not have *enabled* an individual to commit a particular act."[15] So, in the 1902 murder of a little girl, Lombroso's experiments with a plethysmograph showed not that the suspect had spoken the truth when he denied any involvement, but instead that he was "not a born criminal, and was *incapable* of committing the action of which he was suspected — the murder of a child for purely bestial pleasure."[16]

There are a few ways to conceptualise the difference between what Lombroso was doing and lie detection. Horn has argued that Lombroso aimed to determine the danger an individual posed, thus making Lombroso's plethysmograph a "danger detector."[17] In Bunn's view, "because the lie detector would come to rely on the lie as a feature of normality, the instrument's invention was not thinkable until criminology had abandoned the born criminal."[18] The key difference then, is whether what is being investigated is the personological 'liar' or even the pathological criminal, or the discrete lie as it occurs in 'normal' people.

If Lombroso was not the first, then who? There is a debate to be had about whether or not the German psychologist Hugo Münsterberg (1863–1916) could be said to have performed lie detection, but I am not committed to either position.[19] As will become clear some of Münsterberg's work is

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[14] Grubin and Madsen, "Lie detection and the polygraph," 359; Kleinmuntz and Szucko, "Lie Detection in Ancient and Modern Times," 767; John A. Larson, "The Lie Detector: Its History and Development," *The Journal of the Michigan State Medical Society,* 37, no. 10 (1938): 894; Littlefield, *The Lying Brain*, 8; Jerome H. Skolnick, "Scientific Theory and Scientific Evidence: An Analysis of Lie-Detection," *The Yale Law Journal,* 70, no. 5 (1961): 696; Ronald R. Thomas, *Detective Fiction and the Rise of Forensic Science,* (Cambridge: Cambridge University Press, 1991), 22; Paul V. Trovillo, "History of Lie Detection, pt. 1," *Journal of Criminal Law and Criminology,* 29, no. 6 (1939): 862–864; Susanne Weber, "The Hidden Truth: A Sociological History of Lie Detection," (PhD diss., London School of Economics and Political Science, 2008), 48–49, 58; Jan Widacki, "The European Roots of Instrumental Lie Detection," *European Polygraph,* 6, no. 2 (2012): 140

[15] Horn, *The Criminal Body*, 130

[16] Gina Lombroso Ferrero, *Criminal Man, According to the Classification of Cesare Lombroso.* (New York, NY: G.P Putnam's Sons, 1906): 264; italics mine

[17] Horn, The Criminal Body, 131

[18] Bunn, *The Truth Machine*, 75–76

[19] Bunn thinks that Münsterberg was still committed to the idea of a 'personological' liar, while Melissa Littlefield believes Münsterberg was "interested in lies as discrete phenomena that are not necessarily associated with any one type of person;" Littlefield, *The Lying Brain,* 23

relevant to this history either way. It will further become obvious that lie detection really came into its own through the work of William Moulton Marston (1893–1947), a student of Münsterberg's, and the work of Berkeley police chief August Vollmer (1878–1955), police officer and psychologist John A. Larson (1982–1965) and Leonarde Keeler (1903–1949) in the period 1915 to 1921.

Let us now return to the question of the failure and success of lie detection. Even in its native context, the United States of America, lie detection has continually been contested. While other forensic techniques, such as finger printing, ballistics, bloodstain pattern analysis and DNA testing were widely accepted as evidence in state and federal courts, lie detection was typically barred from entry into 20th century US courts. Despite the advocacy of its proponents, doubts about its reliability and validity have remained. These doubts, however, have not prevented the technique from flourishing in other domains; it has been used extensively by law enforcement agencies and for the purpose of employee screening in both the private and government sector. When viewed internationally, another dimension is added to the question of success and failure; while lie detection became near ubiquitous in some parts of American society, it failed to make significant inroads elsewhere.[20]

This thesis contains a case study of one of the countries in which lie detection never got off the ground: the Netherlands, my home and the country in which I study. The Netherlands differs substantially from the US; it is a rather small country, with a population of nearly 5 million in 1900 and nearly 16 million in 2000, versus the US's 76 million in 1900 and 282 million in 2000. In terms of its geographical area size it is smaller than 41 out of 50 US states (bigger than Maryland, but smaller than West Virginia). Based on homicide rates in the last century, the Netherlands is far safer than the US, with the US rate never sinking below 4 per 100.000 inhabitants since 1907, and the Netherlands never once going over 1.5.[21] These facts are certainly worth taking into account as we attempt to explain the differential reception of lie detection in these two countries.

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[20] This is not to say that there have not been pockets of use elsewhere in the world. Especially in recent decades the technology has been adopted by law enforcement agencies in several countries, including Canada, Israel, and the Netherlands's southern neighbour Belgium; Aldert Vrij, *Detecting Lies and Deceit. Pitfalls and Opportunities*, 2nd ed. (Hoboken, NJ: John Wiley & Sons, 2008), 295

[21] Source of the US statistics is the National Center for Health Statistics. The data were at one point available at the US Department of Justice website, but have since been removed. They were archived, however, using the *Internet Archive Wayback Machine,*

Aside from differences in terms of demographics and social statistics, there are also qualitative differences between the two countries. Particularly important for this history are the differences in the legal cultures. The American system is adversarial in nature, that is to say — in broad strokes — that "legal proceedings are essentially contests between equivalent rivals."[22] The Dutch system, by contrast, can be characterised as inquisitorial, which means that "a legal procedure is considered an inquest: "an official and thorough inquiry" directed at establishing the true facts."[23] In more concrete terms, the Dutch system, contrary to the US, knows no jury, puts the judge in charge of fact-finding, has decision-rules rather than admissibility-rules (meaning that all evidence may be brought before the fact-finder, i.e. the judge, who is deemed capable of determining the appropriate weight to be given to the evidence) and places an emphasis on written documentation, rather than in-court testimony. Precedent is also far less important than in the US.[24] These differences will be discussed in more detail in the concluding section of chapter one.

Of course, there are also broader cultural differences that will come to play a role in the story of lie detection. How a people perceives itself, its country and its culture, will determine, in large part, how receptive they are to certain philosophical and scientific ideas, technologies, art forms, and so forth. Interestingly, the Dutch often define their own identity *in contrast to* American culture. This, of course, is a consequence of the widely felt influence of the US on Dutch culture and European culture more broadly. As will become clear, this has consequences for the reception of lie detection; the instrument's perceived "Americanness" directly impacts the Dutch understanding and valuation of it.

In addition to discussing two different countries, I also cover three different "domains" in which lie detection may be found; the courtroom, the workplace and the media. Each of these areas is the subject of one of the chapters of this thesis. Each chapter begins by detailing the presence of lie

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https://web.archive.org/web/20060929061431/http://www.ojp.usdoj.gov/bjs/glance/tables/hmrttab.htm; Dutch statistics taken from the CBS (Centraal Bureau Statistiek) website: Paul Nieuwbeerta en Ingeborg Deerenberg, "Trends in moord en doodslag 1911-2002. Een eerste analyse van het Historisch Bestand Slachtoffers Moord en Doodslag," *Bevolkingstrends* (2005): 56–63, https://www.cbs.nl/nl-nl/achtergrond/2005/09/trends-in-moord-en-doodslag-1911-2002

[22] Peter J. van Koppen and Steven D. Penrod, "Adversarial or Inquisitorial. Comparing systems," in *Adversarial versus inquisitorial justice: Psychological perspectives on criminal justice systems,* ed. Peter J. Van Koppen and Steven D. Penrod (New York, NY: Springer, 2003): 2

[23] Ibid., 3; Hans F.M. Crombach, "Adversarial or Inquisitorial. Do We Have a Choice?" in *Adversarial versus inquisitorial justice: Psychological perspectives on criminal justice systems,* ed. Peter J. Van Koppen and Steven D. Penrod (New York, NY: Springer, 2003): 23

[24] O.A. Haazen, "Precedent in the Netherlands," *Electronic Journal of Comparative Law,* 11, no. 1 (2007), http://www.ejcl.org/111/art111-12.pdf

detection in the domain under scrutiny in the US. In later sections I discuss attempts at introducing the technology in the corresponding area of Dutch society and Dutch perceptions of lie detection. The story that emerges includes a case of a corrupt police officer, a discussion about lie detection by a group of jurists, a private detective firm and a short-lived television show among other things. I end each chapter with a section analysing the differences and similarities between the two countries, in order to get closer to understanding why the US did, and the Netherlands did not, come to make significant use of lie detection. The conclusion of this paper knits those various strands together.

Perhaps the reader has noticed that this thesis contains no chapter dedicated to police stations, even though American law enforcement agencies have made substantial use of lie detection. The reason for this omission is that the discussion of using the technology in Dutch police stations has been very limited. In fact, the only suggestion I have found that it was ever considered at all, is that the ten-year plan for the municipality of The Hague included a proposed 60.000 guilders (approximately 16.700 US dollars at that time) budget for a lie detector, to be spent in 1967.[25] There is no evidence that anything ever came of it. A few years later, when a private detective who we will meet in chapter two claimed to have used a voice-based lie detector to great success in the Netherlands, journalists asked the Ministry of Justice to comment. The response made clear that the government had no interest in making lie detection part of police procedure, nor was there a desire to investigate the technique further.[26] Minister De Ruiter later reiterated that Dutch police made no use of lie detectors.[27] Due to the sparsity of Dutch materials about the matter, then, the law enforcement arena remains unexplored in this thesis. It does, however, come up as a matter of course in the sections about the US because it is closely connected to some of the other issues that are discussed there.

Aside from law enforcement, another area of society is conspicuous by its absence. As the British professor of Criminal Law Courtney Stanhope Kenny once put it: "To make an accused person thus the involuntary subject of a biological experiment may seem to us a process that savours rather of

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[25] "Begroting," *Nota met betrekking tot de investeringen bij de gemeente 's-Gravenhage in de periode 1965/1974 met een proeve van een investeringsplan naar de toestand op 1 januari 1965,* The Hague Municipal archives, 56; "Leefbaarheid van stad verhogen. Den Haag verwacht: Tot 1974 anderhalf miljard investeren," *De Tijd/ de Maasbode,* July 28, 1965; "Haagse politie wil „leugendetector"," *De Waarheid,* July 29, 1965

[26] "Liegen kan ook al niet meer," *Het Vrije Volk,* April 16, 1977; "Detectivebureau ontmaskert schuldige met leugendetector," *Nederlands Dagblad,* May 16, 1977

[27] *Aanhangsel Handelingen II,* 1978/79, 252: 501 (schriftelijke vragen)

the *laboratory* than of the law-court."[28] Indeed, lie detection did not simply appear out of thin air in police stations and courtrooms across the United States and I have already touched upon the "pre-history" of lie detection in European laboratories in the late 19th century. But I have also noted that the work being done in these laboratories differed substantially from what we have come to understand as lie detection. In fact, the moment that lie detection came into its own coincides with the application of the technology outside the laboratory — in the "real world" of police stations, courthouses and army camps. I suspect this is not entirely coincidental; the lie itself — as a discrete action — may not have been so interesting for the psychologists of that time. Only in the context of a personality, whether criminal or otherwise, would lying become meaningful. For those faced with the tangible consequences of lying every day (such as those tasked with solving crimes), being able to identify lies is obviously a matter of some importance.

To be sure, the proponents of lie detection have conducted some laboratory studies, hoping to validate their technique scientifically. But most of these studies have been heavily criticised or debunked. Academic psychologists have been consistent in their rejection of lie detection. For all their hard work, the proponents of lie detection have landed on the non-scientific side of the scientific/non-scientific divide. In part, this is due to the 'boundary work' performed by forensic psychologists and criminologists, who saw in lie detection and its proponents a foil for their own claim to being scientific.[29] But it is also a consequence of a tension that exists in the lie detector itself: although it claims to be a scientific, objective way to identify lies, it actually *requires* the theatre of real-world examinations and the dramatic performance of a capable operator. After all, if what is measured during the procedure is the physiological corrollary of the fear of getting caught — the most popular theory behind the most common versions of lie detection — then suspects must genuinely believe the instrument works. The most important work in making an effective lie detector, then, is the creation and the dissemination of *the* lie detector. It is for this reason that this thesis — despite having been written within the context of a history of science programme — gives little attention to the making of the science that underlies lie detection.

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[28] Courtney Kenny, "The Death of Lombroso," *Journal of the Society of Comparative Legislation,* 10, no. 2 (1919): 226; Italics mine

[29] Thomas Gieryn, "Boundary-Work and the Demarcation of Science from Non-Science: Strains and Interests in Professional Ideologies of Scientists," *American Sociological Review,* 48, no. 6 (1983): 781–795

Because the aim of this thesis is not to expand further on the American tale of lie detection, I have mainly relied on secondary sources for this aspect. As there are no (historical) secondary sources about lie detection in the Netherlands, the sections that address this aspect are the result of primary source research. I have used legal texts, court documents, government documents, documents from the archives of a private company, some audiovisual materials, a novel and more. This thesis most heavily relies, however, on newspaper articles.

There are roughly two reasons for why this made sense. First, newspaper articles provided an excellent starting point for the fact-finding portion of this thesis. Academic authors who have previously mentioned lie detection in the Dutch context (as part of psychological or legal discourse), typically merely noted that lie detection received very little attention in the Netherlands over the course of the twentieth century.[30] In such works, then, there are but few references to specific events and debates. Yet newspapers editors and journalists, throughout the century, found the idea of lie detection sufficiently interesting that they seem to have reported on every mention of lie detection in the Netherlands, no matter how insignificant. In this attempt to write an overview of all the uses of and debates surrounding this technology in the Netherlands before the 1980s, then, newspaper articles were a particularly useful source.

Second, historians have typically underscored the importance of mass media in the popularisation of lie detection in the United States, absent the endorsement of scientists and jurists. The American lie detector's struggle for authority played out in the "court of public opinion," as it were. If I am to identify the differences between the Netherlands and the US that led the latter to accept lie detection and the other to remain aloof, portrayals of the machine in the newspapers are very important indeed. Newspapers not only contributed to the construction of public opinion of lie detection (assuming a somewhat uniform view exists), but they also functioned as a *mirror* of public knowledge and opinion on the matter. What they published existed in dialogue with their readership.

[30] In 1961, one judge wrote: "In this country little interest is shown in lie detecting, and (…) most Dutch lawyers are convinced that such practices are not lawful. Practically nobody contemplates the introduction of lie detection evidence, and, apart from a few popular articles in newspapers, literature devoted to this subject is extremely scarce;" P. Meyjes, "Scientific Criminal Investigation Techniques under Dutch Law. With Special Consideration of Scientific Lie Detection and Blood Tests," *Journal of Criminal Law, Criminology and Police Science,* 51, no. 6 (1961): 654

Whether or not they explained a certain concept, for example, tells us what they assumed their audience did or did not know. Opinions that are presented without any fuss, are likely assumed to be uncontroversial. Although one should not equate what is written in newspapers with what is believed in society at large, it certainly provides important clues. Of course, this is also true for other mass media forms, such as magazines, books, television, advertisements and radio.

The fact of the matter, however, is that newspaper articles were by far the most easily accessible of these various sources due to the excellent online newspaper archive *Delpher*, the result of the *Koninklijke Bibliotheek* (Royal Library) project *Databank Digitale Dagbladen* (Database Digital Newspapers). Not only does *Delpher* provide digital access to "1.3 million newspapers, 3 million magazine pages and more than 320.000 books from the 15th to the 20th century," it also makes a large part of those 60 million pages searchable.[31] A simple search for the English term "lie detector" yielded 110 articles and the most frequently used Dutch equivalent for the word — *"leugendetector"* — yielded 672. Although most familiar in the long run, *leugendetector* is not the only Dutch translation of the term: I also searched for *Leugenontdekker* [lie discoverer], *leugenverklikker* [lie snitcher] and *leugenaanwijzer* [lie pointer]. Searching for these terms in *Delpher* yielded 263, 81 and 3 articles, respectively. As was to be expected, there were a few articles which showed up more than once in these searches: Taking this into account, my approximate sample size was between 750 and 800 articles in total.

In assessing the sources available to me, I tried to keep in mind the religious and political affiliations and the individual characteristics of the various newspapers. Here and there I have made note of these characteristics when a view expressed was particularly striking. As a general rule, however, portrayals of lie detection in newspapers across the political and religious spectrum were fairly homogenous.

There are also newspapers included in the *Delpher* archive which I have chosen to leave out of my analysis. A cursory reading of articles in newspapers from the Dutch colonial territories made it clear that I would gain no information from these sources that I would not otherwise have encountered, as many of the articles found there were reproductions of articles in Dutch publications.

[31] Koninklijke Bibliotheek, "Wat is Delpher?," *Delpher website*, accessed on August 4, 2017, http://www.delpher.nl/nl/platform/pages/helpitems?nid=372

In addition, the societies to which these papers catered had their own culture and character, and their opinions on lie detection are not relevant for understanding how the Dutch understood the technology. To be sure, at the intersection between forensic science and colonialism there is a rich vein for historical research, but there is no reason to suspect that lie detection was ever used by the Dutch colonial administration.[32] The Dutch-American publications *Onze Toekomst*, which catered to the Dutch-American community in Chicago, and *De Volksvriend,* which was published in Iowa, were also excluded from my analysis.

A few remarks about the language in this thesis; all translations are my own, unless otherwise indicated. For any direct quotes the original text in Dutch is provided in the footnotes. Any in-text Dutch terms have been italicised. In what follows I refer frequently to anonymous writers. This is mainly due to the fact that the majority of newspaper articles I studied appeared without a byline. I have consistently referred to unknown persons using the singular gender-neutral "they," although it appears that the majority of actors in this paper are, in fact, men. I have also used this pronoun when referring to a generic person, such as a criminal or an examiner, unless the historical actors themselves used either he or she.

[32] For example, historians have underscored the relation between fingerprinting and colonial India; see Simon Cole, *Suspect Identities. A History of Fingerprinting and Criminal Identification* (Cambridge, MA: Harvard University Press, 2001); Chandak Sengoopta, *Imprint of the Raj: How Fingerprinting was Born in Colonial India,* (London: Macmillan, 2003)

Chapter 1.
Lie Detection has its Day in Court

"The lawyer and the judge and the juryman," wrote the Harvard psychologist Hugo Münsterberg in 1908, "are sure that they do not need the experimental psychologist. They do not wish to see that in this field preëminently applied experimental psychology has made strong strides."[33] The application of psychological knowledge to legal problems had made significant inroads on the European continent, but to Münsterberg's frustration, the United States lagged behind.[34]

Münsterberg was one of the most enthusiastic advocates of a field known as applied psychology. He believed that society could solve its most pressing problems only with the guidance of psychologists and no one could doubt that unreliable witnesses and deceptive suspects posed a major problem for the administration of justice. It therefore irked the Harvard professor that the legal profession had shown itself to be "obdurate."[35] But Münsterberg was a man with a fighting spirit and he took it upon himself to change the situation. He believed that, to make the courts see the light, the public would have to apply pressure. Accordingly, he set out to get the American people on his side by publishing extensively in popular magazines (more about this in chapter three).

We begin the tale of lie detection's fraught relationship with the courts in Boise, Idaho, to where Münsterberg was dispatched by the editor of *McClure's Magazine* to write a piece about a

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[33] Hugo Münsterberg, *On the Witness Stand. Essays on Psychology and Crime,* (New York, NY: Doubleday, Page & Co., 1908): 10

[34] A few other scholars had called attention to the absence of American effort in this area. Dr. Guy Montrose Whipple, for example, wrote an article in the psychological Bulletin with the express intention "to stimulate interest in the problems under discussion." That this was necessary was clear from "the fact that English and American investigators are conspicuous by their absence" from the new field of "the psychology of report." Guy Montrose Whipple, "The Observer as Reporter: A Survey of the 'Psychology of Testimony'," *The Psychological Bulletin,* 9, No. 5 (1909): 154; See Tal Golan, *Laws of Men and Laws of Nature. The History of Scientific Expert Testimony in England and America,* (Cambridge, MA: Cambridge University Press, 2004), 212, 226–232

[35] Münsterberg, *On the Witness Stand,* 10

sensational trial. The case concerned the nationally high-profile murder of the former governor of Idaho, Frank Steunenberg (1861–1905). Steunenberg was killed in a bombing committed by a man known as Harry Orchard, who claimed that he had been hired by three leaders of the Western Federation of Miners. It was during the trial of one of these leaders that Münsterberg received permission to subject Orchard to a series of psychological tests.

Although Münsterberg performed "nearly one hundred groups of tests and experiments," many of which had nothing to do with Orchard's veracity, but instead with "the memory, the attention, the feelings, the judgement and the suggestibility," only one test was described in any detail: the association test.[36] The test, put simply, involved confronting Orchard with a series of words, to which he responded with the first word that popped into his head. The reactions were recorded and analysed for content, as well as timed. The idea is that if someone was trying to hide their guilt, they would actively try to avoid certain words — after all, it would not look good to respond with "blood" to the word "knife" if you were trying to convince the investigator that you are innocent of stabbing someone to death. "Butter" would be far safer. The process of dismissing your initial association and coming up with something more innocent, it was theorised, would cause delays.

None of Orchard's responses were delayed, however. From this Münsterberg concluded first, "that this man did not want to consciously hide anything, and that he himself believed his confession," and second, "that no real emotion accompanied any of his memories of the crime."[37] In other words, Münsterberg not only claimed to have shown that the witness was honest, but also that his emotions were abnormal, "[lacking] every sound and deep feeling."[38] Given this two-sided interpretation of the association test, it is not difficult to understand how two scholars might disagree about whether this procedure was of the kind that would come to characterise lie-detection: the identification of discrete lies in non-pathological subjects (see page 7.)

In any case, when Münsterberg went to Boise he "went, not as an "expert witness," (...) but as a scientific investigator whose conclusions (…) would serve as the basis for future scientific and

[36] Münsterberg, *On the Witness Stand*, 94; The article initially appeared as Hugo Münsterberg, "The Third Degree," McClure's Magazine, 24, no. 6 (1907): 614–621; It was republished as "The Detection of Crime," in Münsterberg, *On the Witness Stand*, 71–110. I have chosen to reference the latter.
[37] Ibid., 98–99
[38] Ibid., 101

"popular" articles."[39] His close relationship with the press allowed him to carry his favourite method of detecting deception to the steps of the courthouse, but not into the courtroom. It seems fitting that the first person to cross that threshold to testify about lie detection was Münsterberg's student.

The first section of this paper deals with that student's attempt to introduce lie detection evidence in the famous *Frye* case of 1923 and section two examines the various arguments made for and against lie detection in trials after *Frye*. In the Netherlands, lie detector evidence was presented in a courtroom for the first time nearly three decades after the *Frye* case. This case, in which a young police officer stood accused of robbery, is the subject of section three. Section four calls attention to a meeting of the *Nederlandse Juristen Vereniging* [Dutch Jurists Association, henceforth NJV] in which lie detection was discussed at length. The discussion that took place gives us insight into the opinion of the Dutch legal community only a few years after that first court case. The final section of this chapter puts the Dutch and the American situation side by side. Because the differences between the legal systems of the US and the Netherlands are substantial, it is key that we do not let ourselves be fooled by the fact that the outcome in both countries — that lie detection was roundly rejected by the legal profession — was the same.

1.1 Marston gets *Frye*'d

William Moulton Marston (1893–1947) began working on the problem of deception as an undergrad in Münsterberg's psychological laboratory at Harvard. He initially worked on the word-association method preferred by his supervisor, but eventually concluded that this was a dead end and turned his attention to a test based on systolic blood pressure.[40] Marston developed his test throughout the Great War, with the support of the Psychological Committee of the National Research Council, and later went on to pursue a PhD in physiology.[41] By 1922 he was teaching a course called Legal

[39] Merle J. Moskowitz, "Hugo Münsterberg. A Study in the History of Applied Psychology," *American Psychologist,* 32, no. 10 (1977): 831
[40] Golan, *Laws of Men and Laws of Nature,* 244; William M. Marston, "Systolic Blood Pressure Symptoms of Deception," Journal of Experimental Psychology, 2, no. 2 (1917): 117
[41] Jill Lepore, *The Secret History of Wonder Woman* (Melbourne: Scribe Publications, 2014): 50–52

Psychology at American University in Washington, D.C. At this point he had for some time believed that "a sufficient psychological background probably exists to qualify an expert upon deception in court" and had been on the lookout for an opportunity to demonstrate his technique's value in a court of law.[42] Then, in the summer of 1922, he got the chance he had been waiting for.

In November of 1920, Washington, D.C. had been shocked by the murder of Robert Wade Brown, an affluent doctor and a prominent member of the city's black community. Police initially failed to find a suspect, and a reward was offered for information about the killer. In the summer of 1921, police had a lucky break when they arrested 22-year old James Alphonso Frye on an unrelated robbery charge. During the investigation, a dentist who knew Frye well agreed to testify against the young black man in the robbery case. He did more than that, however; he told police that Frye had admitted to killing doctor Brown. After being questioned, Frye made a full confession.

Some time later, however, Frye retracted, explaining that he had only confessed because he had been promised by the interrogating officer that the robbery charge would go away and that he would be given half of the reward money. The murder charge, Frye had been assured, would never lead to a conviction, as he had a strong alibi. But the robbery charge did not "go away" and Frye was sentenced to four years in prison. Frye's attorney felt strongly that his client ought to plead guilty to the murder charge. Frye refused, fired his attorney and thus became the client of two young lawyers named Lester Wood and Richard V. Mattingly.

Mattingly and Wood struggled to find witnesses who would confirm Frye's alibi and went in search of a different angle on the case. They invited Marston to test their client and the professor, eager to publicise his technique and his expertise, agreed. Until American Historian Jill Lepore investigated the famous case for her 2014 book *The Secret History of Wonder Woman* (more about Wonder Woman in chapter 3) no one seems to have realised that Wood and Mattingly had been taking evening classes at American University and were at that time enrolled in Marston's course.[43] The move to invite Marston, then, was less "imaginative" than it seemed. Tal Golan has suggested that Mattingly hoped that Marston would expose Frye's lies, so that he could persuade his client to change his plea to

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[42] William M. Marston, "Psychological Possibilities in the Deception Tests," *Journal of Criminal Law and Criminology,* 11, no. 4 (1921): 570.
[43] Lepore, *The Secret History of Wonder Woman,* 67, 339 (endnote 23); See also Jill Lepore, "On Evidence: Proving Frye as a Matter of Law, Science and History," *Yale Law Journal,* 24 (2015): 1121–1122

guilty.[44] He must have been surprised to learn that Marston and his sphygmomanometer — better known as a blood pressure cuff — showed that Frye was telling the truth when he denied any involvement with the murder.

Wood and Mattingly submitted the results of the test, along with several of Marston's publications, to the court, and called Marston as an expert witness. But the judge in the case, Chief Justice Walter I. McCoy, would have none of it. As soon as Marston was introduced, the judge made clear he had no interest in hearing his testimony.[45] Despite Mattingly's protestations, the would-be expert witness left the courtroom without having said a word. The jury declared Frye guilty of second degree murder and judge McCoy convicted him to life in prison. The fact that the jury convicted Frye of second, rather than first degree murder led Marston to believe his aborted testimony had made a difference after all: "As far as Jim Frye was concerned, the test undoubtedly saved his life. No jury could help being influenced by the knowledge that Frye's story had been proved truthful by the Lie Detector."[46]

The defense immediately filed an appeal. The key question, as summarised by the US Attorney's office, was "whether it was in error for the trial court to refuse to admit the testimony of an alleged expert in deception."[47] The court of appeals upheld Judge McCoy's ruling. In a famously short and cryptic opinion, which referenced no other cases and gave no explanation of some of the key terms in it, the court established an important precedent. It became known as the *Frye* Standard and to have your expert witness excluded at trial has sometimes been called "being *Frye*'d." The *Frye* Standard — which refers not only to lie detection evidence but to all types of scientific evidence — states that a

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[44] Golan, *Laws of Men and Laws of Nature*, 246

[45] The tense interaction between Mattingly and judge McCoy is quoted at length in Lepore, "On Evidence," 1127—1135

[46] Bunn, "The Hazards of the Will to Truth," 196; In his 1977 history of lie detection, Eugene B. Block expresses the same argument: "Mention of Marston's report and its results did, however, move the jury to spare Frye's life." Eugene B. Block, *Lie Detectors. Their History and Use,* (New York, NY: David McKay Company, 1977): 26; Of course, it is not at all clear whether Marston's assessment was correct; Lepore has suggested that the jury believed what Frye had said in his initial confession, that his gun had gone of accidentally; Lepore, "On Evidence," 1136. Jon M. Sands has suggested that "the likely explanation [for the light sentence,] unfortunately, was probably racism — it was a Black on Black crime." Jon M. Sands, "It is worth noting that Frye did not receive a "light sentence" of 15 years, as Sands, following Alder, claims. He was actually sentenced to life in prison and was paroled after eighteen years. Jon M. Sands, review of *The Lie Detectors: The History of an American Obsession,* by Ken Alder, *Jurimetrics,* 49, no. 2 (2009): 248; Alder, *The Lie Detectors,* 51

[47] Quoted in Lepore, "On Evidence," 1138

court "must determine whether or not the method by which that evidence was obtained was generally accepted by experts in the particular field in which it belongs."[48]

James Alphonso Frye maintained his innocence and requested a pardon twice while he served his sentence. After he was paroled, having spent eighteen years in prison, he continued to attempt to secure a pardon. He never had any success. He passed away in 1956.[49]

It is hard to say what exactly led Judge McCoy and the appellate court to block Marston's testimony. McCoy, during his interaction with Mattingly, gave many reasons. It seems McCoy's approach in this discussion adhered to that famous strategy of "throwing 'em against the wall, and seeing which ones stick." Some of his arguments seemed mainly indicative of his distaste for the new technique, rather than anything substantive. For one, the judge felt he was too old to take chances. He also suggested that "we make use of that thing which God Almighty has implanted in us, the power of observation."[50] McCoy even stated that he expected to be dead by the time lie detection became a fixture of legal proceedings, implying that he would prefer it that way. Yet he also hinted at more well-thought-out objections.

"The standard legal explanation is that the (…) test (…) constitutes a clear invasion of the province of the jury."[51] Indeed, McCoy pointed out that determining whether a suspect spoke the truth "is what the jury is for."[52] Historian of science Tal Golan is not convinced by this explanation, because to some extent, all expert witnesses do this. Instead, he suggests, the threat of something more dangerous moved the judge; Marston's deception test threatened to render the jury entirely obsolete.[53] This sentiment was expressed in a paper that would later be submitted to the appellate court. "If such tests are ever adopted," wrote professor Zechariah Chafee, Jr., "it is probable that the jury system will

[48] "Frye Standard," Legal Information Institute, Cornell Law School, https://www.law.cornell.edu/wex/frye_standard
[49] Lepore, "On Evidence," 1148–1149
[50] Quoted in Lepore, "On Evidence, 1134
[51] Golan, *Laws of Men and Laws of Nature,* 248
[52] Quoted in Lepore, "On Evidence," 1128
[53] Golan, *Laws of Men and Laws of Nature,* 250

have to be abandoned."[54] It is not at all clear, however, that this is "the objection that had haunted Judge McCoy's refusal," nor did the appellate court reference it in its ruling.[55]

In Golan's view, "McCoy's exclusion of Marston's systolic blood pressure deception test had little to do with the reliability of the test."[56] Jill Lepore, on the other hand, points out that despite the judge's dismissive attitude, he had familiarised himself well with at least one of Marston's studies and "saw at a glance [that] the investigation was wildly unscientific (…) McCoy's refusal to admit Marston's testimony had less to do with the law of evidence than with the scientific method."[57] Indeed, the judge was pretty clear when he stated that "the science has not sufficiently developed detection of deception by blood pressure to make it a useable instrument in a court of law."[58]

With regards to the appellate court's decision, Golan writes:

> "The court of Appeal of the District of Columbia likewise was not about to allow Marston's deception test into the court. Still, being an appellate court, it needed to furnish a better rationale for its exclusion than [McCoy had]. This was not an easy task. In 1923, there was no special rule for the admissibility of scientific evidence. [It] was mainly evaluated according to the two traditional evidentiary criteria: the logical relevancy and helpfulness of the evidence and the qualifications of the witness. (…) The logical relevance of the deception test and its potential helpfulness to the jury were unquestionable. So were Marston's credentials."[59]

This last claim, however, is incorrect. If the defence had based the entire appeal on Marston's credibility, the prosecution would not have had a hard time calling this into question; though the court

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[54] Zechariah Chafee, Jr., "The Progress of the Law, 1919-1921. Evidence," *Harvard Law Review,*35, no. 3 (1922): 309; the salient quote makes an appearance in Lepore, "On Evidence," 1139; Golan, *Laws of Men and Laws of Nature,* 249 and is mistakingly attributed to judge McCoy in Alder, *The Lie Detectors,* 52
[55] Alder, *The Lie Detectors,* 52
[56] Ibid., 250
[57] Lepore, "On Evidence," 1134
[58] Ibid., 1132
[59] Golan, *Laws of Men and Laws of Nature,* 250

documents make no reference to it, Marston's reputation was no doubt damaged by the fact that he was *arrested for fraud*, the week after Mattingly and Wood filed their appeal.[60]

1.2 Out of the *Frye*ing Pan…

It is often said that *Frye* essentially sealed the lie detector's fate. According to Alder, "it laid down a rule that would ban the lie detector from criminal courts for the rest of the century and set criteria for the admission of all scientific evidence for the next sixty years."[61] The story goes that "the *Frye* ruling developed across the states into a *per se* exclusion, meaning that the polygraph was routinely refused admissibility without much hearing of its reliability, validity or technological development."[62] The first signs of a change supposedly came in 1975, when Congress and President Ford approved the Federal Rules of Evidence (which had been in the making for decades; henceforth FRE).[63] Then, in the 1993 *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, the Supreme court officially ruled that *Frye* was incompatible with the FRE and came up with new criteria to help judges decide whether to allow a given piece of novel evidence. This, it is argued, opened up discussion once again about the admissibility of lie detection evidence, after having been excluded from courtrooms for the better part of the century.

This version of the story, however, is overly simplistic. Although it is true that many courts used the *Frye* precedent to simply block lie detection evidence from entering their court rooms, it is also true that many of them considered issues other than the general acceptance criterion when making their decisions. Besides, well before the FRE and *Daubert,* some courts indicated that they saw no barrier to the introduction of lie detector evidence if both trial parties agreed to the procedure

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[60] This remarkable fact, like the fact that Mattingly and Wood were Marston's students, had been overlooked until Jill Lepore exposed it. Lepore, *The Secret History of Wonder Woman,* 74–76; Lepore, "On Evidence," 1142–1145

[61] Alder, *The Lie Detectors,* 51; Alder, "America's Two Gadgets," 127; Ken Alder, "A Social History of Untruth: Lie Detection and Trust in Twentieth-Century America," *Representations,* 80, no. 1 (2002): 5; 11, Leonard Saxe and Gershon Ben-Shakhar, "Admissibility of Polygraph Tests. The Application of Scientific Standards Post-*Daubert,*" *Psychology, Public Policy, and Law,* 5, no.1 (1999): 205; Ford, "Lie detection: Historical, neuropsychiatric and legal dimensions," 172; Grubin and Madsen, "Lie detection and the polygraph," 360

[62] Andrew Balmer, "Telling tales. Some episodes from the multiple lives of the polygraph machine," in *Knowledge, Technology and Law,* ed. Emilie Cloatre and Martyn Pickersgill, (London: Routledge, 2014), 108

[63] Ibid., 109; Saxe and Ben-Shakhar, "Admissibility of Polygraph Tests," 205

beforehand. It should also be noted that *Daubert* did not make *Frye* obsolete and that several jurisdictions still use the general acceptance criterion. In what follows I will discuss a few cases that, taken together, show that diverse opinions existed with regards to the admissibility of lie detector evidence, even as *Frye* was accepted by the majority of US courts.[64]

Ten years after *Frye,* in *State v. Bohner,* a Wisconsin trial court declined to hear testimony by Leonarde Keeler, who had performed a polygraph exam on the defendant (more about Keeler in chapter two and three.) This decision was upheld by the appeals court. The court's decision, it has been argued, relied "exclusively on the rationale and precedent of *Frye.*"[65] This view, however, does not hold up; the court made several remarks showing it had taken other issues into account. First, it pointed out a practical concern related to the status of the technology; the introduction of lie detection might "result in the trial of the lie-detector rather than the issues of the case."[66] The court also worried that allowing the introduction of the instrument too early in its development could lead to "complications and abuses that will overbalance whatever utility it may be assumed to have."[67] Additionally, there were issues with fairness: "If the defendant were permitted to introduce, when favorable to himself, the results of tests taken outside of court without the necessity of taking the stand and submitting himself to cross-examination, grave abuses might result."[68]

Then, in 1938, a court in New York decided to admit lie detection evidence in *People v. Kenny*. The court was impressed by the testimony of the Reverend Walter G. Summers, who had conducted the test with the help of his one-parameter 'pathometer,' a galvanometer, and determined that the procedure now complied with the demands of *Frye*. The court also noted "that lie detector operators should be allowed to testify even if they might disagree with one another in their conclusions."[69] That

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[64] See also footnote 4 in James R. Schirott, "Lie Detector Tests: Possible Admissibility upon Stipulation," *The John Mashall Law Review,* 4, no. 2 (1971): 245–246

[65] Ibid., 294; See also Samuel A. Goldblatt, "Evidence — Admissibility of Results of Lie Detector Tests," *Washington University Law Review,* 1950, no. 2 (1950): 259; Jane C. Schlicht, "Criminal Law — Polygraph Evidence Held Inadmissible in Criminal Trials in Wisconsin. *State v. Dean,* 103 Wis. 2d 228, 307 N.W.2d 628 (1981)," *Marquette Law Review,* 65, no. 4 (1981): 699–700; Morris D. Forkosch, "The Lie Detector and the Courts," *New York University Law Quarterly Review,* 16, no. 2 (1939): 203–204; Walter G. Summers, "Science Can Get the Confession," *Fordham Law Review,* 8, no. 3 (1939): 334–335

[66] Quoted in Horace W. Jordan, "Recent Criminal Cases. Evidence-Admissibility of Deception ("Lie-Detector") Tests," *Journal of Criminal Law and Criminology,* 29, no. 2 (1938): 290

[67] Quoted in Summers, "Science Can Get the Confession," 334

[68] Ibid., 335; Schirott, "Admissibility upon Stipulation," 249; Schlicht, "Polygraph Evidence Held Inadmissible in Criminal Trials in Wisconsin," 700

[69] Schirott, "Admissibility upon Stipulation," 250

is to say, the court felt that lie detection, with Summers' instrument, had indeed moved from the experimental to the demonstrative phase, but it also claimed that general acceptance was not required for admitting it. Judge Colden pointed out that other forensic techniques which were considered legitimate evidence, such as fingerprinting, x-rays, ballistics, psychiatric examination and handwriting analysis, were also at one point viewed with suspicion. The decision did receive criticism, however — according to one commentator, it was "historically untenable, factually incorrect, and legally reversible."[70] Because the case was never appealed and thus not affirmed by an appeals court, its impact was minimal.

Other cases in which lie detector evidence was rejected, such as the *People v. Forte* case of 1938, the *People v. Becker* case of 1942 and *Boeche v. State* case of 1949, saw the courts suggest that if a "proper foundation" had been laid, they might have allowed it.[71] In *Boeche v. State,* this was made explicit in the concurring opinion written by Justice Chappell of the Nebraska Supreme Court. According to this opinion, it had been correct to exclude the results of the lie detector test in this particular case, but they ought to be admitted in cases in which "a proper foundation is laid whereby it would be established that the apparatus used and the tests made thereunder have been given general scientific recognition as having efficacy."[72] Justice Chappell named *People v. Kenny* as an example of a case in which this had occurred. After all, "a better expert could not have been found."[73]

In the period between the *Fyre* and *Daubert* decisions several judges admitted lie detection into their courtrooms after both parties had agreed to the procedure beforehand. It could be argued that the possibility of allowing the results of lie detection tests upon stipulation was already raised in the *Bohner* case of 1933. In that case, the court had been concerned that "the test had been unilaterally conducted by the defendant [and that] this was unfair since the state had no opportunity to conduct a similar examination." The American attorney James R. Schirott has noted that "this objection can

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[70] Forkosch, "The Lie Detector and the Courts," 231; See also Jordan, "Evidence-Admissibility of Deception ("Lie-Detector") Tests," 287–291; Arthur A. Rosenblum, "In Re Lie Detector," *South Carolina Law Quarterly*, 2, no. 3 (1950); 267–268

[71] The term "proper foundation" refers to a rule that states that before a piece of evidence can be introduced, some preliminary facts must be established that tend to show the evidence is relevant and authentic. Rosenblum, "In Re Lie Detector, 268; Goldblatt, "Admissibility of Results of Lie Detector Tests," 257–258; Schirott, "Admissibility upon Stipulation," 251–253

[72] Quoted in Goldblatt, "Admissibility of Results of Lie Detector Tests," 255

[73] Ibid., 256–257

apparently be cured by simply having both parties agree to participate in the administration of the test."[74] But this reading of the *Bohner* case does not hold water, because the same court, in 1943, relied on its own precedent to decline to admit lie detection results, despite both parties having signed a stipulation.[75]

Yet there are other cases in which prior stipulation did lead to lie detection evidence being admitted. Among them are the *People v. Houser* case of 1948, the *State v. McNamara* case of 1960 and the *State v. Valdez* case of 1962. This last case is particularly interesting; although both parties had entered into a stipulation, the defendant objected to the admission of the evidence at trial. The court then decided to forward the question to the Arizona supreme court for review. That court concluded that lie detection results should indeed be allowed if a stipulation had been agreed to, but it also laid out a few conditions: first, each party must sign a written stipulation, second, the judge may always use discretion to allow or disallow the results, third, the opposing party must have the chance to cross examine the expert, and fourth, the judge must give the jury specific instructions about the weight that is to be given to this evidence.[76]

The criteria of *Valdez* were then adopted by various other courts across the country. So it happened that a court in Wisconsin "[changed] its posture from a blanket exclusion" of lie detection evidence, to allowing such evidence under stipulation and following the criteria set out in the Arizona case. Once this court, in *State v. Stanislawski,* had adopted these rules, it then strictly adhered to them, at least until it again reversed its position in *State v. Dean.* This 1981 case put the scientific merit of lie detection once again at centerstage; the criteria adopted in *Stanislawski* did nothing to enhance "the reliability of polygraph evidence", nor did it protect "the integrity of the trial process."[77] And indeed, a court that has no confidence in the reliability of the evidence, ought not allow it upon stipulation either, because, as legal scholar Paul C. Giannelli has pointed out, whether both parties consent to the procedure has no bearing whatsoever on the technique's reliability.[78]

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[74] Schirott, "Admissibility upon Stipulation," 249
[75] Rosenblum, "In Re Lie Detector," 268
[76] Schirott, "Admissibility upon Stipulation," 260–261; Schlicht, "Polygraph Evidence Held Inadmissible in Criminal Trials in Wisconsin," 697–698, 700–701
[77] Schlicht, "Polygraph Evidence Held Inadmissible in Criminal Trials in Wisconsin," 697
[78] Paul C. Giannelli, "Polygraph Evidence: Post-Daubert," *Hastings Law Journal,* 49, no. 4 (1998): 899

Another concern voiced by judges was that lie detection evidence may unduly prejudice the jury, because it goes straight to the heart of the case: the question of guilt.[79] This was one of the objections expressed by the appellate court in the 1947 case *State v. Lowry,* when it overturned the lower court's verdict.[80] In this case the trial court, concerned about fairness, had initially suggested that the defendant and the complaining witness both undergo a lie detector test.[81] Other issues relating to the influence of the lie detector on the jury are the — perhaps hyperbolic — fear that the machine would replace the jury (as was noted in 1.1), the worry that it might confuse the jurors unnecessarily, and that it would impair the function of cross examination.

Historical analyses of lie detection have largely neglected the legal debates that were had after *Frye.* Legal scholars with an interest in polygraphy *have* covered these cases, but have generally done so only in very abstract terms. All historical context is obscured: to give but one example, none of the seven articles I consulted in relation to the *Bohner* case contained any details about the crime or the defendant, while only two mentioned that the expert involved in this case was Leonarde Keeler.[82] As Jill Lepore has observed: "law renders historical evidence invisible."[83]

The history of lie detection in America could certainly gain in depth and nuance if some of the above-mentioned cases were subjected to more in-depth historical analyses of the kind afforded to the *Frye* case. For the purposes of this project, however, it suffices to note that a variety of concerns about lie detection were expressed in courtrooms across the country, even as as many courts understood *Frye* to mean that a *per se* exclusion of lie detector evidence was in order. This should not surprise us; as the legal scholar James R. McCall has pointed out, it was "stated explicitly in Frye [that] the polygraph evidence ruling was fully open to reinspection by subsequent courts as the science and practical technology of polygraph testing matured."[84]

1.3 A Novelty in Arnhem

[79] James R. McCall, "Misconceptions and reevaluation — polygraph admissibility after *Rock* and *Daubert,*" *University of Illinois Law Review,* 1996, no. 2 (1996): 369
[80] Goldblatt, "Admissibility of Results of Lie Detector Tests," 259
[81] Rosenblum, "In Re Lie Detector," 269; Schirott, "Admissibility upon Stipulation," 255
[82] Goldblatt, Admissibility of Results of Lie Detector Tests," 259; Schirott, "Admissibility upon Stipulation," 249
[83] Lepore, "On Evidence," 1098
[84] McCall, "Misconceptions and reevaluation," 369

In 1951, a 26-year-old police officer was brought before the criminal court in Arnhem on charges of violent robbery. The prosecutor requested a three-year prison sentence, while the defence attorney was utterly convinced of his client's innocence. There was no question about the facts of the case; the suspect, known as G.A.R., *had* planned a robbery with the known criminal H.J.; he *had* burst in on a money transaction in the bathroom of a cafe, gun drawn, and he *had* taken the money.[85] The issue at the heart of this case was his motivation. The prosecutor argued that this was a clear-cut case of a corrupt cop looking to make a quick, clandestine buck. The suspect, however, claimed to have accepted H.J.'s proposal to commit the crime in order to bring down the operation from the inside. To hear him tell it, the whole thing was a clumsily executed sting operation. Clumsily executed, because G.A.R. acted without informing his superiors, allowed one of the suspects to get away, failed to request assistance, and apparently only thought to take the money and the remaining suspect to the police station when confronted by a colleague.[86]

Early on in the case, G.A.R.'s defence attorney, F.J.R.C. Sassen, wrote to judge G. Fikkert, at the court in Arnhem, to request a lie detector test for his client. He argued that, no matter the outcome of the trial, the reputation of his client would be damaged:

> "That is why I have searched for an opportunity to establish the innocence of my client beyond the shadow of a doubt. Only the most modern scientific means can be of benefit here: while I think I need to reject the use of penthotal [sic] ("truth serum") for now, because this entails a shutting down of the human personality, I am convinced that an investigation with the so-called lie-detector will bring the desired outcome."[87]

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[85] It is a long-standing unwritten rule in Dutch journalistic practice to refrain from publishing a suspect's full name.

[86] "Speelde Groesbeekse politieman een rol in de onderwereld? Handelaars in vals geld bedrogen elkaar. Tegen de hoofddaders 3 jaar geëist," *De Telegraaf,* November 1, 1950; "Experiment met „lie detector," *De Telegraaf,* November 22, 1950; "Leugenontdekker wordt ook in Nederland gebruikt. Maar alleen voor experimenteel onderzoek in Nijmegen. De affaire met de Groesbeekse wachtmeester," *De Tijd,* November 30, 1950. "Een ander licht op de zaak. Verrassend resultaat van „leugenontdekker." Verdachte (onder de indruk) geeft aanvullende verklaring." *De Telegraaf,* January 20, 1951; "Hof te Arnhem aanvaardt leugenontdekker niet. Ondanks averechts resultaat," *Algemeen Handelsblad,* February 2, 1951.

[87] F.J.R.C. Sassen to G. Fikkert, Nijmegen, June 29th, 1950, Court Archives, Gerechtshof Arnhem-Leeuwarden. Original: "Daarom heb ik gezocht naar een mogelijkheid om onomstotelijk de onschuld van mijn client vast te stellen. De modernste middelen der wetenschap alleen kunnen hier slechts baat bieden: terwijl ik meen gebruikmaking van penthotal [sic] ("waarheidsserum") vooralsnog te moeten afwijzen, omdat dit een uitschakeling betekent van de menselijke persoonlijkheid, ben ik er van overtuigd dat een onderzoek met de zgn. lie-detector de gewenste uitslag zal brengen."

Sassen further tried to tempt the court by noting that this type of investigation would be both interesting and a novelty in the Netherlands, "a novelty that I would be pleased to see happen in Arnhem."[88] Fikkert diligently followed up on Sassen's proposition. He wrote to Dr. P.A.H. Baan, the country's most influential forensic psychiatrist who, in 1949, had established the Ministry of Justice's *Psychiatrische Observatie Kliniek* [Psychiatric Observation Clinic] in Utrecht. Baan responded to the request for more information by suggesting some reading: a book by the American lie detection expert Fred Inbau and an article by an American clinical psychologist about the limitations of the lie detector.[89] He added a warning; this article, in his view, did not clarify well enough "that the psycho galvanic reflex (…) could also occur with emotional tensions which are completely separate from hiding of the truth. One might unjustly conclude a lie [was told], even though the suspect was, for example, merely scared that people would suspect him of a lie when he, in truth, is innocent."[90]

On November 8th Sassen wrote to the court to say that he had, against expectations, managed to locate a lie detector in the Netherlands. The psychological institute at the Roman Catholic University in Nijmegen had a "psychogalvanometer," or "pathometer" in their newly built psychological laboratory. As mentioned in the paragraph about *People v. Kenny* (page 23 and 24), "pathometer" is the name given to a relatively simple one-parameter lie detector, created by Rev. Summers. It was a version of a galvanometer, which, as noted in the introduction, measure changes in a person's electrodermal activity by placing electrodes on the subject's skin. These changes can occur when someone experiences emotional stimulation (this is known as the psychogalvanic reflex) and it is this principle that Summers exploited. Newspaper articles indicated that the pathometer in Nijmegen was among the "most modern instruments, many of which American" that had been obtained by the psychological institute with the help of a 10.000 dollar gift from the Rockefeller Foundation, which was part of the American effort to help rebuild European science after the war.[91] The psychological

[88] Sassen to Fikkert, June 29th, 1950. Original: "een novum, dat ik gaarne in Arnhem dan zou zien gebeuren."
[89] P.A.H. Baan to G. Fikkert, Utrecht, July 11, 1950, Court Archives, Gerechtshof Arnhem-Leeuwarden.
[90] Ibid. Original: "dat de psychogalvanische reflexen (…) ook kunnen optreden bij emotionele spanningen, die geheel los van het verzwijgen van de waarheid staan. Zoo zou men dus ten onrechte kunnen besluiten tot een leugen, terwijl de verdachte bijv. alleen maar bang is dat men hem van een leugen zal verdenken en hij in waarheid onschuldig is."
[91] "Feestdag voor "Nijmegen." Nieuw gebouw der R.K. universiteit door mgr. Hanssen ingezegend," *De Tijd*, June 21, 1948. Original: "de meest moderne instrumenten, waaronder zeer vele Amerikaanse."

institute was using the pathometer for "laboratory tests for the benefit of the students" and in research with deaf children.[92] When Sassen wrote to the court, the director of the institute, the psychologist W. Vijftigschild, had already agreed to make the machine available for the purpose of interrogating G.A.R. In his letter, Sassen also noted that his client had once more and without hesitation agreed to undergo the test, which to Sassen was "new proof of his innocence."[93] It was to no avail. On November 21, 1950, the judge convicted G.A.R. to one and a half years in prison.[94] Immediately after the verdict, an appeal was filed.

The day after the verdict, Sassen asked the court to suspend his client's detention on a handful of dates, to enable him to undergo lie detector tests at the psychological institute in Nijmegen. The court granted this request and G.A.R. visited the institute on December 2nd, 11th and 28th, 1950 and January 6th, 1951. The tests were led by a young psychologist, J.H. van der Zee, "specialist in the area of examinations with the "lie detector"," from Eindhoven.[95] Van der Zee's expertise stemmed from the fact that he had seen the instrument used at Vanderbilt University, after which F.J.Th. Rutten, professor at the University in Nijmegen (and from August 1948 onwards minister for education, arts and sciences), had asked him to investigatae the potential of the instrument.[96] In addition, Van der Zee had been, for a year or so, the student of the American professor of psychology Joseph F. Kubis at Fordham University, who, in turn, had been the student of the above-mentioned Summers.[97] Also present at the tests were Sassen and, on one occasion, the psychiatrist P.A.F.H. Holtzer.

On January 18th, 1951, Sassen wrote to the court to inform them about the proceedings. Unfortunately, the outcome of the lie detector tests was not what he and his client had hoped for, but Sassen's enthusiasm about the technology remained undiminished: "I can firmly assure that the course

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[92] *De Tijd,* November 30, 1950. Original: " laboratoriumproeven ten behoeve van de studenten"; "Leugen-meter wordt nu ook in Nederland gebruikt," *Leeuwarder courant,* December 5,1950; "Leugenmeter doet intrede in Nederlandse rechtszaal," *Provinciale Drentsche en Asser courant,* December 5, 1950.
[93] F.J.R.C. Sassen, LL.M. to the president of the *arrondissements-rechtbank,* Nijmegen, November 8, 1950, Court Archives, Gerechtshof Arnhem-Leeuwarden.
[94] *Algemeen Handelsblad,* February 2, 1951.
[95] "Experiment met "lie-detector"," *De Telegraaf,* November 22, 1950. Origineel: "specialist op het gebied van onderzoekingen met de "lie detector"."
[96] Dr. S. Woldring, "Verslag van de bespreking over de toepassing van de huid-galvanometer, gehouden in de Bibliotheek van de Medische Afdeling Philips op Maandag 30 April 1951 te 16.30 uur," Philips Company Archives.
[97] Mark E. Mattson, "Fordham University, History of Psychology at" in *Encyclopedia of the History of Psychological Theories,* ed. Robert W. Rieber (New York, NY: Springer, 2011): 445

of the lie detection was extraordinarily interesting; it has become possible to entirely reconstruct the actions of the suspect, it has even obliged me to no longer pronounce my originally firm belief in [my] client's innocence without reservation."[98] Sassen's confidence in the lie detector's accurate representation of his client's inner life was no doubt strengthened by the fact that, when confronted with the results, G.A.R. changed his story. He now claimed that he had acted in good faith — hoping to catch H.J. and his affiliates in a criminal act — up until the moment that he was standing in that bathroom, gun drawn, counterfeit dollars in hand. At that point the thought forced itself upon him "that his was an easy opportunity to profit financially." This so confused him that he neglected to alert anyone to the situation and accidentally let one of the suspects slip away. He stated that he never consciously decided to take the money.[99]

The new story conformed to the lie detector results, but — obviously — showed a strange quirk in the way the police officer had acted. To find an explanation for G.A.R.'s confusion, both Van der Zee and the psychiatrist Holtzer examined him and Sassen asked the court to appoint both men as experts to "[ensure] the objectivity of this case."[100]

In his report Van der Zee explained that he had used the Summers-Kubis method, developed at Fordham University.[101] He stated that the accuracy of this method was established to be 97%, a number taken from a paper presented by F.L. Rouke and J.F. Kubis at the APA conference in Boston on September 11, 1948.[102] Summers' method, which, as I understand it, was not substantially changed by Kubis, involves subjecting a suspect to a lie detector test on several different occasions (typically three). In each instance the suspect is asked significant questions, non-significant questions and emotional standards. The emotional standards, although not related to the crime, are supposed to

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[98] F.J.R.C. Sassen, LL.M., to the *arrondissements-rechtbank,* Nijmegen, January 18, 1951, Court Archives, Gerechtshof Arnhem-Leeuwarden. Original: "Stellig kan ik verzekeren, dat het verloop van de lie-detection ongemeen interessant was; het is daardoor mogelijk geworden de handelingen van de verdachte geheel te reconstrueren, het heeft mij zelfs genoopt mijn oorspronkelijke stellige overtuiging in clients onschuld niet meer zonder voorbehoud uit te spreken."

[99] Verklaring R., January 17, 1951. Court Archives, Gerechtshof Arnhem-Leeuwarden. Original: " dat dit een gemakkelijke gelegenheid was om mijzelf financieel te bevoordelen."

[100] Ibid., Original "de objectiviteit in deze zaak aldus verzekerd is."

[101] Meyjes, "Scientific criminal investigation techniques under Dutch law," 655

[102] Fabian L. Rouke, and Joseph F. Kubis, "Determination of guilt or innocence from psychogalvanic (PGR) records of delinquents and non-delinquents," Abstract, *The American Psychologist* 3, no. 7 (1948): 255

evoke strong emotions distinct from the fear of getting caught in a lie.[103] In Summers' own words: "For purposes of interpretation we contrast and compare the reactions to the significant questions with the reactions to the emotional standards. If the deflections to the critical (significant) questions are consistently greater than the deflections to the emotional standards, the individual is consciously trying to deceive the examiner. If, on the other hand, the deflections to the critical questions are not consistently greater than those to the emotional standards, the individual is truthfully expressing his state of mind."[104]

I could not confirm, however, whether Van der Zee faithfully followed this method. In some articles based on an interview with Van der Zee, the method is described as involving neutral questions (e.g. "is your name G.A.R.?") and relevant questions ("Were you, from the first meeting with [H.J.], planning to hand him over to the justice department?"), but the emotional standards are not mentioned.[105] In his own report, Van der Zee lists neither emotional standards nor neutral questions; he merely informs the court of the 16 case-relevant questions. Of those questions four were apparently answered truthfully, nine were not, and three remained uncertain.

Thus armed with lie detector evidence, a new statement by the suspect and a psychological and a psychiatric evaluation, Sassen and his client returned to court on February 8, 1951. The prosecutor felt it was important to note that his office had nothing to do with the use of the lie detector. The court likewise underscored that it had not instructed Sassen to subject his client to a lie detector test, but merely allowed the suspect to temporarily leave jail to undergo the test. In other words: the use of the lie detector was the responsibility of the defence alone![106]

Van der Zee testified first. He reiterated what he had already shared with the court in his report and said his opinion remained unchanged. He noted that he considered the pathometer to be reliable and cited Kubis' reliability estimate of 97 percent. The court, at this point, interjected that a reliability of 97% may not be enough for them to accept the evidence. G.W. Mollerus, esq., the judge

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[103] Summers, "Science Can Get the Confession," 339; Paul V. Trovillo, "History of Lie Detection, pt 2.," *Journal of Criminal Law and Criminology,* 30, no. 1 (1940): 108
[104] Summers, "Science Can Get the Confession," 341
[105] ""Leugenmeter" in de rechtszaal. Op verzoek van de verdediger," *De Leidse Courant,* December 5, 1950; "Leugen-meter wordt nu ook in Nederland gebruikt," *Leeuwarder courant,* December 5, 1950.
[106] "Opnieuw toestemming voor gebruik van leugenontdekker, " *De Tijd,* February 8, 1951; "Leugen-ontdekker in de practijk. Verdachte geeft na onderzoek gewijzigde verklaring. Negen van de zestien vragen onjuist beantwoord," *De Tijd*, February 9, 1951; Meyjes, "Scientific criminal investigation techniques," 655

presiding over the case, stated that the court would not take the results of the lie detection procedures into consideration, but they would hear Van der Zee's opinions as a psychologist about the mental state of the suspect.Van der Zee was undeterred. He claimed that the article on which the court had based its opinion of lie detection, written by prof. Jan Waterink and published in the protestant newspaper *Trouw,* had no merit.[107] Van der Zee plainly stated that Waterink, a theologian and psychologist, lacked the relevant expertise. Sassen submitted to the court a piece written by Van der Zee in response to Waterink's article and published in the Catholic newspaper *De Tijd.* According to Van der Zee, Waterink's flawed description of lie detection showed that he was "uninformed about the literature of the last 12 years and about the large turnaround in "lie detector" research since Summers." The psychologist was clearly incensed at what his colleague had written; he even implied that Waterink had neglected his "scientific responsibility."[108]

When Van der Zee continued his statement, he noted the importance of lie detection for his findings: "The suspect's attitude towards the problem in the toilet area is ambivalent and the lie-detector has been an aid for me in reaching my conclusions."[109] His conclusion, as he noted in his report, was that G.A.R. acted in good faith until he was in the toilet area, at which point "he underwent a curious change of attitude and intentions."[110] After establishing this, Van der Zee next assessed whether this change fell within the confines of normal behaviour: "The lie detector brings us, like a police dog, on the trail, besides which we need to determine whether it is normal."[111]

The answer was no, it was not normal. The suspect, in Van der Zee's expert opinion, suffered from self-overestimation, childlike emotions and a strong drive to assert himself. Holtzer elaborated on the suspect's psyche; G.A.R. was neurotic, "a young foal, that sometimes trots too far ahead."[112] He

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[107] Prof. J. Waterink,"„Leugen-ontdekker" in de rechtszaal kan niets bewijzen," *Trouw,* December 23, 1950
[108] J.H. van der Zee, "Hoe werkt de "leugendetector"? Met bepaalde methodes kan een nauwkeurigheid van 97 pct. worden bereikt. Antwoord aan prof. J. Waterink," *De Tijd,* February 6, 1951. Original: "niet op de hoogte is van de litteratuur van de laatste 12 jaar en van de grote ommezwaai in het "lie detector" onderzoek sinds Summers;" "wetenschappelijke verantwoordelijkheid."
[109] Testimony of J.H. van der Zee, *Proces-verbaal van de terechtzitting van 8 Februari 1951.* Court Archives, Gerechtshof Arnhem-Leeuwarden. Original: "Verdachte's houding tegenover het probleem in de toiletruimte is ambivalent en de lie-detector is voor mij een hulpmiddel geweest voor het trekken van mijn conclusies."
[110] Ibid., original: "een merkwaardige verandering van houding en bedoelingen heeft ondergaan."
[111] Ibid., original: "De lie-detector brengt ons, net als een politiehond, op het spoor, daarnaast moet worden beoordeeld, of het normaal is."
[112] Testimony of P.A.F.H Holtzer., *Proces-verbaal van de terechtzitting van 8 Februari 1951.* Court Archives, Gerechtshof Arnhem-Leeuwarden. Original: "Een jong veulen, dat af en toe doorholde."

also made the remarkable claim that it was well known that redheads, as the suspect was, often display neuroticism. Far from this being a throw-away remark, Sassen actually mentioned it in his closing argument and at least one newspaper picked up on it as well, describing the defendant as a "red-haired impulsive policeman."[113]

It should be clear that for Sassen the case rested almost entirely on the lie detector. In his closing argument, he reiterated that he deemed the machine reliable. To support this statement he submitted to the court an article by Summers, the creator of the pathometer, as well as a fragment from a talk given by Inbau, the same professor mentioned by professor Baan of the *Psychiatrische Observatie Kliniek*.[114] Sassen argued that the lie detector examinations had proved that his client could not be convicted under article 326 of the penal code. This code states, in part, that "he who, with the aim of illegally benefitting himself or another, (…) [either] by cunning deceit, [or] by a web of lies, moves anyone to surrender any possession (…) will, as guilty of swindling, be punished with a prison sentence of at most four years or a fine."[115] According to Sassen there was no cunning deceit, no web of lies; merely the confused actions of a confused individual. The prosecutor again stated that he did not consider the lie detector a reliable instrument. Sassen replied that even though the results were not what he had expected the method had nevertheless shown itself to be "more effective, than any other, for uncovering the truth."[116] A bold claim, to be sure!

The court decided that they wanted to hear from another expert before reaching a verdict and Baan was called upon to submit a report. When the report — which sadly is not among the archival materials at the court in Arnhem — was presented in a hearing on April 19th, 1951, Van der Zee and Holtzer remained unconvinced. Baan was thereupon invited to testify on May 24th. Between these sessions, G.A.R. was released and Baan wrote to the court with a request: "As the entire staff of the *Observatiekliniek* takes great interest in this case, I would appreciate it if the 2nd psychiatrist of the

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[113] "Leugen-ontdekker in de practijk. Verdachte geeft na onderzoek een gewijzigde verklaring. Negen van de zestien vragen onjuist beantwoord," *De Tijd,* February 9, 1951.
[114] The article here referred to is Summers, "Science can get the confession." Dr. Fred. E. Inbau presented the paper referenced here at the third international congress of the Legal Profession International Bar Association in London, July 1950.
[115] Article 326 of the *Wetboek van Strafvordering* [Penal Code/ Code of Criminal Procedure]. Original: "Hij die, met het oogmerk om zich of een ander wederrechtelijk te bevoordelen, (…) hetzij door listige kunstgrepen, hetzij door een samenweefsel van verdichtsels, iemand beweegt tot de afgifte van enig goed (…) wordt, als schuldig aan oplichting, gestraft met gevangenisstraf van ten hoogste vier jaren of geldboete."
[116] F.J.R.C. Sassen, *Proces-verbaal van de terechtzitting van 8 Februari 1951.* Court Archives, Gerechtshof Arnhem-Leeuwarden. Original: "effectiever is, dan welke andere ook, om de waarheid te achterhalen."

Observatiekliniek, miss Dr. Roosenburg, the psychologist J. van Ratingen, M.Sc., and the advisor of our *Kliniek* Prof. Dr. G. Th. Kempe, professor of Criminology at Utrecht University, would be allowed to be present at the hearing" (see image 2).[117] Whether their interest lay in the supposedly confused actions of the suspect or in the use of lie detection in this case, Baan does not say.

Image 2. Dr. P.A.H. Baan (middle), dr. A.M. Roosenburg (left) and J.R.M Van Ratingen of the *Observatiekliniek*

In his testimony, Baan contested the reliability estimate that Van der Zee had proffered; far from being 97 percent, he noted estimates of 60, 45 and 47 percent. He also noted that the value of the suspect's revised statement of January 17th was "extremely limited (…) due to the manner in which this statement, more or less suggestively, came to be."[118] In fact, he felt that the statement could not be

[117] P.A.H. Baan to the president of the *arrondissements-rechtbank*, Utrecht, May 9, 1951, Court Archives, Gerechtshof Arnhem-Leeuwarden. Original: "Daar de gehele staf van de Observatiekliniek zeer veel belangstelling voor deze zaak heeft zou ik het zeer op prijs stellen, wanneer ter zitting ook de 2e psychiater van de Observatiekliniek, mej. Dr. Roosenburg, de psycholoog Drs. J. van Ratingen en de adviseur van onze Kliniek Prof. Dr. G. Th. Kempe, hoogleraar in de Criminologie aan de Rijksuniversiteit te Utrecht, tegenwoordig zouden mogen zijn."

[118] Testimony of P.A.H. Baan, *Proces-verbaal van de terechtzitting van May 24, 1951.* Court Archives, Gerechtshof Arnhem-Leeuwarden. Original: "uiterst gering (…) door de de wijze waarop deze verklaring, min of meer suggestief, is tot stand gekomen."

considered to have been made freely. This is a key observation, from a legal perspective. It deals not so much with the reliability of the lie detector, but rather with the appropriateness of the way it was used in this trial. Until Baan mentioned it, this question had remained in the background.

On June 7th. G.A.R.'s conviction was overturned.[119] No documentation remains which outlines the court's reasoning but it is clear that the case turned on the intentions of the suspect. Whether or not the court was convinced by the revised testimony, the lie detector evidence, or the experts' opinions about the suspect's mental state, the defence did at least manage to introduce enough doubt to make a guilty verdict untenable. It is easy to see how this case might have turned out the same way without the introduction of lie detector evidence. Yet it was this aspect of the case that attracted nationwide attention.

In fact, several attorneys now felt their clients might benefit from being subjected to the test.[120] The courts, however, remained stand-offish. For example, when Van der Zee and Holtzer were called upon to conduct pathometer tests in a paternity case, the court argued "that, considering the lack of experience in this country with these methods, and the differing opinions of experts, the results of the tests could not be accepted as evidence, the less so since they were intended to disprove evidence already given and because the tests had been made on one of the litigants only."[121]

1.4 Unreliable and Unworthy

During the trial and in its immediate aftermath, various scholars spoke out publicly about the risks of lie detection, typically in conjunction with other methods, such as narco-analysis and blood alcohol testing. Dirk van Eck, professor of criminal law and criminology in Nijmegen, for example, gave a lecture in a bookshop in Rotterdam in which he argued against the use of truth serums and lie detection for legal purposes. He gave a similar lecture later in the year in Heerlen, for an audience of

[119] Verdict, June 7th, 1951, Court Archives, Gerechtshof Arnhem-Leeuwarden.
[120] "Opnieuw toestemming voor gebruik van leugenontdekker," *De Tijd,* February 8, 1951; "Woonwagendrama voor Maastrichtse rechtbank. Acht maanden geëist voor moordaanslag op vrouw Tonka in Meerssen. Verdachte blijft stellig ontkennen," *Limburgsch dagblad,* February 21,1951.
[121] Meyjes, "Scientific Criminal Investigation Techniques," 656

police officers and interested civilians.[122] A.H.M.H. Receveur, a prosecutor at the court in 's-Hertogenbosch, faced a similar audience when he spoke about lie detection at a conference of a Catholic police association, while Prof. Baan lectured to his colleagues in the legal profession.[123] Baan asked the court in Arnhem for permission to study the files from the G.A.R. case in preparation for this speech. He indicated that Vijftigschild, who — as you might remember — ran the psychological institute at the university in Nijmegen, would be present at the meeting to demonstrate the instrument and share his insights.[124]

These intellectuals were not only concerned about the instrument's reliability, but also about the ethics of using lie detection in the legal context. Van Eck called lie detection and the truth serum "unworthy" and warned that in the time of technological advances the drive for efficiency threatened to edge out common sense and intuition. Although it was not quite as bad as the truth serum, lie detection "[goes] against the fundamental right of freedom of the person, who has a ,,right to his own inner life"."[125] Not even at the suspect's request should we allow this right to ever be violated. To make sure listeners understood how grave the matter was, Van Eck reminded them of situations in which such rights had been trampled; the lie detector was a gentler (and more surreptitious) version of methods used by the Nazi occupiers to "attack the deepest human values" and "behind the "Iron Curtain"" such values had already lost out to national interests.[126] Apparently "the professor had himself undertaken a test with the "lie detector" and concluded that he would not dare base a single decision on it."[127] Receveur agreed; the lie detector was "utterly unreliable" and drawing conclusions based on the reactions of the instrument would be "dangerous." What was happening here was "an

[122] *Drogues de Police* appeared in Dutch as Jean Rolin, *Het Waarheidsserum* (Helmond: Uitgeverij Helmond, 1950) and in English as Jean Rolin, *Police Drugs* (London: Hollis & Carter, 1955); "Lezing mr van Eck," *Limburgsch dagblad,* October 30, 1951; "Moderne opsporingsmethoden. Prof. mr. D. van Eck sprak over Narco-analyse en Lie-detector," *Limburgsch dagblad,* November 21, 1951.
[123] "Mr. Receveur: ,,Lie-detector" is een onbetrouwbaar middel," *De Tijd,* July 12, 1951. Original: "volkomen onbetrouwbaar"; "gevaarlijk"; "een overwaardering van de techniek"; Pasquino, "Leugenontdekker," *De Telegraaf,* Juli 16, 1951; "Vereniging voor strafrechtspraak," *Limburgsch dagblad,* May 21, 1952.
[124] P.A.H. Baan to the president of the *arrondissements-rechtbank*, Utrecht, March 28, 1952, Court Archives, Gerechtshof Arnhem-Leeuwarden.
[125] "Geen narcotica bij rechtspraak," *Het vrije volk,* February 28, 1951. Original: "onwaardige;" "[druist in] tegen het wezenlijke recht van vrijheid van de mens die ,,recht heeft op zijn eigen innerlijk"."
[126] *Limburgsch dagblad,* November 21, 1951. Original: "valt (…) de diepste menselijke waarde aan"; "achter het "Ijzeren gordijn."
[127] "Geen narcotica bij rechtspraak," *Het vrije volk,* February 28, 1951. Original: "De professor had zelf een proef genomen met de ,,leugenontdekker" en concludeerde dat hij er geen enkele beslissing op zou durven nemen."

overvaluation of technology."[128] Elsewhere Receveur was quoted as saying that "the investigating officers should be proud to demonstrate the truth with means that were not obtained by testimonies or even confessions of suspects." This line, according to the columnist who quoted it, should adorn the walls of all police stations, because it had more than once been forgotten in the Netherlands, "especially after the liberation."[129]

Amidst these negative appraisals, one legal mind argued that the use of narco-analysis (and by extension lie detection) may not be so objectionable after all. First at a meeting of the *Notariële vereniging* in Amsterdam on December 16, 1954 and later in a newspaper article, Prof. D. Hazewinkel-Suringa, an outspoken scholar and the first female professor at a Dutch law faculty, argued that the horrified reactions to narco-analysis were baseless.[130] Narco-analysis had nothing to do with torture, as some of her colleagues had implied, because torture was aimed solely at eliciting a confession, true or not, to bring an end to the proceedings. Narco-analysis was used for the purpose of "gaining insight in the actual contents of the consciousness of the subject."[131] The use of such methods was attractive because of the profound responsibility of the police and the judiciary to get to the bottom of crimes, both to grant the public peace of mind and to prevent miscarriages of justices. One envied the doctor and his x-rays. She admitted that, at the time of her writing, Dutch law clearly prevented the use of narco-analysis, but laws could change over time. Her position was not that one ought to introduce these methods immediately (especially because they were still being tested and improved), but rather that one ought not simply declare them "experiments of the devil."[132] We should keep an open mind!

Prof. J.M. van Bemmelen was sufficiently aroused by Hazewinkel-Suringa's argument that he penned an article in response. It contained a few criticisms specific to narco-analysis, but the key

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[128] "Mr. Receveur: „Lie-detector" is een onbetrouwbaar middel," *De Tijd,* July 12, 1951. Original: "volkomen onbetrouwbaar"; "gevaarlijk"; "een overwaardering van de techniek."; "Leugen ontdekker onbetrouwbaar. "Moderne duivelsapotheek"," *De Leidsche courant,* July 12, 1951.

[129] Pasquino, "Leugenontdekker," *De Telegraaf,* Juli 16, 1951. Original: "De opsporingsambtenaren moeten er een eer in stellen met middelen, die niet verkregen zijn door verklaringen of zelfs bekentenissen van verdachten, de waarheid te bewijzen"; "vooral na de bevrijding"

[130] "Mevr. prof. Hazewinkel: Bekentenis onder narcose?" *De Telegraaf,* December 17, 1954; D. Hazewinkel-Suringa, "Verschil van inzicht is mogelijk - maar: Narco-analyse is geen duivels experiment," *De Telegraaf,* January 25, 1955

[131] Hazewinkel-Suringa, *De Telegraaf,* January 25, 1955. Original: "verkrijgen van inzicht in de werkelijke bewustzijnsinhoud van de proefpersoon."

[132] Ibid. Original: "experimenten des duivels;" Four years earlier Receveur had called truth-serums "concoctions from a modern devil's apothecary." *De Leidsche courant,* July 12, 1951. Original "Brouwsels uit een modern duivelsapotheek."

argument pertained to lie-detection as well; the judiciary and the government must always respect the personality and freedom of its citizens and neither technique was in line with this principle. Van Bemmelen did note that "there may be fewer objections to the lie detector, if it could be proven to be infallible."[133]

A third article in this series was written by an unnamed medical contributor to *De Telegraaf.* They argued that narco-analysis and lie detection do not reveal what they claim to; people say all sorts of strange things under the influence of narcotics and lie-detectors only show whether someone is fearful. But innocent people may be fearful, while guilty people may be unfazed. Mostly, though, the author objected to these methods from the perspective of medical ethics. Medical professionals and psychologists have the inalienable duty to do no harm and patient confidentiality cannot be set aside. Furthermore, laypeople, according to this author, could not understand the implications of the examinations well enough to consent to it.[134]

In November of 1952, worries about the ethics and legality of lie detection reached the Dutch House of Representatives [*Tweede Kamer.*] During a discussion of the Ministry of Justice's budget proposal for 1952 and "in response to the experimentation with the use of the so-called lie detector in criminal cases, some members [of the House of Representatives] remarked, that they consider the application of this method utterly objectionable, unless the suspects freely wishes to subject themselves to it." The unnamed members also felt that the blood test (to establish blood alcohol level) should not be used if a suspect objected to it. The principle underlying that opinion was the idea "that one must not force a suspect to contribute to his own conviction." There also appeared to be agreement that lie detection was more objectionable than blood testing.[135]

In his response the newly installed minister for justice, the relatively little known, but well-regarded jurist Hendrik Mulderije, formulated a slightly stronger rejection, one which took the reliability question into account: "As long as there has not been scientifically established more certainty

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[133] Hazewinkel-Suringa, *De Telegraaf,* January 25, 1955. Original: "Iets minder bezwaar zou er misschien zijn tegen de lie-detector, indien bewezen zou kunnen worden dat deze feilloos werkte."
[134] "„Narco-analyse" is strijdig met de medische ethiek, zegt onze geneeskundige medewerker," *De Telegraaf,* February 10, 1955
[135] Tweede kamer, rijksbegroting voor het dienstjaar 1952, 2300 IV 7: 6. Original: "Naar aanleiding van de proeven, in strafzaken genomen met toepassing van de z.g. leugenontdekker, merkten sommige leden op, dat zij de toepassing van deze methode volstrekt verwerpelijk achtten, ten- zij de verdachte uit vrije wil zich daaraan wenst te onderwerpen"; "dat men een verdachte niet mag dwingen mede te werken aan zijn eigen veroordeling."

with regard to the reliability of the so-called lie detector, the undersigned considers testing with this instrument in criminal cases, even when the suspect agrees to it, unwelcome." The minister also noted that, as far as he was aware, there had been only one criminal case in which lie detection had been used, that this was at the request of the defence and that the court had not viewed it as having any evidentiary value.[136]

1.5 The *Nederlandse Juristen Vereniging* debates the matter

With the exception of the exchange between Hazewinkel-Suringa, Van Bemmelen and the medical contributor to *De Telegraaf,* there was hardly any back-and-forth between scholars. In 1956, however, new investigatory methods (in particular lie detection, narco-analysis and blood tests) became the subject of debate at the annual assembly of the *Nederlandse Juristen-Vereniging* [Dutch Jurists Association; NJV], which was established to give jurists the opportunity to discuss relevant legislative and judicial developments. Each year, two topics are put on the agenda and two members are invited to draw up so-called *pre-adviezen* for each topic (preliminary reports which are circulated among the members in preparation of the discussion at the assembly.) In 1956, one of the questions was: "To what extent ought investigatory methods in criminal cases, concerning the personhood of the suspect, to be subjected to limiting provisions?"[137] The authors of the *pre-adviezen* were P. Meyjes, and Prof. G.A.H. Feber.

In this section, I first discuss the contents of both reports, as well as an article by Prof. J.M. van Bemmelen, which was published in response to the *pre-adviezen* and ahead of the general assembly on June 30th. Lastly, I discuss the NJV's reaction to these articles.

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[136] Tweede kamer, rijksbegroting voor het dienstjaar 1952, 2300 IV 8: 19. Original: "Zolang omtrent de betrouwbaarheid van de z.g. leugenontdekker wetenschappelijk niet meer zekerheid is verkregen dan thans, acht de ondergetekende proeven met dit instrument in strafzaken, ook wanneer de verdachte daarmede instemt, niet gewenst." See also; "Minister houdt de leugenontdekker uit strafzaken," *Het vrije volk,* November 3, 1951; "Leugenontdekker niet, bloedproef wèl in tel," *De Telegraaf,* November 3, 1951.

[137] Nederlandse Juristen-Vereniging. *Handelingen der Nederlandse Juristen-Vereniging,* (Zwolle: N.V. Uitgeversmaatschappij W.E.J. Tjeenk Willink, 1956): 82. Original: "In hoeverre behoren onderzoekingsmethoden in strafzaken ten aanzien van de persoon van de verdachte aan beperkende voorschriften te worden onderworpen?"

1.5.1 *Pre-advies* Meyjes

According to P. Meyjes, vice-president at the Court of Appeals in The Hague, the time had come to consider whether evidence gathering with the help of psychological methods was permissible in the Dutch legal system. While the personality of the suspect had begun to play an increasingly large role in the courts, Dutch law had few provisions concerning psychological investigations aimed at evidence gathering — such as lie detection and narco-analysis — which could not rightly be seen as either interrogation or physical examination.[138] This situation, Meyjes suggested, could lead one to three distinct conclusions about the permissiblity of such evaluations: they could be considered entirely "permissible and not subjected to legal limitations," entirely impermissible, due to the lack of legal guidance, or "[not] impermissible, but [one ought to] consider the rules regarding investigations of the body similarly applicable" to evidence-focused psychological evaluations.[139] In his *pre-advies* Meyjes aimed to determine which of these options was most in line with (the intent of) Dutch law.

An oft used argument against lie detection, as we have seen, was that the technique lacked reliability. This rang hollow to Meyjes: "Rejection of the deception-tests on the basis of alleged unreliability (…) sounds unconvincing, so long as we work with types of evidence which, like witnesses and handwriting analysis, are similarly unreliable."[140] In fact, if applied in an expert manner, it may be among the most reliable methods.[141] On the flipside; in the hands of an incompetent operator, or worse, one with bad intentions, the instrument would be dangerous. In fact, there had been American cases where the instrument was used to intimidate suspects. This could explain the suspicion that many people felt towards lie detection:

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[138] Meyjes, *Handelingen,* 135–136, 140

[139] Ibid., 140. Original reads: "geoorloofd en niet aan en niet aan wettelijke beperkingen onderworpen," "…kan niet als ongeoorloofd worden beschouwd, maar het ligt (…) voor de hand de bepalingen omtrent het onderzoek aan het lichaam van overeenkomstige toepassing te achten."

[140] Ibid., 157. Original: "Afwijzing van de deception-tests op grond van beweerde onbetrouwbaarheid der uitkomsten klinkt weinig overtuigend, zo lang wij werken met bewijsmiddelen die, zoals getuigen en schriftvergelijkend onderzoek, evenmin betrouwbaar zijn."

[141] Meyjes here refers to the 1953 edition of Inbau and Reid's *Lie Detection and Criminal* Interrogation to say that the results are correct in 95% of cases, inconclusive in 4% of cases and incorrect in 1% of cases

> "In the time in which, in the Netherlands, criminal proceedings were improved and modernised and the ,,privilege against self-incrimination'' was ever more clearly recognised, the signs of more malicious practices than we could ever dream up were already showing themselves in other parts of the world. The American police methods designated as ,,Third Degree'' became infamous. (…) They prove to which extremes (…) people can go. They have also caused a lot of prejudice against [psychological] scientific investigative methods, which have on occasion been confused with them."[142]

This conflation, however, was misguided. In fact, Meyjes pointed out, people turned to the young science of psychology precisely to avoid having to resort to the Third Degree. Rather than forcing a confession out of a suspect through threats and the use of violence, the truth would be laid bare in a harmless, scientific manner. In itself, lie detection had nothing to do with the Third Degree.

Meyjes did not believe that lie detection, if appropriately used, was in conflict with article 29 in the Penal Code. This article stated that "in all cases in which someone is heard as a suspect, the interrogating judge or official abstains from everything that has the purpose of obtaining a statement which cannot be said to have been given freely." It also required the suspect to be informed that they were not required to answer any questions, and that any statement must be recorded in the suspect's own words, as far as possible.[143]

Because lie detection was not an interrogation, according to Meyjes, it could not be in conflict with the *letter* of article 29, so the question was whether it was in conflict with its *spirit.* Someone who believed this to be the case might argue that article 29 implied that the suspect had the right to remain silent, or to lie. However, Meyjes countered, this was not a true right of the suspect. It was only relevant in the context of the moral obligation of the *interrogator*; namely to abstain from forcing a

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[142] Meyjes, *Handelingen*, 143. Original: "In den tijd waarin in Nederland het strafproces verbeterd en gemoderniseerd werd en het ,,privilege against self incrimination'' steeds duidelijker erkenning vond, toonde zich elders ter wereld reeds de tekenen van boosaardiger practijken dan wij ons ooit hadden kunnen dromen. De Amerikaanse als ,,Third Degree'' aangeduide politiemethoden werden berucht. (…) Zij bewijzen tot welke extremen personen (…) kunnen geraken. Ook hebben zij veel vooringenomenheid veroorzaakt tegen [psychologische] wetenschappelijke opsporingsmethoden, welke men er wel eens mede verward heeft."
[143] Article 29 of the *Wetboek van Strafvordering.* Original: "In alle gevallen waarin iemand als verdachte wordt gehoord, onthoudt de verhoorende rechter of ambtenaar zich van alles wat de strekking heeft eene verklaring te verkrijgen, waarvan niet gezegd kan worden dat zij in vrijheid is afgelegd."

suspect to confess. The rule existed mainly to protect the *innocent* suspect, who could be pressured into giving a false confession. The innocent suspect, however, had nothing to fear from an expertly executed lie detection test and might even benefit from it: "It appears (…) a petitio principii to consider the tests forbidden *because* they corrode the so-called right to remain silent of the suspect."[144]

There remained the question of whether it was immoral to use information obtained through the observation and interpretation of a suspect's "psychisms," for the construction of circumstantial evidence. Meyjes here offered as an example a US case in which a lie detector test was used to figure out where the bodies of the suspect's victims were hidden, thereby unearthing evidence that helped to convict the murderer. The case, known as the Cemetery Murders case, stood out to Meyjes as an example of why one ought to think twice before rejecting the use of the technology; after all, the murders may have remained (partially) unsolved if not for the use of lie detection.[145] Meyjes did not think that these proceedings were immoral (although they were unusual). The important thing, in his view, was the way in which the police conducted the procedure and how they treated the suspect.[146]

Meyjes also noted that perhaps these questions were purely academic in the Dutch context; there were hardly any experts available that could conduct lie detection tests. They would have to be trained to do so, and gain experience in the field. Considering the Netherlands' small size and population (at the time nearly 11 million), it would be conceivable that there would simply not be enough cases for the newly-trained experts to develop the required routine. Applying lie detection willy-nilly to counteract this issue was clearly inadvisable.[147]

So which of the three options did Meyjes believe to be most appropriate? The first option — that psychological investigation methods were permissible and not subject to legal limitations — was clearly not in line with the Penal Code. Dutch law, according to Meyjes, recognised the privilege against self-incrimination in the context of the interrogation and placed limitations on physical investigations. This told him that unrestrained probing of the suspect's mind was not in line with the intent of the law. The second suggestion — that psychological examinations, due to the lack of legal guidance, were not permissible at all — would be the correct solution for those who believed that the

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[144] Meyjes, *Handelingen,* 159. Original: "[Het] lijkt (…) een petitio principii de tests verboden te achten, *omdat* zij het zgn. zwijgrecht van de verdachte aantasten."
[145] Ibid., 155
[146] Ibid., 159
[147] Ibid.

Dutch legal system ought to adhere to the principles of the 'adversarial' system (see pages 9.) This would imply the broadest possible interpretation of the privilege against self-incrimination. Meyjes argued at some length, however, that the Dutch system had a moderately inquisitorial character, and that suspects were required to participate in their own prosecution to some extent.[148] He was not convinced, therefore, that the second option was the right one either.

Meyjes believed that the scales might tip in favour of the third option on the strength of the lie detector's potential: "If one does not wish to reject outright lie detection in particular, then one will have to opt for the [third] option."[149] He suggested various small amendments to the law that would protect the suspect against misuse of psychological investigatory measures. For example, he thought it would be sensible to include a rule already in use in the US and the U.K.; that results obtained by inappropriate practices cannot be used as evidence.

1.5.2 *Pre-advies* Feber

Prof. G.A.H. Feber, at the time of writing the *pre-advies*, was a member of the Dutch Supreme Court [*Hoge Raad*] and would, in 1963, become the president of that institution. He had a long-standing interest in the relationship between psychology and the law and was therefore an obvious choice to write the report. In his discussion of lie detection, Feber, more so than Meyjes, responded directly to a few objections that had been made against the technology. He considered a trio of recent cases in two nearby courts. A German court rejected the use of lie detection, because it found that the technology made the accused participate in their own prosecution. It also stated that the use of the technology represented an infringement of the suspect's personal freedom. A Belgian court, however, took a different position. In a case in which the defendant was suspected of simulating disordered thought, it stated that the lie detector merely made emotional reactions visible, without affecting the will or freedom of the defendant. The same court did, however, bar the use of lie detection in a murder case, because here the question of the suspect's guilt was at stake. Such questions, it felt, were the

[148] This distinction was touched upon in the introduction of this thesis, on pages 6 and 7, and will be discussed in more detail in section 1.5, page 41.
[149] Meyjes, *Handelingen,* 172–173. Original: "Wil men met name den Lie-detector niet met één slag van de hand wijzen, dan zal men voor de [derde] mogelijkheid dienen te opteren."

exclusive purview of the court and should never be transferred to a third party (i.e. a lie detection expert.)

This last argument was unconvincing to Feber; *of course* it would be appropriate for a court to delegate part of the investigation to an expert. In fact, this already frequently happened (for example in cases where a doctor testified about the results of a blood test in a drunk driving case.) We saw that for Meyjes, the key issue was the one also cited by the German court; psychological investigation methods must not infringe on a suspect's free will.[150] The German court decided that it did just that, whereas Meyjes argued that lie detection left free will completely unimpaired. This was what set lie detection apart from narco-analysis, and what made the lie detector permissible. For Feber, however, the issue was a side point.

> "I, myself, do not see any ethical or juridical objections to employing the lie-detector, setting aside the (…) efficacy of this method or the requirements to be set for its technological perfection. Objections such as the ones mentioned above seem untenable to me. Not only because the emotions are here (…) merely scientifically investigated and (…) registered, in which process, by the way, the normal and free functioning of the personality is left intact. The issue reaches deeper."[151]

So what was the rub, really? Well, there appeared to be a conflict between two ostensibly opposed principles: the individual's freedoms and the openness that is required of an individual if they are to live harmoniously with their fellow citizens. Personal freedom is something people around the world strove for, but, Feber noted, it was particularly important to the Dutch. Yet the nature and extent of such freedoms could change over time and would never be absolute; every political system had to place some limits on it. Someone could, for example, squander the freedoms granted to them

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[150] Note that the term "free will" [*vrije wil*] is used in a decidedly unphilosophical sense by many of the participants in the debate; it here merely denotes the common sense understanding of unimpaired mental functioning (specifically decision making.)

[151] Feber, *Handelingen,* 215. "Zelf zie ik generlei ethische of juridische bedenkingen tegen het toepassen van de lie-detector, daargelaten de (…) doeltreffendheid van deze methode of de eisen, aan haar technische vervolmaking te stellen. Bezwaren als de hiervoren genoemde lijken mij niet steekhoudend. Niet slechts omdat hier, (…) slechts op wetenschappelijke wijze gemoedsbewegingen worden nagegaan en (…) geregistreerd, waarbij overigens de normale en vrije functionering van de persoonlijkheid intact gelaten wordt. Het vraagstuk reikt dieper."

by doing something harmful to society: "someone who is sentenced to death no longer has a right to physical integrity, and with a custodial sentence the right to liberty is rendered void."[152] In and of itself, therefore, appeal to any specific right could not answer the question of lie detection's permissibility.

Instead, Feber approached the problem as if it were a balancing act. As the Netherlands had moved towards a "social welfare state," openness had become more expected. Reciprocity was at work; in a society that left its citizens to fend for themselves, the citizens could demand more freedom than in a society that took care of the individual. The Dutch, according to Feber, had increasingly adopted a philosophy of reconciliation between criminals and society. This meant that, more than ever, the criminal would be required to open themselves up to "others, who after all, have his best (…) interests at heart." The notion that the government gaining access to a suspect's psyche would amount to an infringement on "dignity, integrity or free will" struck Feber as nonsensical: "Human dignity surely is not located in concealing one's own untruthfulness."[153] In other words, Feber did not believe that the suspect had the right to remain silent or to lie. They had a moral obligation, in fact, to open themselves up to society.

The other side of this coin was the question of what rights the government had to make a person do so. Feber here considered the origin of the right to remain silent. It was a logical consequence of the turn away from torture: when society decided to no longer use force to make suspects confess, the government automatically had to accept this "right." There was simply no action it could take to make the denying or silent suspect talk. Until now, perhaps. According to Feber, the tacit acceptance of the right to remain silent "does (…) not mean that the government relinquished the right to discover the truth (…) should it be possible for this to happen without violence and without the chance to obtain, through the associated intimidation and suggestion, results that are opposed to the truth."[154]

Feber did not explicitly consider the position of the innocent suspect in the context of lie detection, but he did do so when discussing narco-analysis. He simply set undeserved suffering on the

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[152] Feber, *Handelingen,* 202. Original "de ter dood veroordeelde heeft geen recht meer op zijn lichamelijke integriteit, bij vrijheidsstraf vervalt het recht op vrijheid."
[153] Ibid., 215. Original: "waardigheid, integriteit of vrije wil"; "De menselijke waardigheid toch is niet gelegen in het verheimelijken van eigen onwaarachtigheid."
[154] Ibid., 2017. Original: "wil (…) niet zeggen dat de overheid daarmee afstand deed van het recht de waarheid (…) te achterhalen indien dit zou kunnen geschieden zonder geweld en zonder de kans, door de daarbij optredende intimidatie en suggestie, uitkomsten te verkrijgen welke met de waarheid strijdig zijn"

part of an innocent suspect aside as an unfortunate and unavoidable consequence of the fact that they lived in a society where both people and investigatory methods were fallible. Narco-analysis risked laying bare personal and sometimes embarrassing or painful information that was not pertinent to the question of guilt. Feber did not believe that this was novel, either; other psychological investigations also risked this. Handling such information in a discreet manner was the best anyone could do. Besides, narco-analysis, as well as lie detection, might actually speed up the process of exonerating the suspect, thereby shortening their suffering. Meyjes also made this argument.

As we have seen, critics of lie detection and narco-analysis occasionally used examples (or the potential) of misuse of such technologies by oppressive regimes in their arguments against them. Feber was not impressed by such tactics: "abusus non tollit usum" (abuse does not take away use) he noted, and moved on to the next topic.

With regard to whether new investigatory methods should be subjected to limiting provisions, Feber stated that only some minor changes to existing law were necessary. Specifically, he felt it was important to establish the division of responsibility, so that an expert enlisted to diagnose a suspect was not also in charge of truth-finding. This would violate patient confidentiality. Someone tasked with finding the truth through the use of lie detection, narco-analysis or any other technology would be "a technical extension of the judiciary and must not present themselves in any other way."[155]

Feber recognised that many of his colleagues would likely take issue with his findings: "To many the conclusions I reached in the preceding will appear too far-reaching, as they would go too far in an inquisitorial direction and demonstrate too little reserve about the human psyche."[156] Like Meyjes, Feber argued that the Dutch justice system simply *was* inquisitorial to some extent. In his view, this had become unavoidable when the criminal became the focus of the process, when first the focus was on the crime. This was not a problem at all, so long as the investigations were conducted by competent and objective persons.

1.5.3 Ex-officio *Pre-advies* Bemmelen

[155] Feber, *Handelingen,* 241. Original: "een technisch verlengstuk van de justitie en moet zich ook niet anders voordoen."
[156] Ibid. Original:" Aan velen zullen de conclusies waartoe ik in het voorgaande kwam te ver gaand toeschijnen, daar zij te zeer in inquisitoire richting zouden gaan en te weinig reserve zouden tonen tegenover het innerlijk van de mens."

Van Bemmelen, whom we first encountered when he responded to Hazewinkel-Suringa, found himself sufficiently shocked by the *pre-adviezen* to pen an article in the *Nederlands Juristenblad* ahead of the NJV meeting. Mostly he was "shocked by the fact, that both advisers are of the opinion that not much needs to be changed about our criminal code to have their views come into effect in practice."[157] Van Bemmelen pointed out that the advisers disagreed about whether narco-analysis was in conflict with article 29 and they both believed lie detection was not, and that he himself was of the firm conviction that both were forbidden under current law. If three jurists could differ so profoundly in their views on this matter, then Feber and Meyjes' contention that the law does not require any substantial changes was untenable: Van Bemmelen believed it was time for the legislative branch to explicitly state whether or not it considered such things permissible.

Van Bemmelen argued that the intent of the law was that a suspect did not have to participate in their own prosecution. He strongly disagreed with Meyjes' assertion that the law was simply inquisitional in that regard, but he mainly focussed his critique on Feber's arguments, because the latter's ambition to have people be more open went much further than anything Meyjes suggested. It was a position, that, in Van Bemmelen's view, ignored the reality of the situation, "that the criminal justice process is still a struggle between individual and community." It was the duty of society to place limits upon itself in this confrontation and to be "fair, honest and impartial."[158] Because Meyjes and Feber suggested that innocent suspects had nothing to fear from lie detection, Van Bemmelen provided a clear counter example; if someone was attempting to protect, say, a spouse or a child, the lie detector would register that they were lying. Of course, one might respond that it would be inappropriate to lie, even if the culprit was a family member. The Penal Code, however, contained articles that explicitly protected this behaviour.

With regard to the question of why it would be unfair to use measures such as lie detection or narco-analysis, even if a suspect offered to do so voluntarily, Van Bemmelen argued that, if submitting suspects to such examinations became common practice, it would create a bias against those suspects

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[157] J.M. van Bemmelen, "Onderzoeksmethoden in strafzaken," *Nederlands Juristenblad,* 31, no. 24 (1956): 499. Original: "geschokt door het feit, dat beide preadviseurs van mening zijn, dat aan ons Wetboek van Strafvordering niet veel behoeft te worden veranderd, om hun opvattingen in de praktijk doorgang te doen vinden."

[158] Ibid., 501. Original: "fair, eerlijk en onpartijdig."

who refused; they would suddenly seem more suspicious. Of course, Feber explicitly suggested that it would be ethically acceptable to gain entry into the mind of a suspect, even without their permission, because the opposition between community and individual was becoming ever smaller. Van Bemmelen noted the idealism of this position and even acknowledged that *if* the criminal's sentence was indeed exclusively an effort to resocialise them, then it would be less morally problematic to require a suspect to be more open during the trial. Unfortunately, there would never be a time in which the the oppositional nature of the trial was abandoned, at least not for the innocent suspect, who would always resist prosecution. Van Bemmelen disagreed with Feber about the importance of the innocent suspect in deciding what was and was not permissible: "Precisely in the case of the innocent suspect the use of the lie-detector and narco-analysis becomes so very unacceptable, because (…) — when one makes them available to the suspect or even enforces them — one must also do this with respect to the witnesses."[159] Otherwise we would be in violation of the fair play principle.[160]

Van Bemmelen further took issue with the way Feber handled the argument that psychological investigatory methods infringed on the integrity of the human personality. Feber, as we saw, argued that the criminal had lost this right by doing harm to society. This may have *seemed* convincing, as there were other freedoms that were routinely denied to the criminal, but, to Van Bemmelen, the freedom that was at stake here was simply of a different order than something like, say, confidentiality of the mail. He outlined three reasons for that. First, "if we are going to allow the lie detector and the narco-analysis in (…) homicides and sexual crimes, we lose the right to object, when any dictator or government wants to also apply this method in political crimes." Note that Feber had addressed this, saying that it was not the methods that were the problem here, but the dictatorship itself. Van Bemmelen's argument had a pedagogical bent, however; we might not be able to stop a dictator from committing the crimes, but we could influence public opinion. People would be more likely to stand up

[159] Van Bemmelen, "Onderzoeksmethoden in strafzaken," 502-503. Original: "Juist in het geval van de onschuldige verdachte wordt de toepassing van de lie-detector en de narco-analyse zo onaanvaardbaar, omdat (…) — wanneer men ze voor de verdachte mogelijk maakt of ze aan deze zelfs gedwongen oplegt — men dit ook moet doen t.a.v. de getuigen."
[160] Ibid., 503

to a dictator, if said ruler "is doing something that we would not approve *under any circumstances.*"[161] In other words, the people would not stand up as fiercely against something they were used to.

The second argument was again pedagogical; the state had to set an example for its civilians. If it wanted the people to respect their neighbours' rights, then it, too, had better respect those rights, especially concerning a person's inner life. Lastly, Van Bemmelen warned that we knew very little about the connections between the unconscious and the conscious mind and that it was not clear what the consequences would be of artificially laying such connections bare. In general, the state should not be too quick about accepting new types of evidence, especially if it required a suspect to participate in their own prosecution:

> "This applies in particular to methods, in which statements are elicited from [the suspect], after one has tried to penetrate his unconscious psyche. That narco-analysis is such a method, is admitted by everyone. In the case of the lie-detector people doubt this. In my opinion, unreasonably so. The electric responses that are registered by the lie-detector flow equally from our subconscious as our conscious psyche."[162]

1.5.4 NJV members respond

In Hengelo on June 30th, 1956, approximately 200 members of the NJV came together to discuss what had been outlined in the *pre-adviezen.* Several members took to the floor to react to the positions that Meyjes and Feber had taken, after which the advisers were given the opportunity to respond. The discussion, in Meyjes' view, proceeded in a calm and collected manner. Compared to similar discussions in Belgium, France and the UK, the NJV ought to feel "fortunate that we have here

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[161] Van Bemmelen, "Onderzoeksmethoden in strafzaken, 504. Original: "Indien wij de lie-detector en de narco-analyse gaan toelaten bij (…) levens- en zedendelicten verliezen wij alle recht van spreken, wanneer enige dictator of overheid deze methode ook wil toepassen bij politieke delicten;" "dingen doen die wij *onder geen omstandigheden* goedkeuren."

[162] Ibid., 505. Original: "In het bijzonder geldt dit voor methoden, waarbij verklaringen aan hem worden ontlokt, nadat men getracht heeft in zijn onbewuste geestesleven door te dringen. Dat de narco-analyse een dergelijke methode is, wordt door ieder toegeven. Voor de lie-detector betwijfelt men dit. M.i. ten onrechte. De elektische reacties, die door de lie-detector worden geregistreerd, vloeien evenzeer uit ons onderbewuste als uit ons bewuste geestesleven voort."

been able to face these issues in our calm Dutch mood."[163] At the end of the discussion, the assembly took a vote on several questions. The key question was phrased as follows:

> "May, assuming a sufficient degree of technical usefulness, psychological investigations or experiments concerning the suspect's person, which are aimed at obtaining information about unresolved facts, be allowed under safeguards, to be regulated by law, if the subject, e.g. during lie-detecting, is *not* brought into an abnormal state of consciousness?"[164]

This question was answered in the negative by a "large majority" of the assembly. This meant that the view of both the advisers was rejected by the NJV; lie detection, as well as narco-analysis, was deemed inappropriate in the Dutch legal system. Had the answer been "yes, such methods are allowed," the assembly would have taken a vote on whether the subject would have to sign off on it. But, as it stood, this did not matter to the NJV; lie detection should not be allowed for the purposes of evidence gathering in criminal processes at all. In other words, the first member to speak at the assembly, I.E. Hes, an attorney from Den Haag, was correct in his estimation that "many of you will (…) have been better able to follow Prof. Van Bemmelen than the *pre-adviseurs*."[165] Yet even if the members were largely in agreement that neither Feber nor Meyjes had got it right, their reasons for believing so varied.

First, there was the question of whether these technologies were permissible under current law. Meyjes, at the end of the meeting, simply noted that opinions differed on this point, while Feber suggested that the question was irrelevant in this context; whether or not the penal code permitted these technologies was not important, because the discussion dealt with whether they were *in principle* acceptable. Notwithstanding, the question was clearly on the minds of the NJV members. The correct

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[163] "Tweede zitting," *Handelingen,*131. Original: "dat wij ons gelukkig mogen prijzen, dat wij hier in onze rustige Hollandse stemming deze zaken eens onder ogen hebben mogen zien."
[164] Ibid., 151. Original reads: "Mogen, aangenomen een voldoende mate van technische bruikbaarheid, onder bij de wet te regelen waarborgen, psychologische onderzoekingen of proefnemingen aan de persoon van de verdachte, welke erop gericht zijn gegevens te verkrijgen omtrent onopgehelderde feiten, worden toegestaan, indien de proefpersoon, zoals b.v. bij lie-detecting, *niet* in een abnormale bewustzijnstoestand wordt gebracht?"
[165] Ibid., 86. Original: "Velen uwer zullen (…) Prof. Van Bemmelen beter hebben kunnen volgen dan de preadviseurs."

characterisation of the law (as either inquisitorial or adversarial) and the correct interpretation of article 29 was discussed most extensively by Prof. J.E. Jonkers and S.J. Timmenga.

S.J. Timmenga, an attorney who had written on the subject of lie detection and narco-analysis before, pointed out a circularity in Meyjes argument: Meyjes used a narrow reading of article 29 and a broad reading of article 56 (which outlined the permissibility of physical investigations) to argue that the Dutch system is not adversarial, but moderately inquisitorial. However, whether the interpretations of these articles ought to be narrow or broad is *determined* by whether you believe the system to be adversarial or inquisitorial. Timmenga believed it was intended to be the former.

With regard to those same articles, Jonkers suggested that the key question was whether the terms included in them were static or not; did the term "interrogation" exclusively refer to a verbal question-response conversation, as doubtlessly it was originally intended, or should we assume that the law is dynamic and that new technological methods for uncovering the truth should therefore also be included in the term? Jonkers sided with the latter interpretation. From that it followed that he considered lie detection "in conflict with the spirit of our legal proces, in particular with art. 29, because the lie-detector in actuality, albeit partially, eliminates the suspect *as a party* in the trial."[166]

Meyjes' response to concerns about the nature of the Dutch legal system was that this was a matter of semantics; in his narrow definition, an adversarial system was one "in which the suspect has a consistently enforced party position and in which he, therefore, is not questioned or interrogated."[167] None of this meant that he undervalued the importance of article 29, Meyjes assured the assembly.

Various members argued against blood tests, narco-analysis and lie detection from an ethical or moral, rather than legal, perspective. Professor W.P.J. Pompe viewed lie detection and narco-analysis "as poison, from which jurists (…) should stay away."[168] Obviously, this meant that Pompe agreed with Meyjes on the subject of narco-analysis, although he felt that appeals to the respect for human dignity carried more weight than the argument that narco-analysis was in conflict with the spirit of article 29. As we saw, Feber argued that a simple appeal to a human right could not be used to establish the ethical appropriateness of narco-analysis or lie-detection. Timmenga agreed; the way

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[166] "Tweede zitting" *Handelingen*, 110. Original: "in strijd met de geest van ons strafproces, in het bijzonder met art. 29, omdat de lie-detector feitelijk, zij het ten dele, de verdachte *als partij* in het strafproces uitschakelt."
[167] Ibid., 133. Original: "waarin de verdachte een consequent doorgevoerde partijpositie bezig en waarin hij dus ook niet wordt ondervraagd of verhoord."
[168] Ibid., 102. Original: "als vergif, waarvan juristen (…) moeten afblijven."

forward was to weigh pros and cons. No simple appeal to human dignity could solve the problem; it had to be balanced against the ethical obligation of the suspect to speak the truth. Feber found the latter more important, Timmenga the integrity of the mind. Respect for the person also played a role in the thinking of Prof. Dr. D. Wiersma. He pointed out that lie detection in the context of a criminal investigation would cause the suspect to feel he was being made into an object, rather than treated as an equal. Guided by his background in psychology and psychiatry, in which respect for the patient was key, Wiersma found this extremely objectionable.

A third line of argument at the assembly revolved around the potential for abuse, despite Feber's warning that "abusus non tollit usum." Timmenga pointed out that abuse could take on such a large magnitude that it *should* lead us to avoid the technology. He, as well as his colleague Jonkers, were not shy to reference the horrors of the Second World War to make their point. Jonkers stated that

> "A little over 10 years ago, when the second world war had come to an end, the United Nations came together. They proclaimed solemnly the human rights manifesto. In it the sanctity of the human mind and body were prioritised (art. 2.) Unanimously they agreed that the terrible horrors that were committed in those dark war years (…) had to be brought to an end for good. This must, so was the slogan, never happen again in the future. Now, not even 10 years later, we are yet again considering the question of whether the possibility of denigrating the body and mind of the human in prosecutions ought not be regulated more loosely than is currently the case."[169]

Timmenga argued that we should only allow the use of those methods that were explicitly permitted by the law. The memory of the war made clear why this was important. Some people, during that time, were seeking to punish innocent people. They argued that when something was not

[169] "Tweede Zitting," *Handelingen*, 111. Original: "Ruim tien jaar geleden, toen de tweede wereldoorlog ten einde was, kwamen de verenigde volken bijeen. Zij proclameerden plechtig het manifest van de rechten van de mens. Daarin werd vooropgesteld (art. 2) de onschendbaarheid van 's mensen geest en lichaam. Unaniem was men het er over eens, dat voor goed een einde moest worden gemaakt aan de verschrikkelijke gruwelen, die in die duistere oorlogsjaren (…) waren begaan. Dit mag, aldus de leus in de toekomst nooit meer gebeuren. Thans, nog geen tien jaar later, beraden wij ons al weer over de vraag of de mogelijkheid van aantasting van lichaam en geest van de mens in de strafvordering niet ruimer moet worden geregeld dan thans het geval is."

explicitly covered in the law, they could let themselves be guided by their own moral rules. But such rules were flexible, so they would say: "according to *our* understanding of State and State law (…) we are allowed to [use these methods.]"[170] The whole point of the law, according to Timmenga, was to avoid such appeals to morality.

None of the speakers specifically addressed the fact that the lie detector's reputation was damaged by examples of abuse in the US, but Meyjes still decided to cover it in his remarks. America, he said, was "a country of extremes."[171] Despite its tremendous scientific advances, it still carried within it a wild-west attitude, that often popped up in the context of criminal investigations. This explained how the lie detector has become associated with the third degree, even though the technology on its own had nothing to do with it. In fact, the lie detector was well suited to preventing excesses in police practice. Meyjes warned the assembly against throwing "a possibly promising baby" out with the "dirty (though fortunately not our own) bathwater."[172]

A fourth issue that was taken up by the members were Feber's "idealistic" arguments. Pompe, who confronted these arguments most extensively, questioned the premisses, but granted them for the sake of argument; if it was true, he said, that there was indeed a growing closeness between society and the criminal and that the criminal justice system more and more wanted to help the criminal rather than punish them, "then one thing will have to be the guiding principle in this, which is: the respect for the human person, the respect for human dignity."[173] And, as mentioned above, Pompe believed that lie detection and narco-analysis were incompatible with those values. Jonkers similarly showed himself willing to grant the premisses, while rejecting the conclusion. Sure, there was an increasing closeness between society and individual, but with respect to the individual's inner life, society and individual simply *were* opposed.

In his response to these two colleagues, Feber admitted that he portrayed the relationship between individual and community more positively than it actually was. The current situation would not permit the most far-reaching interventions in the person, because that reciprocal relationship had

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[170] "Tweede zitting," *Handelingen*, 104. Original: "Volgens *onze* opvattingen van Staat en Staatsrecht (…) mogen wij [deze methodes gebruiken.]"
[171] Ibid., 138. Original: "een land van uitersten."
[172] Ibid., 139. Original: "een wellicht toch veelbelovend kind"; "vuil (gelukkig niet ons eigen) waswater
[173] Ibid., 99. Original: "dan zal toch één ding daarbij een leidend motif moeten zijn, dat is: de eerbied voor de menselijke persoon, de eerbied voor de menselijke waardigheid."

not been fully realised. This was not a problem for Feber; one could admit that the time was not ripe, without thereby closing off the possibility of using the technology in the future. The question of whether we, as a society, would ever get to the point where the time *was* ripe, was of course difficult to answer, but Feber believed that things were pointing this way. To support his position, he referred to a speech given by Van Bemmelen about the the treatment of criminals in the Van der Hoeve clinic. Lastly, Feber noted that it would be best to avoid creating a conflict at the current moment by digging our heels in the sand too much, because this would damage the reputation of these methods. If we allowed that to happen, it would prevent us from using these methods once society was ready for it.

Another thread that Pompe picked up was the issue of protecting the innocent. He expressed surprise, as Van Bemmelen did in his article, that Feber so easily set aside the plight of the innocent suspect. Pompe acknowledged that among suspects there were innocents whose suffering at the hand of the justice system was unavoidable, but this did not mean we should accept just any suffering: "Agreed, but is it not a golden rule (…) that everything should be aimed at having [the] innocent (…) suffer as little as possible?" Keeping that in mind, it would be unacceptable to just say, oh, well, the suffering is unavoidable, let us employ lie detection; it was important to *first* establish the value and permissibility of the instrument before subjecting a suspect to it. Feber, in his reply, defended himself against Pompe's charge that he was using an "armchair concept" of the suspect, but it was Meyjes who took up the issue of unnecessary suffering.[174] He noted that lie detection involved hardly any physical discomfort and that there were protocols in place to alleviate any mental anguish.

Another member concerned with the potential suffering caused to the innocent by lie detection was Wiersma, who insisted that the question of reliability be taken seriously. The physical responses registered by a lie detector, he noted, could be the consequence of many different emotions which *could* be caused by the act of lying, but were not necessarily so. Meyjes was unimpressed; as Wiersma well knew, nervousness did not affect the operator's ability to establish guilt or innocence. There were safeguards in place that prevent other emotions from registering as deceit. So long as the test was administered correctly, there was no need to worry about suspects erroneously being labelled as guilty, simply because they were emotional for some reason. If this was granted, then it would

[174] "Tweede zitting," *Handelingen*, 98. Original: "Accoord, maar is het niet een gouden regel (…) dat alles er op gericht moet zijn om een onschuldige (…) zo weinig mogelijk te laten lijden?;" "studeerkamer-begrip"

become clear that the lie detector could actually benefit the innocent by identifying them sooner and with less hassle. I should note that this argument was also made by the attorney M.P. Plantenga, lest it appear that neither advisor had any support at all: "You think that narco-analysis and the lie-detector are only meant to elicit a confession from the guilty against their will, but you forget (…) that those same methods can serve to safeguard the innocent against injustice."[175] Van Bemmelen's remarks about the suspect having to worry about accidentally implicating someone else remained unanswered by Meyjes and Feber.

A last line of argument I want to highlight concerned the question of whether lie detection and narco-analysis might be permissible if the suspect agreed to undergo the procedure. Pompe deemed both technologies unacceptable even in such cases. As Feber himself said, the judge would draw their own conclusions if a suspect refused, so the choice was hardly free. Van Bemmelen also identified this as a problem. In addition, Feber had stated that lie detection could never prove someone's innocence. What then, would ever inspire a person to undergo the test? There was nothing to be gained from it.

1.6 Different systems, same outcome.

Though lie detection was, and is, a widely used tool in the US — in policing, employee screening and national security investigations — it never became a staple in the legal arena. In the Netherlands, where lie detection has failed to make much of an impact, the same is true. However, taking into account the differences between the two legal systems and the countries' cultures more generally, it is reasonable to expect that there are different reasons for why this is the case in each country. In this section I will delve a little deeper into some of the differences between the legal systems and how they might relate to the reception of lie detection. I will also contrast the *Frye* and G.A.R. cases, as well as the arguments laid out by US judges in subsequent cases and the arguments discussed at the NJV meeting. Were any arguments unique to either country? Which arguments seemed to carry

[175] "Tweede zitting," *Handelingen*, 127. Original: "U denkt, dat de narco-analyse en de lie-detector alleen bedoeld zijn om aan schuldigen tegen un wil een bekentenis te ontlokken, maar U vergeet dan, dat diezelfde methodes ook kunnen dienen om onschuldigen tegen onrecht te vrijwaren."

most weight in each context? Did the arguments relate to characteristics of the legal process, or did they reflect broader cultural norms and values?

One way to understand the differences between the American and the Dutch legal system is to contrast the inquisitorial character of the latter with the adversarial character of the former. The inquisitorial-adversarial dichotomy has been criticised as overly simplistic and unable to capture the great variety of systems that exist, but for the purposes of this study it will suffice, especially because "the criminal legal system of the Netherlands and the criminal legal system of several American states are at opposite extremes of the inquisitorial-adversarial dimension."[176] In the introduction of this paper I gave a very general impression of what that the difference entails, in an adversarial system legal proceedings are a contest between two equal parties, while in an inquisitorial system legal proceedings take the form of "an official and thorough inquiry."[177] The adversarial system is aimed at resolving conflict and its most important principle is fair play; both parties must be equally able to present their (necessarily partial) arguments to the trier of fact.[178] The trier of fact in such systems is often (though not necessarily) a jury of laypeople, while the judge takes the role of a referee, who decides how to move forward when one party accuses the other of violating the fair play requirement. In an inquisitorial system, by contrast, the judge or judges take charge of the investigation. They decide both on matters of fact and on matters of law. They are assumed and expected to be professional, impartial and in search of the truth. The goal of such a system is to enforce the state's policy; finding the truth, here, takes precedence over fair play.[179]

Aside from those essential features of each system, there are several characteristics that naturally follow from them. For one, the inquisitorial system knows no plea-bargaining, which focusses on conflict resolution rather than establishing the truth. For another, appeals have a different function; if a case is appealed in the Netherlands the facts of the case are reconsidered, while an American

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[176] Peter J. van Koppen, "The diversity of nations and legal systems — contrasting the Dutch and the Americans," in *Social Psychology of Punishment of Crime,* ed. Margit E. Oswald, Steffen Bieneck and Jörg Hupfeld-Heinemann (Oxford: Wiley-Blackwell, 2009), 4; P.T.C. van Kampen, "Expert Evidence Compared. Rules and Practices in the Dutch and American Criminal Justice System," (PhD diss., Leiden University, 1998): 19
[177] Van Koppen and Penrod, "Adversarial or Inquisitorial. Comparing systems," 3; Crombach, "Adversarial or Inquisitorial. Do We Have a Choice?" 23
[178] Crombach, "Adversarial or Inquisitorial. Do We Have a Choice?" 24
[179] Van Koppen and Penrod, "Adversarial or Inquisitorial. Comparing systems," 2; Crombach, "Adversarial or Inquisitorial. Do We Have a Choice?" 22–24

appeal deals exclusively with matters of law. The adversarial system gives preference to orally presented evidence, while inquisitorial systems tend to prefer documentary evidence (this is why, according to the Dutch professor of law and psychology Peter J. Van Koppen, "boredom" would be the prevailing emotion for anyone choosing to observe an average Dutch trial.)[180]

This is true for the input of experts as well; in the Netherlands, experts typically submit a written report to the court and are not required to testify orally. This is very different in the US, where expert witnesses regularly take the stand. Another major difference with regard to experts is who engages them; the Netherlands has a tradition of court-appointed experts, while the US relies on the prosecution and defence to enlist their own experts. It has often been said that adversarial systems are detrimental to the authority of scientific experts; after all, two competing experts bickering about the same piece of evidence would hardly inspire confidence in their ability to get it right. A criticism that has been levelled at the inquisitorial system, meanwhile, is that judges have too much faith in the court-appointed experts: "their expertise is hardly ever doubted."[181] In the Netherlands this effect may be amplified by the fact that "although judges are free to appoint experts as they see fit, there is a de facto monopoly on forensic evidence." Experts from a couple of institutions are thus able "to develop trusting relations with the prosecution and investigating judges."[182]

If we now turn our attention to the two central cases discussed above, several differences stand out. The cases occurred almost three decades apart, one five years after the First World War, and the other seven years after the Second World War. The suspects and the crime were vastly different; in one, a young African-American man was suspected of murder in a time when Washington D.C. was rife with racism, while in the other a young ginger-haired police officer had robbed some disreputable figures. In addition, the motivations of the attorneys were different. Sassen was utterly convinced that the lie detector test would demonstrate G.A.R.'s innocence, but when the test actually showed that his client had behaved questionably, Sassen's strategy changed. He now argued that G.A.R. may, at some point, have had ill intentions, but that this was a consequence of his neuroticism. The young police

[180] Van Koppen, "The diversity of nations and legal systems," 3
[181] Petra van Kampen, "Polygraphs in Criminal Justice Systems: The Effect of Different Legal Curltures on the Use of Scientific Evidence," in *Psychology and Criminal Justice. International Review of Theory and Practice,* ed. János Boros, Iván Münnich and Márton Szegedi (Berlin: Walter de Gruyter, 1998):149
[182] Roland Bal, "How to Kill with a Ballpoint: Credibility in Dutch Forensic Science," *Science, Technology & Human Values,* 30, no. 1 (2005): 56

officer could not, in other words, be held fully responsible for his actions. In the *Frye* case, it seems that the exact opposite may have happened. At least one historian has suggested that Frye's attorneys initially did not intend to introduce the results of the procedure in court, but hoped that the results of the test would demonstrate their client's guilt so that they could convince him to take a plea deal. They had to adjust that plan when Marston demonstrated that Frye was innocent.

Mainly though, it is clear that the *Frye* case and the G.A.R. case played out in a fairly similar way, despite being tried in two very different systems. Both Van der Zee and Marston were experts introduced by the defense. In each case, the experts were present in the courtroom. The court, in both cases, declined to take the results of lie detection into account in making its decision. Of course, in the *Frye* case the judge ruled Marson's testimony inadmissible, while the Dutch court heard Van der Zee's testimony, but stated it would not take it into account in reaching its verdict. This is line with the general rules of both systems; adversarial systems have so-called admissibility rules, while inquisitorial systems rely on decision rules; "in the Netherlands, these decision rules are such, that a verdict can only be based on legal means of proof."[183] Both cases were appealed. In the *Frye* case the appeal was based on the question of whether it was appropriate for the trial court to have blocked Marston's testimony. I was unable to establish the exact grounds for Sassen's appeal, but it is clear that, here too, lie detection took central stage. It is notable that neither test was a polygraph test. Both were single parameter tests; in the case of *Frye,* Marston used his systolic blood pressure test and in the G.A.R. case Van der Zee used Summer's "pathometer."

In the *Frye* case, judge McCoy gave a multitude of reasons why he would not allow Marston to testify, but I believe the key issue was the question of the instrument's status as a scientific technique (though it is difficult to overstate McCoy's general distaste for the idea of lie detection.) I agree with Lepore that the judge realised that the test stood on less than sturdy scientific footing. This, of course, was also the issue that informed the decision of the appeals court. It bears saying that the scientific status of the instrument was a shorthand for its reliability; the way for judges to assess whether a technique is reliable, according to the *Frye* rule, was to determine whether the scientific community thinks it is.

[183] Van Kampen, "Polygraphs in Criminal Justice Systems," 146

In the G.A.R. case, the judges were not very forthcoming in giving their reasons for rejecting the lie detection evidence, but it is clear that they too had grave concerns about the technique's reliability. They were willing, however, to take Van der Zee's opinions seriously. When he continued to forcefully argue that the technique *was* reliable, they asked for a second opinion. They turned to Baan, one of the earliest experts to enjoy that close relationship with the court mentioned above. When Van der Zee still resisted Baan's report, they summoned the latter to give testimony in person. The court also took Van der Zee seriously in another way; his and Holtzer's characterisation of the suspect as neurotic and immature convinced the court that he ought not to be held responsible for his actions. It seems unlikely that this case could have turned out in the same way had it occurred in the US at the time that Frye was tried; after all, psychological expertise in the courtroom was still contentious — barely a decade had passed since Münsterberg had aired his grievances in *On the Witness Stand* and not much had changed.

Despite the Dutch court's insistence that it would not take the lie detection evidence into account, it would be foolish to pretend that it did not make a difference. The court must have believed the revised story told by G.A.R. after he failed the test and they must have believed that the suspect's particular mental characteristics explained the unlikely choices he made. Van der Zee and Holtzer made it clear that their conclusions about G.A.R.'s mental state were based upon a picture of his actions that was painted with the help of the lie detector. William Moulton Marston also felt that the lie detector had made a difference in the *Frye* case. Indeed, though Frye was indicted for first-degree murder, the jury declared him guilty of second degree murder, but it is not at all clear whether Marston's aborted testimony had anything to to with this.

As we have seen, despite the differences in the principles that underlie the justice system in the US and the Netherlands, the G.A.R. case and the *Frye* actually have quite a bit in common. In what follows I will contrast the various arguments that have been made about lie detection by members of the legal profession in both countries. It is important make note of a limitation of this comparison; the arguments made on the US side of this equation were made in courtroom settings, while the Dutch arguments were made mainly in a setting intended for debate. The arguments on the Dutch side, therefore, are at times a little more adventurous; an argument such as Feber's is unlikely to come up in the context of a trial. Still, it is safe to say that most of the arguments we have encountered in this

chapter have popped up in both settings. In what follows, then, I am mostly concerned with the question of which arguments were deemed most important in each setting.

In the Netherlands there appears to have been a much larger emphasis on how suspects must be protected from the government. Arguments related to the integrity of the human person and the right to privacy of the inner life were made frequently and forcefully. Perhaps this means that Feber was correct in his observation that the Dutch were especially preoccupied with personal freedom. A related issue is the potential for abuse, though NJV members did not address the possibility that Dutch law enforcement or courts might turn the lie detector against civilians. Meyjes pointed out that America was a country of extremes, thereby implying that we need not worry about the lie detector ever being used in Third Degree-esque practices here. Several other members of the NJV, meanwhile, drew on the recent memory of the German occupation to argue against methods like lie detection and narco-analysis. Should another totalitarian government take over the country, we must not have these tools ready for them to employ, the reasoning seemed to go.

Related to this emphasis on protecting suspects was concern for the wellbeing of the innocent suspect. This too received a lot of attention in the Dutch discussion and was hardly ever mentioned in the American context. It may be that concerns about false positives were implicit in the discussions about reliability, or that this issue was underrepresented in the materials here used because lie detection evidence was typically introduced by the defence.[184] Other reasons why the Dutch might be more concerned with the wellbeing of the (innocent) suspect might be that the court, in the inquisitorial system, has more power over the suspect and is therefore responsible for protecting the suspect against itself. In adversarial systems, meanwhile, defendants are expected to be protected by their defence attorney and procedural rules. Finally, the spectre of the Second World War no doubt played a role, as the Dutch witnessed the debasement of due process up close.

The NJV rejected the idea that a suspect should be allowed to voluntarily agree to undergo lie detection. This relates, in part, to the question of reliability; if the technique cannot be said to be reliable, then there is no reason to submit anyone to it — this would be detrimental to the the issue of finding the truth, and would threaten the innocent. The question was also raised whether a layperson

[184] However, Schirott, who put together a comprehensive list of arguments against lie detection (see footnote 65), does not mention this either. Schirott, "Admissibility upon Stipulation," 245–246

could consent to the procedure at all, given that they would not have the requisite knowledge to fully grasp what that means. Interestingly, there is not a lot of debate about what would happen if a suspect did not *agree* to submit to lie detection, but actively *wanted to* and introduced the idea themselves. This is an important omission, given that this scenario was actually very common (and the only situation to ever present itself in the Netherlands)

Several US courts, meanwhile, allowed lie detection upon stipulation, i.e. if the defendant and the prosecutor both agreed to the procedure ahead of time. There are two ways we could read this; judges in those courts which allowed lie detection believed it to be reliable, or they saw it not as a way of getting to the truth, but instead as contributing to the goal of resolving the conflict between the defendant and the state. It is of course possible, perhaps even likely, that both these considerations played a role.

Another issue that comes sharply into focus in these cases is the issue of fairness. Stipulation here is a remedy to an imbalance that would occur if a defendant was able to introduce favourable lie detector evidence while the prosecution could not perform its own test. The correction seems to have been called into existence mainly to make sure the prosecution gets a fair shot. Of course, questions about fairness were also raised with reference to the suspect; it was suggested that, if the suspect is subjected to lie detection, than so should the witnesses. In the Netherlands, only the latter problem was brought up. This difference makes sense in light of the characteristics of the different legal systems; in the Dutch system the prosecutor is not an equal adversary to the defense.

In the NJV debate the question of reliability played in the background; the feeling appeared to be that lie detection might be *less* objectionable if it is either very reliable, or infallible, but certainly not entirely unproblematic even then. Many of the arguments made in this forum relied on the assumption that the technique was, indeed, reliable. In the US cases described above, reliability always played a large role — the various arguments outlined above were always discussed in addition to the question of reliability. Part of this is no doubt due to the fact that *Frye* put the issue front and centre, but it is also simply the most obvious first question when a piece of evidence is introduced. Indeed, though there was little discussion of reliability in the academic debate at the NJV meeting, the issue was clearly important in the G.A.R. case. This difference, then, would appear to be due to the different arenas from which the arguments hail.

I would like to highlight an argument related to reliability that appears very similar on first sight, but is actually very different. Judge Colden, in the *People v. Kenny* case, argued that general acceptance ought not be a requirement for accepting a technique as evidence, because most currently accepted techniques were, at one point, also mistrusted by part of the scientific community. Meyjes argued that considerations of reliability were not that important, because courts regularly used techniques and tools that were also unreliable. Meyjes was willing to accept unreliable evidence, Colden was not. I would not like to generalise from these arguments — mainly because they are made by one individual each — but it seems to me that this difference is an extension of differential concerns about the ability of fact finders in either system to assess the value of scientific evidence.

Dutch judges were expected to be able to separate good evidence from bad evidence. Only one argument is made with regard to the prejudicial nature that lie detection could have; if lie detection became a common practice, then suspects who declined the test would immediately appear suspicious to the judge(s) trying the case. Meanwhile, US judges and legal scholars were very concerned about the effect that lie detection might have on the jury; the jurors, they felt, may not be able to understand the evidence, might be distracted by it and may place too much trust in it. In addition, because lie detection gets straight to the question of guilt, scholars also worried that lie detection would intrude on the role of the jury and might actually come to replace the jury.

One apparently unique feature of the Dutch discussion around lie detection is that the instrument was often mentioned in conjunction with other methods for evidence gathering, especially narco-analysis. This was true for the NJV discussion — where both were on the agenda — but also for those scholars giving public lectures and penning articles for newspapers. References to narco-analysis in a discussion of lie detection did two seemingly contradictory things; on the one hand, they made lie detection seem like less objectionable by comparison. On the other hand, they aligned lie detection with a technique which is super invasive, thereby increasing whatever aversion one may have to lie detection. In combination with the frequent references to the Nazi occupation, the latter seems to be the more common reaction in the Netherlands.

Chapter 2
Lie Detection in the Workplace

The most obvious use of lie detection is in the context of criminal investigations. But lie detection came to be used for the purpose of personnel screening as well. This began with August Vollmer and his protégé Leonarde Keeler. It is perhaps helpful at this point to give a quick overview of these men's roles in the history of lie detection. Vollmer was the reform-minded police chief of the Berkeley police department. He worked hard to modernise the police force; he put his officers first on bicycles, then on motorbikes and in 1914 in patrol cars, he had a communication system installed in the city, he outfitted patrol cars with radio receivers and he came up with new methods of organising records. He also worked to improve the quality of police officers, instituting mandatory intelligence testing and recruiting officers with college degrees. He even employed a psychiatrist "to weed out the emotionally unsuited."[185]

One of the "college cops" hired by Vollmer was John A. Larson. Larson had a PhD in physiology and had joined the Berkeley Police Department part time to gain practical experience in criminology.[186] In 1921, Larson and Vollmer came across a report written by Marston about his systolic blood pressure test.[187] Encouraged by Vollmer, Larson worked on ways to improve Marston's method and to employ lie detection in police practice. He added instrumentation — including a pneumograph,— which he "jury-rigged (...) on a six-foot-long plank" and he changed up Marston's

[185] O.W. Wilson, "August Vollmer," Journal of Criminal Law and Criminology, 44, no. 1 (1953): 99
[186] Alder, "To Tell the Truth," 495–496
[187] Despite lacking a formal education, Vollmer was an associate editor of the *Journal of Criminal Law and Criminology,* and published an article in the February issue of 1921, in which also appeared — you guessed it — an article by Marston; August Vollmer, "A Practical Method for Selecting Policemen," *Journal of Criminal Law and Criminology,* 11, no. 4 (1921): 571–581; Marston, "Psychological Possibilities in the Deception Tests," 551–570

protocols — whereas Marston had his test-subjects tell free form stories, Larson felt it would be better to make people respond to specific questions.[188] Larson was assisted in this endeavour by a crafty teenager by the name of Leonarde Keeler.[189]

Larson and Keeler collaborated for many years. There was a clear division of labour; Larson would develop the science, Keeler would develop the technology. Over the years Keeler made a number of innovations to Larson's machine; he quite literally "black boxed" the instrument, made a number of small technical improvements with the help of more accomplished engineers and eventually added a galvanometer to the setup. As we will see in this chapter and the next, Keeler was a brilliant marketeer and knew how to turn a profit from lie detection, offering his expertise to law enforcement and private companies, and teaching others to operate the instrument as well. He also had ambitions to obtain a patent for his version of the polygraph and succeeded in doing so in 1931.[190] Keeler's attitude did not sit well with John Larson, who over the years developed some doubts about lie detection and increasingly felt it should be used exclusively by psychologists and physiologists, preferably for therapeutic interventions. The two men, who had once been close collaborators, became each others biggest rivals.

With that out of the way, let us turn to the subject of workplace lie detection. In section one of this chapter, we see how Keeler and some of Vollmer's other disciples began using lie detection to determine the trustworthiness of those entrusted to protect society from criminals. Lie detection, here, was a new answer to that age-old question: "Who will guard the guardians?" Later Keeler began offering his services to banks and department stores that were losing money due to pilfering employees. Not only did he promise to identify the thieves, he also pointed out that the threat of follow-up testing would deter any future misbehaviour. This lucrative endeavour is the subject of section two of this chapter. The logic of deterrence also underlies the extensive use of lie detection in American national security contexts, which is the subject of the third section.

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[188] Alder, "America's Two Gadgets," 127

[189] How exactly Keeler became interested is unclear; Alder outlines three different stories, the most interesting of which involves some criminal mischief on Keeler's part. But Leonarde was the kid of one of Vollmer's friends, so once the boy became interested in the instrument, it is not surprising that Keeler would encourage him to be involved and assist Larson. Alder, *The Lie Detectors,* 54–56

[190] Alder, "To Tell the Truth," 497

Section 2.4. outlines one specific Dutch attempt to market lie detection to companies. As will become apparent, despite the considerable marketing skills of the private detective involved, the enterprise never took off. The final section of this chapter addresses why this might have been the case and contrasts the American situation with the Dutch.

There are different ways of using lie detection in the workplace. One is very similar to the use of lie detection in criminal investigations; here, a lie detector operator will be called in to examine an employee who is suspected of having committed some kind of misdeed (such as theft.) One might also wish to examine many or all employees when a specific crime is known to have occurred, but there are no suspects. Escalating this even further, the operator might go on a 'fishing expedition' in which they are not asking about any specific crime, but about misbehaviour in general. This requires a different procedure and one that is deeply flawed. What might have been the control questions in investigations into a specific crime (e.g. did you steal anything in the past two years), now become the relevant questions. Also, because repeat examinations are part and parcel of this type of personnel screening there are serious concerns about attenuation effects. There are further questions about the appropriateness of putting one's employees or applicants through the procedure; at the very least it creates a culture of distrust, which cannot be good for the well-being of individual employees or for company morale. It is for these and other reasons that in 1988 the American congress passed the Employee Polygraph Protection Act, which prohibits the use of lie detection on employees in private companies (this is covered in section 2.2). Interestingly, federal agencies are exempt from this restriction, and lie detection continues to be used by institutions such as the CIA, NSA and FBI to screen those people entrusted with sensitive, nationally important information.

2.1 Who Will Guard the Guardians?

August Vollmer's scientific policing, developed in Berkeley, California, drew the attention of powerful men in Los Angeles, who were fed up with the unchecked crime that plagued the city. The Third Degree was rampant, racist vigilante mobs took to the streets to deal with suspected non-white

criminals themselves, and "the [Ku Klux] Klan had permeated the Los Angeles Police."[191]Add to this the fact that the city had recently gone through six different police chiefs in half as many years, the most recent of which went down in a sex and booze scandal, and LA was a city of the brink of chaos. It was against this background that Vollmer agreed to temporarily move to Los Angeles in 1923 in order to overhaul the police department.

While at Berkeley, Vollmer had introduced all kinds of managerial and technological innovations — one of which, of course, was Larson's lie detector — but he had also worked to create a different kind of police officer, one who was well educated, engaged with the community and hired and promoted on the basis of merit rather than nepotism. He would now try to do the same in a city that had twenty times as many citizens and a much larger police force. Keeler, who had enrolled at the University of California in Berkeley, decided in the autumn of 1923 to transfer to Los Angeles. Like Larson, the younger of Vollmer's protégés was committed to police professionalisation and he was eager to continue working with Vollmer. By January of 1924 Keeler had been set to work with his lie detector. It was here, in LA, that Keeler caught his first corrupt police officer.[192] Of course, this did nothing to endear him to the LA police force, which was already bucking Vollmer's reforms. After his year was up, Vollmer returned to Berkeley.

A few years later, in Chicago, Keeler got another opportunity to do his part in tackling police corruption. After a Chicago woman committed suicide, four police were assigned to guard her possessions until relatives could take responsibility for them. When acquaintances visited the house, however, they discovered that the woman's pet, a valuable canary, had gone missing. It would not have been the first time police had looted the homes they were supposed to guard and an investigation was immediately opened by judge Henry Horner. A dead canary was subsequently found in the house but two of the deceased's friends claimed it was not the right canary. An autopsy was performed; the bird had been strangled. Judge Horner called Vollmer, who referred him to Keeler. With the help of the lie detector, the guilty policemen were caught.[193] The judge "predicted that routine polygraph

[191] Alder, *The Lie Detectors,* 63–64
[192] Ibid., 67
[193] Leonarde Keeler, "The Canary Murder Case (The Use of the Deception Test to Determine Guilt," *The American Journal of Police Science,* 1, no. 4 (1930): 381–386; See also Alder, *The Lie Detectors,* 111–113, Alder, *To Tell the Truth,* 503–504 and Bunn, *The Truth Machine,* 166; Not all cases were so trivial: Keeler also tested several police

examination of police officers would soon follow."[194] Indeed, in 1940, Keeler claimed that cases of potential police misconduct were by then regularly investigated with the help of lie detection by the Chicago Park District Civil Service Commission.[195]

Such cases did not differ significantly from the way that police might use lie detection on civilian suspects. A crime had been committed and the guilty needed to be found. But another use of lie detection against law enforcement officers also developed. In 1925, Walter Wiltberger, a "disciple of Vollmer" who had briefly worked with Larson in Berkeley and at the Institute for Juvenile Research in Chicago, was appointed police chief in Evanston, Illinois.[196] True to the teachings of his mentor, Wiltberger hoped to modernise the police department and as part of that process he began hooking his subordinates up to a lie detector. Tensions ran high and in 1926 he was "drummed out of town."[197] In Wichita, Kansas, O.W. Wilson, another one of Vollmer's college cops, would do the same during his tenure as police chief between 1929 and 1939. Aside from screening police officers, Wichita apparently tested more suspects "annually with Polygraph deception technique than anywhere else in the world."[198] It is perhaps worth mentioning that even police chiefs could become ensnared in the wires of a lie detector; "By 1933 Keeler was subjecting Evanston's mayor and new police chief to lie detector tests in order to contribute to a "one hundred page citizens' report" on municipal corruption."[199]

Keeler also tackled the age-old question of "*Quis custodiet ipsos custodes?*" with regard to a different group of guardians. While working at the Institute for Juvenile Research in Chicago, Keeler spent most of his time (lived, in fact) at the state penitentiary, where he tested "prisoners on his new machine as fast as the prison psychologists would clear them."[200] Like Larson, who had held held the same position for a time, Keeler was eager to do something about the widespread corruption he witnessed. Unlike Larson, who had a knack for making enemies, however, Keeler actually got somewhere. When a new warden was assigned, Keeler began screening would-be prison guards.

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officers suspected of having caused the death of a jailed suspect; Geoffrey C. Bunn, "The Hazards of the Will to Truth: A History of the Lie Detector," (PhD diss., York University, 1997): 161

[194] Alder, "A Social History of Untruth," 11

[195] Leonarde Keeler, "The Lie-Detector Proves its Usefulness," *Polygraph,* 23, no. 2 (1994): 185, reprinted from *Public Management*, 22 (1940):163–166

[196] Block, *Lie Detectors. Their History and Use,* 82

[197] Alder, "To Tell the Truth," 504

[198] According to Thomas H. Jaycox, quoted in Bunn, "The Hazards of the Will to Truth," 130

[199] Alder, "To Tell the Truth," 504

[200] Alder, *The Lie Detectors,* 107

Writing to his father, he declared himself "the first shot from the gun of destruction of political graft and the construction of orderly scientific management. More and more of the administration of this penitentiary will be from this office."[201]

2.2 What a Way to Make a Living

The screening procedures described above need not only apply to law enforcement officers. It could just as easily work in the private sector, as demonstrated early on by William Moulton Marston. After obtaining good results doing research with the support of Robert Yerkes of the Psychological Committee of the National Research Council during the first World War, Marston struggled to convince law enforcement big shots to employ him. So Yerkes got him an assignment at his own place of work in Washington. Someone had been stealing scientific instruments and Marston "was asked to examine all the negro messengers (…) who could have had access to the room from which the instruments were taken."[202] Unfortunately for everyone involved, Marston fingered the wrong man. In an attempt to safe face, Marston investigated the innocent man's background, concluding that he came from a bad family and therefore must be bad himself — regardless of whether he had committed this particular crime. In addition, Marston claimed that he should have taken into account "the factor of voluntary control which (…) apparently is almost altogether lacking in negroes."[203]

Leonarde Keeler was far more successful when he began providing personnel screening for private companies in the 1930s.. The idea was simple; if American businesses were losing "million[s] a year to employees' pilfering, [then] there was a huge market for testing honesty."[204] What made this venture especially lucrative was that it greatly expanded the number of potential subjects — to include basically everyone working for a large coorportation — and that this type of screening typically involved repeated testing. Keeler's goal was not to catch misbehaving employees, but to deter thieves and would-be thieves; he would create more honest employees.[205]

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[201] Quoted in Alder, "To Tell the Truth," 502
[202] Marston, quoted in Lepore, *The Secret History of Wonder Woman,* 52–53
[203] Ibid., 53
[204] Alder, *The Lie Detectors,* 124
[205] Ibid.; Paul R. Sackett and Phillip J. Decker, "Detection of Deception in the Employment Context: A Review and Critical Analysis," *Personnel Psychology,* 32, no. 3 (1979): 494

The first opportunity to try this new business model came when, in the course of a criminal investigation, Keeler examined a bank teller suspected of theft. When he concluded that the suspect was innocent, he proceeded to test several other employees. He caught three petty thieves and declared the vice-president of the bank guilty of the embezzlement for which he had been called in.

Then, in 1931, Keeler scored a contract with an insurer that promised its clients (banks, specifically) reduced premiums if they introduced periodic lie detector testing. This, of course, brought Keeler an enormous amount of business, which enriched him personally and helped fund the Crime Detection Laboratory. Keeler encouraged managers not to fire those caught by his sweeping investigations; they, he promised, would now be the companies' most loyal employees.[206] Aside from periodically testing existing employees, Keeler was called upon to examine job applicants, making their hiring contingent on their submitting to the test, though not necessarily on their passing it (though presumably, employers would be hesitant to hire someone after they had admitted to something illicit.)[207] Through it all, "Keeler attempted to maintain his integrity, claiming that his 'real interest' was 'in the study of human behavior and not in inventing and making money out of some instrument'."[208]

The use of polygraphs and other lie detectors in private businesses expanded quickly, especially after the Second World War. Not only did Keeler's own work expand to include other large businesses, such as department stores, he also began offering training courses and selling his instrument. In addition, others began developing their own instruments and methods.[209] In the 1970s, for example, a lie detector based on voice stress analysis (VSA) came on the market, which had the advantage of being less intimidating (because no "strapping in" is required) and having the option of being applied over long distances (in phone conversations).[210]

As more employees across the US were subjected to lie detection in their workplaces, however, resistance to the procedure grew. Some resented having their loyalty and decency questioned and their privacy invaded. Keeler dismissed these concerns out of hand; they were "the concern of namby-

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[206] Viola Stevens, "Biography of Leonarde Keeler," *Polygraph,* 23, no. 2 (1994): 125; Alder, *The Lie Detectors,* 124; Alder, "A Social History of Untruth," 17
[207] Alder, *The Lie Detectors*, 124
[208] Bunn, "The Hazards of the Will to Truth," 216
[209] Alder, *The Lie Detectors,* 166–168
[210] Sackett and Decker,"Detection of Deception in the Employment Context," 500

pamby "women's clubs"."[211] It took some time, but eventually employee's concerns drew the attention of legislatures. From the 1960s onwards, states began enacting licensing legislation, aimed at making sure that no one would be subjected to a lie detector test by a hack with minimal training. Licensing boards could now address concerns about inappropriate and invasive questioning and unqualified operators were put out off business.[212] By 1977, twenty-one states had instituted such licensing statutes.[213]

In addition, several states (sixteen of them by 1977) banned or limited the use of polygraph examinations in employment contexts. In some of these states, namely Alaska, Connecticut, Delaware, Minnesota and New Jersey, employers were not even allowed to request that a (prospective) employee undergo a polygraph exam, while other states' laws merely stated that employers could not force an employee to submit to the procedure. Many of these bills explicitly exempted law enforcement or the government.[214] Though polygraph proponents claimed to be happy about the licensing controls, the later bans and limitations were — understandably — not welcomed by those who made a living from testing employees. According to one, "it was because of the liberal-dominated 1960s (…) that several states "let witch hunts initiated by Mob controlled labor unions, and other rottenstinking sources, cause 'elected' state representatives to enact ridiculous antipolygraph statutes of the flimsiest sort"."[215] Alder has pointed out that the states that placed restrictions on the use of lie detection on (prospective) employees indeed all had high levels of unionisation.[216] The jury is out on the involvement of witches and mobsters.[217]

On a federal level, lie detection was discussed several times in committee hearings and several bills were introduced to restrict its use.[218] It would take until 1988, however, for a bill to come into

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[211] Ibid., 168
[212] F. Allan Hanson, *Testing Testing: Social Consequences of the Examined Life* (Berkeley, CA: University of California Press, 1993): 79
[213] Clarence H.A. Romig, "Polygraph Legislation as of 1977," *Polygraph,* 6, no. 4 (1977): 309–310
[214] Ibid., 312–313
[215] Ferguson, quoted in Hanson, *Testing Testing,* 79
[216] Alder, *The Lie Detectors,* 254
[217] Although the notion that some of the efforts aimed at providing oversight and legislation to curb the use of lie detection amounted to "a witch hunt" might not be such a stretch: Senator Sam J. Ervin, Jr., who introduced a bill against the use of the polygraph in preemployment screening in 1971, consistently called polygraphy "20th century witchcraft;" See *The use of polygraphs and similar devices by Federal agencies: hearings before a Subcommittee of the Committee on Government Operations*, House of Representatives, 93rd Cong., second session, June 4 and 5, (1974), https://archive.org/details/useofpolygraphss00unit
[218] Jack Brooks, "Polygraph Testing: Thoughts of A Skeptical Legislator," *American Psychologist,* 40, no. 3 (1985); https://babel.hathitrust.org/cgi/pt?id=umn.31951d035050891;view=1up;seq=9

effect. The Employee Polygraph Protection Act (EPPA) made it illegal for an employer "to require, request, suggest or cause any employee or prospective employee to take or submit to any lie detector test."[219] This effectively put an end to pre-employment screening and periodic personnel screening, but left room for the use of lie detection in the investigation of specific crimes. Nonetheless, limitations were placed on this practice, including that an employer had to have reasonable suspicion of the employee they aimed to test. Keeler's very first workplace investigation, therefore, would have been illegal from the moment that he declared the initial suspect innocent and went on a 'fishing expedition' instead. Also exempted from EPPA's protections were government employees — this in the name of national defence and security — and those working in companies which "manufacture, distribute, or dispense a controlled substance."[220]

The exemption for government employees is a little surprising given that it could be argued that passing of EPPA was a response to president Ronald Reagan's 1983 National Security Directive 84, "which authorized Federal executive agencies and departments to administer psychophysiological veracity (…) examinations using the polygraph to their employees pursuant to investigations of unauthorized disclosure of classified information."[221] In other words, president Reagan, who once told aides "I've had it up to my keister with these leaks," was looking to weed out leakers with the help of lie detection.[222] Members of Congress then requested a report about the validity of lie detection from the Office of Technology Assessment (OTA). The OTA rapport, which was published eight months after Reagan's directive, pointed out that there was hardly any research into the use of lie detection in preemployment screening and "dragnet" investigations, and that studies which looked at "narrow specific-incident investigation" came up with widely varied accuracy figures.[223] This report, as well as public protestations from the Secretary of State, caused Reagan to suspend his directive. Eventually "this snafu helped jar Congress into passing the Polygraph Protection Act of 1988."[224]

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[219] Employee Polygraph Protection Act, 29 USC §2002 (1988)
[220] Employee Polygraph Protection Act, 29 USC §2006 (1988)
[221] James Allen Matté, *Forensic psychophysiology using the polygraph: scientific truth verification, lie detection,* (Williamsville, NY: J.A.M. Publications, 1996): 70; Alder, *The Lie Detectors,* 255
[222] *The New York Times* helpfully pointed out that "keister" is "a slang word for rump;" Steven R. Weisman, "Reagan, annoyed by news leaks, tells staff to limit press relations," *The New York Times,* January 11, 1983, https://www.nytimes.com/1983/01/11/us/reagan-annoyed-by-news-leaks-tells-staff-to-limit-press-relations.html; See also Brooks, "Polygraph Testing," 351
[223] Brooks, "Polygraph Testing," 352
[224] Alder, *The Lie Detectors,* 255

2.3 National Security Concerns

The issue of National Security loomed large in the debate that followed Reagan's directive. It was by no means the first time that proponents of lie detection had "cite[d] national security concerns to justify their positions."[225] In fact, well before Larson had put together his polygraph, during the Great War, Marston had proposed using his systolic blood pressure test "to flush out "slackers" – draft dodgers – and German spies, but the war ended before he found an opportunity to do so."[226] In the next World War, Keeler, always quick to spot opportunities, tested 274 German POWs. The men were being trained to be policemen in occupied Germany and Keeler was tasked with identifying any "undesirable affiliations, sympathies, or intentions."[227] He apparently concluded that more than a third of the POWs held Nazi sympathies and uncovered a variety of crimes.[228]

After the war, Keeler was asked to examine employees at Oak Ridge, the nuclear facility that was hastily built in in 1942 to produce Uranium-235 and Plutonium-239 as part of the Manhattan Project. The request came after the House Committee on Un-American Activities leaked news about a potential Soviet spy ring at Oak Ridge in January of 1946. In mid-February Keeler and Russell Chatham — a graduate of Keeler's polygraphy course — hooked up 690 employees to a lie detector.[229] Almost one in every five employees admitted to questionable behaviours, including theft (both of some of the "product material" and tools and supplies), revealing secrets, covering up spills and using fake names. According to John G. Linehan, a polygraph operator who wrote about the history of lie detection, "the psychological effect of testing was so strong there was an estimated 50% to 70% reduction of "loose talk" or revealing isolated bits of secret information to unauthorized people."[230]

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[225] Brooks, "PolygraphTesting," 353
[226] John Philipp Baesler, "From Detection to Surveillance: U.S. Lie Detection Regimes from the Cold War to the War on Terror," *Behemoth: A Journal on Civilisations,* 8, no. 1 (2015): 51
[227] Grubin and Madsen, "Lie detection and the polygraph," 362
[228] Ibid.; Alder, "A Social History of Untruth," 18; See also Stevens, "Biography of Leonarde Keeler," 123–124
[229] John G. Linehan, "The Oak Ridge Polygraph Program. 1946–1953," *Polygraph,* 19, no. 2 (1990): 132; Alder, "To Tell the Truth," 515; Alder, "A Social History of Untruth," 18; Alder, *The Lie Detectors,* 206
[230] Linehan, "The Oak Ridge Polygraph Program," 132; it should be noted that this number was pulled out of thin air by an Oak Ridge employee, who was likely providing the interviewer with the answers they wanted to hear.

Keeler eventually left Oak Ridge and Chatham was given the contract. With a staff of eleven polygraph examiners he conducted "some fifty thousand polygraph tests to over eighteen thousand individuals at Oak Ridge, giving it the title to being America's most honest town."[231] Those who worked closely with classified materials, might be tested as often as once every three months. The nature of the questions changed over time; initially employees were asked about past behaviours, later they were also asked questions intended to gauge the likelihood that they *would* in the future do something illegal. Among such questions were some about their affiliations with, and affinities for, "un-American" organisations.[232]

Despite this, in a survey conducted in 1951 Oak Ridge employees — apparently "cooperative and frank"— showed overwhelmingly positive attitudes towards polygraph testing.[233] But perhaps we should be suspicious of their answers; the respondents, who were listed by name, were likely telling the investigators what they wanted to hear. Some respondents noted that "others" were not happy about the machine, although they, of course, had no misgivings. Over time, opposition to the polygraph programme grew louder with some pointing out that scientists working at Oak Ridge had been fired for small infractions, others had quit over how the security-issue was handled and due to the polygraph, hiring new scientists was a challenge. Eventually the issue caught the attention of politicians, with one Senator calling lie detection itself "un-American." The Atomic Energy Commission, which ran Oak Ridge, quickly assembled a panel of polygraph experts, who raised objections to the mass screening approach. The polygraph programme was discontinued in 1953.[234]

The same period, however, also saw the expansion of lie detection by various institutions concerned about national security, including the State Department, the CIA and the NSA. So the State Department began probing the "morals" of its employees; specifically, they aimed to purge homosexuals from their ranks. Although perhaps it is not immediately obvious to our modern eyes how gay people working for the government would be a threat to national security, this is precisely how their treatment was justified. As Alder summarised the feelings of homophobes: "If the cold war

[231] Alder, "America's Two Gadgets," 131
[232] Linehan, "The Oak Ridge Polygraph Program," 133; Alder, *The Lie Detectors,* 207
[233] Ibid., 134
[234] Alder, *The Lie Detectors,* 210–212

could be won only by force of will, then America was as vulnerable to the depredations of limp-wristed government as it was to deliberate treachery."[235]

The first polygraph examination conducted by the CIA occurred on August 12, 1948, as part of the routine security screening of a job applicant. In addition, the CIA tested "agents recruited for clandestine operations," across the globe.[236] A study of three hundred such examinations showed that "more than one in ten of the agents and prospective agents had deliberately falsified his biographic data" and "six percent of them had hidden their past connections with other intelligence services."[237]

In a 1960 article, which was declassified in 1994, CIA officer Chester C. Crawford, who "played a major role in the establishment and success of the Agency's polygraph program," wrote that "it was inevitable that the polygraph would become a counter-intelligence aid."[238] After all, "deception is intrinsic to espionage activity [and] conversely (…) the ability to detect deceptions of the opposition is the most critical requirement of a counterintelligence force."[239] But those working in national security knew full well that the polygraph — or other forms of lie detection for that matter — did not actually deliver on that promise. The continued usage of lie detection by institutions such as the CIA was a matter of "deterrence through spectacular performances of technological prowess rather than building trust between the opponents."[240] Who, after all, would apply for a job with the aim of undermining their employer if they believed that they would be caught? It might also offer peace of mind to employees; they could rest assured that they had done nothing wrong and that their colleagues were similarly reliable.

These sorts of intangible advantages were often cited as key reasons for using the instrument in national security contexts. Yet a more complex dynamic was at work below the surface. If the Cold War was, at heart, a conflict of ideologies, then national security was about more than protecting against foreign invasion in a tangible sense; it was also about the invasion of the people's minds by

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[235] Alder, *The Lie Detectors,* 222
[236] Chester C. Crawford, "The Polygraph in Agent Interrogation," *Studies in Intelligence* 4 (1960): 32
[237] Ibid., 33
[238] "Recommendation that Crawford, Chester C. be awarded Career Intelligence Medal," Report of Honor and Merit Awards Board, November 20, 1973, https://www.cia.gov/library/readingroom/docs/DOC_0005474340.pdf ; Chester C. Crawford, "The Polygraph in Agent Interrogation," *Studies in Intelligence* 4 (1960): 31
[239] Crawford, "The Polygraph in Agent Interrogation," 31
[240] Baesler, "From Detection to Surveillance," 49; See also Alder, "America's Two Gadgets,"

foreign ideas. Protecting one's values *at all cost* is problematic, however, and "the lie detector was meant to solve the dilemma of U.S. national security policy, which meant to preserve core values through policies that potentially violated those values."[241] It was an apparently non-violent way to violate the integrity of people's minds.

As we have seen, the use of lie detection on law enforcement officers, employees of private businesses and in national security contexts had much in common. Most importantly, they used peculiar "softwares;" lie detector operators went on "fishing expeditions," testing large numbers of employees, hoping to catch some of them for non-specified misdeeds, and they asked questions designed not only to learn about the subjects past actions, but also about their likely future behaviours. Making lie detection part of the job-application procedure could thus prevent one from hiring the wrong person. The market for lie detection in the workplace was particularly lucrative, because it expanded the population of people fit for being tested from criminal suspects — and perhaps witnesses — to nearly all working Americans, and because there was an emphasis on repeat investigations.

Of course, there were also substantial differences between the three fields here discussed. The types of crimes and the overarching goals of the operation were different. Vollmer's disciples tested their police officers with the aim of rooting out police corruption and increasing the public's trust in local law enforcement. The stakes were high; the aim was not so much to scare corrupt officers straight, but to get rid of them, and avoid hiring them in the first place. Meanwhile, private corporations turned to lie detection as a way to assess the loyalties of their employees in increasingly large and hierarchical work environments.[242] Leonarde Keeler and his colleagues (and rivals) emphasised that they were creating an honest workforce not by getting rid of duplicitous employees, but by making employees feel that theft and other behaviours detrimental to the company were futile, as they would be caught anyway.

The stakes in the national security context were significantly higher than in the other domains: here the targets of the investigations were not petty thieves or bad cops, but spies, who could potentially bring down the entire society from the inside by giving American secrets away to the Soviets. The hope was that people with ill will towards the country might not apply to positions within

[241] Baesler, "From Detection to Surveillance," 52
[242] Alder, "A Social History of Untruth," 2

the government, for fear of being caught, and that double agents would be caught. The practice continues until today, despite the fact that the instrument failed to catch Aldrich Ames; this double agent passed a polygraph test twice during the period that he was supplying the KGB with information about US national security operations.[243] It could be argued that the reason that Ames managed to evade capture for nine years was that the CIA relied too much on lie detection. Here, then, the instrument may have actually undermined national security.[244] Despite this, the FBI's reaction to the capture of a spy in their own ranks in 2001 was to finally institute routine polygraph testing of their employees.

2.4 A Private Detective in Dutch Businesses

In the Netherlands, no law enforcement officer (apart from G.A.R., the officer accused of violent robbery, whom we met in the previous chapter) has ever been subjected to a lie detector test, and I have encountered no publicly available information that the instrument was ever used by the Dutch national security apparatus. An attempt *was* made, however, at introducing lie detection in Dutch private businesses in the 1970s. The lie detector advertised for this purpose was not a polygraph, but a new instrument, called a Psychological Stress Evaluator (PSE). The PSE is based on the idea that there are detectable undulations in the inaudible part of the human voice. If someone experiences stress (which is hypothesised to be the case when someone is lying), "the array of muscles associated with the vocal cords and cavity walls is subject to mild muscular tension (…) This tension, indiscernible to the subject and similarly indiscernible by normal unaided observation techniques to

[243] According to the CIA website: "The Agency uses a polygraph to check the veracity of information that bears upon the areas listed above. CIA's polygraph examiners are highly trained security professionals, among the world's best in their field. They work closely and carefully with applicants to ensure that the information upon which clearance decisions are based is as accurate as it can be and is guarded with the strictest confidence;" "Application Process," Careers & Internships, CIA website, accessed June 21, 2018, https://www.cia.gov/careers/application-process; Ames' polygraph results could be classified as a false negative; the lie detector operators concluded that Ames was not hiding illicit actions, even though he was. Though it is impossible to quantify, there must have been numerous instances of false positives; reliable applicants being denied jobs in national security because they failed the polygraph exam. If the reader is interesting in how this might happen, the popular radio show and podcast *This American Life* aired a fantastic story in 2005 about how one man applying to the NSA failed the polygraph exam despite having done nothing wrong. I highly recommend giving it a listen; *This American Life* "Backed Into a Corner, Act Three." 287. Produced by Brian Montopolis. WBEZ Chicago, PRX, April 15, 201. https://www.thisamericanlife.org/287/backed-into-a-corner

[244] Vrij, *Detecting Lies and Deceit,* 332

the examiner, is sufficient to decrease or virtually eliminate the muscular undulations present in the unstressed subject."[245] The PSE represents this change graphically and a capable investigator should then be able to interpret that record to sort lies from truths. Like the polygraph, this voice based lie detector could also be transported in an unobtrusive briefcase.

"During the 1960's, the Federal Government invested large sums in a search for a covert lie detector."[246] The army researched various alternatives, at one point apparently experimenting with body odour as an indicator of deception. When army officers Allan D. Bell, Jr., Charles R. McQuiston and Wilson H. Ford developed the PSE, however, the army was not enthusiastic. The three men retired from the army and established Dektor Counterintelligence and Security, Inc. (CIS) in April of 1970.[247] Dektor CIS was intended to be a security company, broadly conceived, but the unexpected success of the PSE after its launch in March of 1971 led the founders to focus their attention solely on this new lie detector. It was the very first voice stress analyser (VSA) available on the market, but many more followed.[248]

Like the polygraph, the PSE managed to draw the attention of journalists across the United States, receiving "uncritical acceptance" in early articles, even though the "device (…) was (…) well on the road to oblivion within a dozen or so years of its first media notice."[249] A 1979 article about the theory, validity and legal status of the machine, also noted that "journalists have seized upon it almost as a news-making gadget sure to provide copy on demand. (…) The PSE," the author remarked, "seems assured of headlines if not scientific or legal acceptance."[250] In the Netherlands, too, the PSE managed to make a few headlines, the first of which was "Soon telephones with lie detector?" in 1974. The article noted that the machine had been gaining popularity among "official agencies and private

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[245] Allan D. Bell, Jr, Wilson H. Ford and Charles R. McQuiston, Physiological Response Analysis Method and Apparatus. US Patent 3,971,034, filed September 5, 1972, and issued July 20, 1976.
[246] David T. Lykken, "Psychology and the Lie Detector Industry," *American Psychologist,* 29, no. 10 (1974): 725
[247] Berkeley Rice, "The New Truth Machines," *Psychology Today*, 12 (1978): 63—64; Also appeared as Berkeley Rice, "De nieuwe waarheidsmachines. De elektronica contra de leugen," trans. Reineke Hollander, *NRC Handelsblad*, November 25, 1978; Lonnie Branstetter and Leo Brunette, "The Truth & Voice Stress Analysis," *The Magazine of the FBI National Academy Associates,* 8 (2006): 26
[248] Darren Haddad, Sharon Walter, Roy Ratley and Megan Smith, "Investigation and Evaluation of Voice Stress Analysis Technology," Final Report for National Institute of Justice, file 193832, NCJRS, March 2002, https://www.ncjrs.gov/pdffiles1/nij/193832.pdf
[249] Kerry Segrave, *Lie Detectors: A Social History,* (Jefferson, NC: McFarland & Company, Inc., 2004): 101
[250] William H. Kenety, "The Psychological Stress Evaluator: The Theory, Validity and Legal Status of an Innovative "Lie Detector"," *Indiana Law Journal,* 55 (1979): 349

companies in the US and is now starting to conquer the European market." Still, it took three years for the signs of the PSE's supposed invasion of Europe to become visible in the Netherlands.

In April of 1977, the private detective Gerd H. Hoffmann announced that his company, Hoffmann Bedrijfsrecherche, had been using the PSE for a couple of years. They had been sending tapes of the voices of suspects to experts abroad (at the time of the interview to someone in the United Kingdom), but the company was planning on sending three of its employees (including Hoffmann's son, Gerd Hoffmann, jr.) to America to learn how to operate the machine. Once they had the necessary in-house expertise, they would bite the bullet and invest an estimated 12,000 guilders (approximately 4,900 USD) to get a PSE of their own.[251]

Hoffmann did not hold back in singing the machine's praises: The Psychological Stress Evaluator

> "has been shown to be a revelation time and time again. (…) Where we used to spend days on end on interrogations, we are now done in a morning. We record the voices of those involved on a tape. That tape is then thoroughly analysed and, with a high degree of precision, more than ninety percent, we can say whether someone is involved or not. (…) I see the PSE as a extremely nifty aid. You now get, objectively and in a short timeframe, a rough selection of possibly suspects. We used to be forced to work with subjective information such as: who drives a car that is too large and who walks around a little too well dressed for his income. De machine puts an end to that. Now it is written in black and white that someone is innocent."[252]

Not everyone shared Hoffmann's enthusiasm, however. An article in *Het Vrije Volk* came with a warning in a unmissably large font; the PSE, it said, was "a dangerous machine on its way to our

[251] "Liegen kan ook al niet meer," *Het Vrije Volk*, April 16, 1977

[252] "Detectivebureau ontmaskert schuldige met leugendetector," *Nederlands dagblad*, May 16, 1977. Original reads: "blijkt elke keer weer een openbaring te zijn. (…) Waar wij vroeger dagen bezig waren met ondervragingen, zijn wij nu in een ochtend klaar. Wij nemen de stemmen van de betrokkenen op een bandje op. Die band wordt geanalyseerd en met een grote mate van nauwkeurigheid, meer dan negentig procent, kunnen wij zeggen of iemand erbij betrokken is of niet. (…) ik zie de PSE als een uiterst handig hulpmiddel. Je krijgt nu objectief en in korte tijd een grove selectie van mogelijke verdachten. Vroeger moesten we werken met subjectieve gegevens als: wie rijdt er in een te grote auto, en wie loopt er wel erg goed gekleed bij voor zijn inkomen. De machine rekent daarmee af. Nu wordt zwart op wit vastgelegd dat iemand niet schuldig is."

country."[253] The Ministry of Justice responded to journalists' inquiries about the PSE by saying that "the Dutch government has no interest in lie detectors." In the 50s, after all, the use of such machines had been rejected on ethical grounds.[254]

Hoffman's three chosen employees were supposed to get their training in the summer of 1977 and the machine itself would be purchased soon after. By the summer of 1978, however, Hoffmann Bedrijfsrecherche still did not have a machine of their own. In a special on company espionage in the magazine *Sociaal Economisch Management* it was noted that Hoffmann "rents time from the supplier in England."[255] Contrasted with what Hoffmann told newspapers in 1977 (which was that tapes were sent off to be analysed), it initially sounded to me as if the training did indeed happen, and Hoffmann's employees were conducting the analysis themselves using machines on loan from the seller in England. According to Hoffmann Jr., however, their use of lie detection was limited to calling in the help of an English expert. I asked for further clarification, but mr. Hoffmann declined to comment.

In this same article, we get an insight in the scale on which Hoffmann used the PSE in his investigations. "Approximately twice a year, and even then always at the request of those involved, typically Americans who have heard about the existence of the machine and grab the opportunity to prove their innocence when suspected of something or other."[256] This should give us pause: Hoffmann had been using the machine for no more than three years at this point. Yet in 1977, he said that he had used the machine "a few dozen times."[257] It is possible, that the dozens refer to the number of individuals tested with the PSE, while the "approximately twice a year" refers instead to the number of cases; after all, Hoffmann noted that the machine was most useful in situations where a selection had to be made from a large number of suspects.

But it should be noted that Hoffmann, like any good private investigator since the invention of Sherlock Holmes, was a bit of a showman. On the company website, Hoffmann is described as a

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[253] Ibid. Original reads: "Een gevaarlijk apparaat op weg naar ons land."
[254] Ibid. Original reads: "… in Nederland bij de overheid geen belangstelling bestaat voor leugendetectoren."
[255] Jos Kool en Rolf Hoekstra, "Bedrijfsspionage sterk onderschat," S*ociaal economisch management,* 12 (August, 1978): 14. Original reads: "huurt tijd bij de leverancier in Engeland."
[256] Ibid. Original reads: "Ongeveer twee keer per jaar en dan nog altijd op verzoek van betrokkenen, meestal Amerikanen die van het bestaan van deze apparatuur hebben gehoord en de gelegenheid aangrijpen om bij verdenking van 't een of ander hun onschuld aan te tonen."
[257] *Het vrije volk,* April 16, 1977. Original reads: "verschillende tientallen malen."

"charismatic" man with a "feel for dramatics and pr."[258] He smoked a pipe, gave titillating lectures and declined to have his picture published in the newspaper ("That would make me too recognisable in this line of work.")[259] Perhaps he guessed that voice based lie detection was sure to grab people's attention and exaggerated on the details?

If this was the case, he guessed correctly. Despite the admission in that 1978 article that the use of the machine was fairly limited, two members of the Dutch House of Representatives (*Tweede Kamerleden*) were sufficiently alarmed that they questioned the Minister for Justice about the use of the "voice analyser." The *Kamerleden,* Roethof and Stoffelen (both associated with the Dutch labour party, de *Partij van de Arbeid,* or PvdA), wanted to know three things:

1. "Has the minister taken cognisance of the magazine articles in which there is mention of the use, also in the Netherlands, of the so-called voice analyser, a modern variant of the lie detector?"
2. "Can the minister say at what scale and by whom this voice analyser, or the more complex version of the analyser, the "PSE" (…), which is also used by police in the US, is used in the Netherlands?"
3. "Is the minister prepared to investigate whether these voice analysers are in conflict with the current criminal provisions for the protection of privacy? If this turns out to be the case, is he prepared to propose the necessary changes to the law?"[260]

The minister replied that he had indeed read the article, that he knew of no uses of the voice analyser in the Netherlands other than the one mentioned in the article, and that the Dutch police did

[258] "Een halve eeuw Hoffmann; geschiedenis van een marktleider," accessed June 2, 2017, https://hoffmannbv.nl/over-ons/historie Original reads: "charismatisch" and "een goed gevoel voor dramatiek en pr."
[259] "Liegen kan ook al niet meer," April 16, 1977. Original: "Dat zou me te herkenbaar maken in dit werk"
[260] *Aanhangsel Handelingen II,* 1978/79, 252: 501 (schriftelijke vragen). Original reads: "1. Heeft de Minister kennis genomen van tijdschriftartikelen waarin melding wordt gemaakt van het gebruik ook in Nederland van de zogenaamde stem- analysator, een moderne variant op de leugendetector (…)? 2. Kan de Minister meedelen op welke schaal en door wie deze stemanalysator of de ingewikkelder versie van de stemanalysator de "PSE" (…), die ook door de politie in de VS benut wordt, in Nederland gebruikt wordt? 3. Is de Minister bereid te onderzoeken of deze stemanalysators in strijd zijn met de huidige strafbepalingen ter bescherming van de privacy? Indien dit het geval blijkt te zijn, is hij dan bereid de nodige voorstellen tot wetswijziging in te dienen?

not use the machine. With regard to the third question, the minister said that "the quoted magazine article does not contain enough information to make a judgement about the extent to which the case mentioned might be in conflict with current criminal provisions."[261] He also indicated that he had asked the Amsterdam Attorney-General J.H.G. Boekraad to advise him on the matter. I have not been able to find out about the follow-up.

However much attention Hoffmann's use of lie detection managed to attract, the private investigator's initial enthusiasm seems to have faltered fairy quickly. Exactly how Hoffmann Bedrijfsrecherche's use of lie detection came to an end is difficult to say, as the company, which has since been bought by Trigion, has indicated to me that there are no relevant pieces of documentation in what remains of their archive and mr. Hoffmann jr. (who ran the company between between 1997 and 2011) declined to be interviewed. It should be noted that there is no mention of the PSE (or any kind of lie detector) in Hoffmann's newsletter, *Hoffmann recherche tips voor het bedrijfsleven* (which appeared in English as *Hoffmann detectives' tips for business & industry*) after June 1977. The issue which appeared sometime in 1976 or early 1977 and which caught the attention of a *Nederlands Dagblad* journalist, seems to have been the only one to have ever referenced it.[262] It is also worth mentioning that the current-day website of Hoffmann Bedrijfsrecherche, whose fairly extensive overview of the company's history I reference above, makes no mention of the instrument. Other technical advancements that were taken on board in the same period (e.g. radiophones, electronic listening devices and secret cameras) do receive attention.

An interesting postscript to this story is that a few years later someone attempted to sell their voice-based lie detector. The advertisement, which ran in the national newspaper *De Telegraaf* on September 12, 1981 read: "Private person offers for sale a voice stress analyser (lie detector by means of voice analysis). Buyer should take into account that some instruction in the use is necessary, perhaps professional education abroad. Original price 30,000 guilders, asking price 20,000 guilders. 1.5 years old." The seller seems to have had no luck with this ad, because on July 8th, 1983, they placed another

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[261] Ibid. Original reads: "Het aangehaalde tijdschriftartikel bevat onvoldoende gegevens om te kunnen beoordelen, in hoeverre in het gesignaleerde geval sprake zou kunnen zijn van strijd met deze huidige strafbepalingen."

[262] "Detectivebureau ontmaskert schuldige met leugendetector," *Nederlands dagblad*, May, 16, 1977; Unfortunately I was unable to unearth the issue of *Hoffmann recherchetips voor het bedrijfsleven* to which this article refers.

one, in the same newspaper. This one was much more concise and the price had gone down another third: "Offered for sale lie detector, price 10,000 guilders."[263] A third advertisement appeared in November of 1984, though this one listed a different phone number, so I cannot be sure that this is the same seller, or the same lie detector (see image 3 for all three ads). I believe it unlikely, however, that two different people were trying to shift two different voice-based lie detectors through advertisements in the same newspaper, in the same time period. I was able to trace the phone number in the third advertisement to a member of the Libertarisch Centurum [libertarian centre], who later became part of the controversial nationalistic, anti-immigrant political party Centrum Democraten [Centre Democrats, CD].[264] I was unable to figure out why this person would have a voice-based lie detector or why he might want to sell it, so this remains an unsolved mystery, a footnote to the career of lie detection in the Netherlands.

Image 3. Three advertisement in the *Telegraaf,* from 1981 (left) and 1983 (top right) and 1984 (bottom right)

2.5 A Swing and a Miss

In some ways, the story of Hoffmann's attempt to introduce the PSE to his clients echoes the American story of lie detection in the workplace, but on a much smaller scale. Employers suspicious

[263] Advertisement, *Telegraaf,* July 8, 1983
[264] I know this because his name and phone number were listed in the newsletter of the libertarian centre and he later showed up on the electoral list of the CD; "Lijsten van kandidaten voor de verkiezingen van de tweede kamer der Staten-Generaal op 3 mei 1994 in kieskring 9 (Amsterdam)," *Het Parool,* April 29, 1994

that they were being stolen from, could enlist a private detective, working independently of law enforcement, who would resolve the issue mechanically and objectively. In both the US and the Netherlands this drew the attention of lawmakers and was, in the end, deemed improper. Hoffmann, here, takes on a role similar to Keeler's; a proponent of lie detection with a flair for theatrics. But Hoffmann did not put all his eggs in the same basket; lie detection with the PSE was only one of the services he offered. It appears Hoffmann realised relatively quickly that interest among Dutch business owners was limited and gave up on trying to sell them on lie detection.

Besides, Hoffman was the only person advocating lie detection in the Netherlands — unless, of course, the person or persons who placed those advertisements attempting to sell voice-based lie detectors, had also tried to set up a business along those same lines — while Keeler had students, colleagues and rivals that pushed lie detection forward. In addition, Keeler was wel connected. Vollmer was particularly helpful; known throughout the country as the face of modern policing, as well as something of a criminologist, he was able to introduce Keeler (and lie detection more generally) to various influential figures. In addition, Vollmer's enthusiasm for lie detection was carried far and wide by his disciples and the examiners trained by Keeler also took up the business of employee-screening. To be sure, these lie detector operators thrived because there was a market to sustain them, but it is also true that they created the market by offering these services.

In addition to the support of individuals, institutional backing was key to the successful introduction of lie detection in the workplace. When Keeler began working with banks to eradicate petty theft, he was working at the Scientific Crime Detection Laboratory in Chicago, one of the nation's first forensic labs. The lab supported Keeler's venture — and, in turn, relied on it; Keeler and his lie detector kept the organisation afloat financially when the charitable donations of the lab's foremost benefactor dried up during the Depression. It also seems reasonable to assume that the deal Keeler struck with the insurance organisation contributed to the success of his venture. Unfortunately, information about this deal is fairly sparse, so it is difficult to say exactly how much of an impact it truly had. Perhaps Keeler would have been able to sell his services to banks without the promise that premiums would go down for those who did so, perhaps not.

In any case, the backing of these institutions gave Keeler and his instrument credibility. This would have grown as he attracted more clients; the fact that large and serious companies such as banks

would use lie detection no doubt gave other companies confidence that this technology could help them too. In addition, the American media had already reported on the lie detector's successes in the law enforcement context. In the Netherlands, these American stories had also made headlines (as we will see in the next chapter), but there were no Dutch success stories. In addition, voice based lie detection was almost entirely unknown when Hoffmann tried to introduce it. Keeler's polygraph, in other words, was already familiar to his would-be corporate clients; Hoffmann was trying to sell a service that was unheard of.

It is important to understand that Hoffmann and Keeler were selling something fundamentally different; Hoffmann was a private detective, who was called upon to solve specific offences. He saw his work as related to law enforcement; companies called upon him if they had suspicions that they wanted to confirm before getting police involved or if they wanted to resolve the issue internally. But the work was the same. Hoffmann considered himself "an unacknowledged 'competitor'" of the police.[265] The PSE was a way to increase the efficiency of the service that his company already provided: "Where we used to spend days on end on interrogations, we are now done in a morning." Keeler offered something much more grandiose. He claimed to make employees more honest. He would not solve petty thefts, but rather prevent them. He allowed business owners to outsource trust.

Despite the fact that Hoffmann's sales pitch was very modest by comparison, however, Dutch lawmakers immediately began asking questions. In the US, this took much longer. It was the protest of workers and unions that finally convinced law makers to begin thinking about legislating against (careless) use of this technology on workers. Bills passed in the different states had varied contents, but in many of the states, and in the federal legislation passed in 1988, law enforcement and national security organisations were exempted from the limiting provisions and bans.

The desire to keep lie detection available as a tool in these government agencies is remarkable, especially as it was Reagan's attempt to expand the use of lie detection on government employees that caused the congress to take action. This apparent cognitive dissonance cannot be explained by claiming that lie detection functioned differently in private and government business; both relied on the logic of deterrence. Whether the instrument worked was not all that relevant. What was more

[265] "Liegen kan ook al niet meer," April 16, 1977. Original: "niet erkend 'concurrent'"

important was that the lie detector was enlisted in the Cold War battle of ideologies; it was a non-violent means to a violent end. This bears close resemblance to the early use of lie detection in police contexts as well; here, the lie detector was simultaneously the antithesis of the violent interrogation methods known as the Third Degree and an extension of it.

As far as I was able to discover no one in the Netherlands ever considered using lie detection to assess the honesty of those working in law enforcement or national security. This is likely due, in part, to the fact that the fears and concerns to which lie detection was supposed to be an answer were simply not felt as deeply here. It is also true that the use of lie detection in one part of society reinforces its credibility in other areas. Had lie detection taken off in one domain, perhaps it would have stood a chance at being introduced in other areas as well.

Chapter 3
Lie Detection in the Media

In the previous chapters we have searched for lie detection in real world spaces; in courtrooms, private companies and government agencies. But perhaps these were not the best places to look; perhaps, we should focus on finding the instrument in the pages of novels, newspapers and comic books and on the screen, both large and small. The lie detector, by its very nature, demands a public hearing; according to the most common theory about the workings of the technology it is the fear of getting caught that triggers the physiological responses measured by lie detectors. In other words, it only works if those who might be subjected to it believe it works. In this chapter, I address the historical connections between lie detection and various media forms, in the United States of America and in the Netherlands. As before, I compare both situations to get closer to answering the question of why America *did* and the Netherlands *did not* come to use lie detection on a large scale.

Section 3.1 shows how, in some ways, lie detection was invented in American detective fiction. It argues that novels and comics played an important role in getting the American public used to seeing the technology as a viable tool for policing. In the next section I look at the presence of lie detection in films and tv programmes, some fictional, some fictionalised and some documentary in nature. In section three of this chapter I consider the representation of lie detection in news media. Because they were key to "regulating the discourse," I here necessarily focus on how the early proponents of lie detection, particularly Marston and Keeler, managed to make headlines.[266] The celebrity status of these men comes to the fore in sections 3.2 and 3.4 as well, the latter of which discusses the connection between lie detection and advertising.

[266] Bunn, "The Hazards of the Will to Truth," v

From section 3.5 onwards, I turn my gaze to the Netherlands. I first consider whether the Dutch would have been able to learn about lie detection in works of fiction. I discuss the impact of American novels, comics and films in the Netherlands, as well as a Dutch novel in which the idea of lie detection was explored. In section 3.6, I discuss the portrayal of lie detection by Dutch news media, while section 3.7 focusses specifically on the media response to the G.A.R. case covered in the previous chapter.

3.1 Pulp Fiction and Comic Strips

In 1983, the American psychologist Leonard Krasner wrote that "the relationship between psychology and crime has [an] important aspect, (…) one virtually undocumented until this point: that is, the use of scientific psychology and psychologists in the world of the detective/mystery novel." Investigating this relationship would be worthwhile, as "the fictional use of psychology not only illustrates an important application of psychology to the solution of crimes but also offers a portrait of the activity of psychologists to the very wide segment of the population that reads such books."[267]

Other scholars agree; in his 1999 monograph *Detective Fiction and the Rise of Forensic Science,* Ronald R. Thomas showed how detective fiction existed in dialogue with the wider society at three different historical moments, each of which was also characterised by an "unprecedented inventiveness in developing practical forensic devices." The argument, here, was that the ideologies of identity, crime and nationality which gave rise to, or became embedded in, forensic technologies such as lie detection, fingerprinting and the mugshot, were embodied by the fictional detective. Detective stories engaged debates about these new ideologies and were able to "provide reassurances (…) by continually reinventing fictions of national and individual identity to respond to rather specific historical anxieties, often invoking the authority of science to do so."[268]

At various points in the book, Thomas shows how fictional detectives employed specific forensic technologies before real-world law enforcement adopted them; in the section on lie detection, however, this remains underexplored. This is due to the fact that those works of fiction which showed

[267] Leonard Krasner, "The Psychology of Mystery," *American Psychologist,* 38, no. 5 (1983): 578
[268] Thomas, *Detective Fiction and the Rise of Forensic Science*, 6

the actual usage of lie detection were most prominent in a sub-genre of detective fiction that is often overlooked because it falls "squarely between two prominent eras of detective fiction: the popularity of Arthur Conon Doyle's Sherlock Holmes (original series, 1887–1893; return 1903–1905) and the so-called Golden Age of detective fiction (1920–1940)." Littlefield has criticised this omission and has shown that "the subgenre of [American Scientific Detective Fiction] is symptomatic of a large shift in the relationship between forensic science, police work, the media, and fiction."[269] The protagonists of this subgenre relied on scientific techniques and instruments, rather than deduction, to solve crimes; they function mainly as mouthpieces for the science — even working to teach the police their methods — and their personal quirks did not matter as they did in the Sherlock Holmes stories. Like Littlefield, Bunn, too, has more eye for the type of popular/pulp detective fiction that remains unexplored in Thomas's analysis; I here follow their example in focussing on those narratives.

By Bunn's reckoning, the first ever use of the word 'lie detector' appears in *The Yellow Circle*, a 1909 novel by American author Charles Edmonds Walk.[270] One of the main characters, Foster Cole, is intrigued by the inscrutable demeanour of a suspicious butler and has an idea:

> "There's a contrivance recently invented by some college professor," said he, "that I'd like to try on Cullimore. It is a lie detector; with its aid one can plumb the bottomless pits of a chap's subconscious mind, and fathom all the mysteries of his subliminal ego. You set some wheels going, the chap lays his hands on a what-you-call-'em, and then you proceed to fire some words at him. It is like a game. The chap must say the first word that pops into his mind, suggested by the word you gave him; the machine measures the interval of thought, and if there is nothing to interfere with the association of ideas, the chap will answer prompt the first word that your word suggests. Hesitation signifies equivocation.
>
> "The possibilities are obvious. If you lead him unsuspecting over a prepared course, why, pretty soon he begins to shy; the machine notes the time, and —"[271]

Foster Cole never finishes his thought, but we know what he is describing; the association test

[269] Melissa Littlefield, "Historicizing CSI and its Effect(s):The Real and the Representational in American Scientific Detective Fiction and Print News Media, 1902–1935," *Crime Media Culture,* 7, no. 2 (2011):138
[270] Bunn, *The Truth Machine,* 95
[271] Charles Edmonds Walk, *The Yellow Circle,* (Chicago, IL: A.C. McClurg & Co., 1909), 69–70

developed by researchers such as Carl Jung and Hugo Münsterberg. *The Yellow Circle* is not a scientific detective novel; Foster Cole is simply a family friend turned sleuth who solves the case by clever reasoning and occasional righteous thuggery. The lie detector suggestion is never put into action. In any case, talk of probing the "subconscious mind" and the "subliminal ego" shows that Charles Edmonds Walk had not crossed the bridge from "liar" detection to "lie" detection.

This bridge *was* crossed by the authors of the *Luther Trant* stories, the first of which appeared in May of 1909.[272] An early representative of the scientific detective genre, Trant certainly lived up to the "scientific" aspect; in the year after the publication of this first instalment, Trant used a chronoscope, a galvanometer, a plethysmograph and a pneumograph to detect guilt in four different stories. The authors of these stories, Edwin Balmer and William MacHarg, made clear that these instruments were being used by real-world scientists in laboratories in Europe and America, but regretted the fact that they were exclusively used to identify the mentally disordered.[273] Trant's exploits vividly showed how else they might be put to use; for detecting lies in non pathological criminal suspects.[274]

Bunn has noted that in one of the stories, "bearing a vague resemblance to Hugo Münsterberg, a German psychologist called "Professor Kuno Schmalz" helps Trant to use a plethysmograph and a pneumograph to detect guilt."[275] This is no wonder; Balmer and MacHarg were clearly inspired by the work of Hugo Münsterberg.[276] The Harvard professor wanted the general public to learn about the merits of applied psychology in "the most popular form possible," and Balmer and MacHarg answered this call; in the very first scene of the very first Trant story, we find the protagonist engaged in a conversation — a soliloquy, perhaps — about ideas and frustrations similar to Münsterberg's:

> "Five thousand years of being civilized," Trant burst on, "and we still have the 'third degree'! We still confront a suspect with his crime, hoping he will 'flush' or 'lose colour,' 'gasp' or

[272] "If a lie detector is defined as an instrument used to record the physiological reactions of a nonpathological subject, then such an instrument was first described in Balmer and MacHarg's inaugural Luther Trant story;" Bunn, *The Truth Machine,* 117
[273] Edwin Balmer and William MacHarg, "Foreword," *The Achievements of Luther Trant,* (Boston, MA: Small, Maynard & Company, 1910)
[274] Bunn, *The Truth Machine,* 110–112
[275] Ibid., 111
[276] Krasner, "The Psychology of Mystery," 578–582; Littlefield,*The Lying Brain*, 18–47

'stammer.' And if in the face of this crude test we find him prepared or hardened so that he can prevent the blood from suffusing his face, or too noticeably leaving it; if he inflates his lungs properly and controls his tongue when he speaks, we are ready to call him innocent. Is it not so, sir?

"Yes," the old man nodded, patiently. "It is so, I fear. What then, Trant?"

"What, Dr. Reiland? Why, you and I and every psychologist in every psychological laboratory in this country and abroad have been playing with the answer for years!"[277]

Aside from introducing a wide audience to the potential of applied psychology, the detective also "[translated] the gist of Münsterberg's mythos into an applied task for the expert."[278] If the notion of using lie detection in criminal investigations had seemed merely hypothetical before, Trant and other fictional detectives showed what it might look like in practice.

Luther Trant receives most attention in the secondary literature, but several other fictional scientific detectives are notable for their use of lie detection too; in a 1909 novel by the American dramatist Cleveland Moffett, a French detective by the name of Paul Coquenil and an investigating judge together submit the suspect to an association test like the one suggested by Foster Cole in *The Yellow Circle*. In a second test, the suspect is hooked up to a sphygmomanometer and presented with various magic lantern images. He is instructed to name what is depicted in the images by Dr. Duprat, "a kind-eyed, grave-faced man (…), who, for all his modesty, was famous over Europe as a brilliant worker in psychological criminology." The "leather sleeve," the doctor explains, will register the suspect's emotions. Of course, as the suspect is confronted with pictures of the scene of the crime, his pulse gives him away, even though the suspect manages to take some partially effective countermeasures.[279] The author of the novel was clearly inspired by Münsterberg's *On the Witness Stand*, as evidenced by the judge's use of the phrase "mental microscope" to refer to the word association procedure.[280]

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[277] Edwin Balmer and William MacHarg, "The Man in the Room," *The Achievements of Luther Trant,* (Boston, MA: Small, Maynard & Company, 1910): 2

[278] Littlefield, *The Lying Brain,* 23

[279] Cleveland Moffett, *Through the Wall*, in *The Craig Kennedy Scientific Detective Megapack* (Rockville, MD: Wildside Press, 2012)

[280] Münsterberg uses this term in Münsterberg, *On the Witness Stand*, 77

Detective Paul Coquenil seems to have been mostly forgotten. Not so with detectives Craig Kennedy and Dick Tracy. The creation of Arthur B. Reeve, the Craig Kennedy stories were widely read and republished several times.[281] Published in *Cosmopolitan* (for which Münsterberg had also written,) Kennedy's first adventure, titled "The Case of Helen Bond," saw the detective use a plethysmograph to examine the female suspect.[282] Helen Bond confesses once she realises that Kennedy has figured her out. There are various later stories in which Kennedy employs some form of lie detection to crack the mystery.

Craig Kennedy, though he was a truly scientific detective, still had much in common with Sherlock Holmes; he was a pipe-smoking intellectual (a chemistry professor), who had his very own live-in sidekick, and was not in government employ. The title "the American Sherlock Holmes" was appropriate. Not so with another detective that has occasionally received that honorific. Dick Tracy, the brainchild of cartoonist Chester Gould, was the original hard-boiled police detective in a fedora hat and trench coat, who happily used his brawn to catch villains. Clever reasoning was not central to the character. Dick Tracy did, however, make frequent use of the most recent forensic techniques. Gould made sure to stay up to date about this subject, at one point enrolling in the monthlong lie detection course organised by Leonarde Keeler at the Northwestern University crime lab. Ken Alder has even suggested that Tracy was inspired by Leonarde Keeler and his colleagues at the Northwestern University crime lab.[283]

What Gould learned at the crime lab became part of Dick Tracy's toolkit; in late 1932 and early 1933 Tracy would use a lie detector first on ""Larceny" Lu, queen of the stolen car and accessory ring," and later on Tess Trueheart, his love interest (see image 3).[284] The latter instance is

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[281] Bunn, *The Truth Machine*, 113

[282]Arthur B. Reeve, "The Case of Helen Bond," *Cosmopolitan Magazine,* L, no.1 (December, 1910): 113-124; It was later published as "The Scientific Cracksman" in Arthur B. Reeve, *The Silent Bullet* (New York & London: Harper & Brothers, 1910); Gina Lombroso Ferrero's account account of her father's use of plethysmography was published after the appearance of *The Case of Helen Bond.* However, Cesare Lombroso, during his life, dwelled "with enthusiasm on the revelations of guilt or innocence that can be elicited by using the hydrosphygmograph or the volumetric glove" and his usage of the instrument in this way was well known. Kenny, "The Death of Lombroso," 226

[283] Alder, *The Lie Detectors,* 118; The more obvious inspiration is Eliot Ness, the law enforcement agent who led the so-called Untouchables in their task of shutting down Al Capone's crime syndicate. E.g. Kenneth Tucker, *Eliot Ness and the Untouchables. The Historical Reality and the Film and Television Depictions,* (Jefferson, NC: McFarland & Company, 2012), 8; Max Allen Collins, "Dick Tracy Begins. Introduction," in Chester Gould, *The Complete Chester Gould's Dick Tracy. Volume 1,* ed. Ted Adams and Max Allen Collins (San Diego, CA: IDW Publishing, 2006)

[284] Gould, *The Complete Dick Tracy.*

identical to the story told of John Larson's relationship with his would-be wife Margaret Taylor, namely that he strapped her into the lie detector and asked her "do you love me?" Her embarrassed denial was shown by the machine to be a lie. [285]

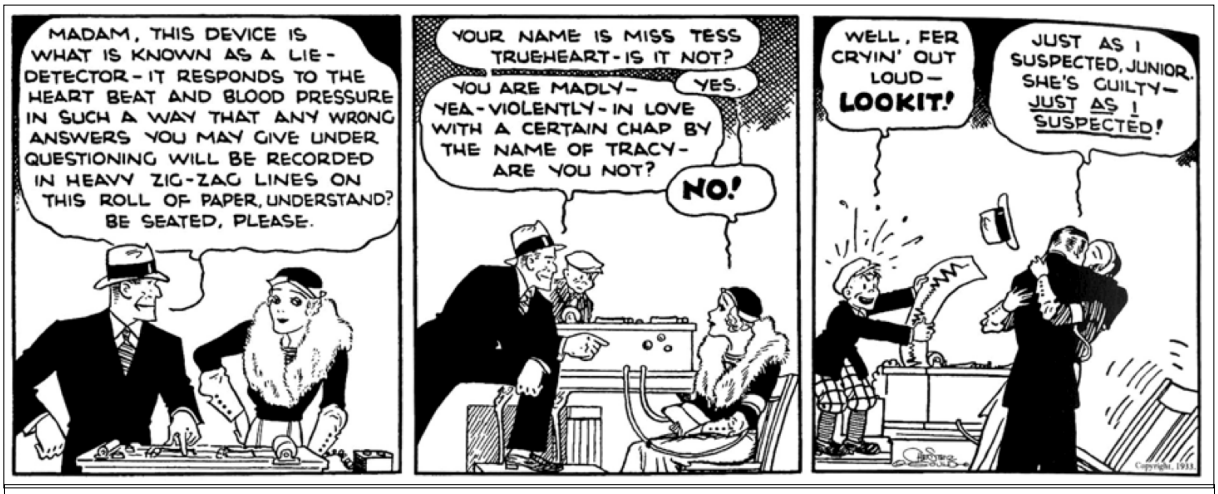

Image 3. Dick Tracy catches Tess Trueheart in a Lie (jan. 2nd, 1933)

One last work of fiction deserves our attention. *Wonder Woman,* the Amazonian superhero who has recently returned to the spotlight in the eponymous Patty Jenkins film, was created by William Moulton Marston. The comic was no stranger to the use of a mechanical lie detector (see image 4). More interestingly, however, Marston "equipped his heroine with a lie detector of her very own, one that encapsulated his utopian philosophy of psychology." The Golden Lasso did more than merely register the truth or falsehood of a statement, it actually compelled whomever found themselves caught in it to tell the truth (see image 5). This demonstrates one distinct feature of Marston's view of lie detection; he "was aware of the lie detector's dual qualities as an instrument of liberation and

[285] Leonarde Keeler, too, was familiar with this story, writing a version of it for an English composition class; Alder, *The Lie Detectors,* 11—12, 83

domination,"[286] while other advocates had insisted that the lie detector was essentially humanitarian and made to *replace* coercive tactics.

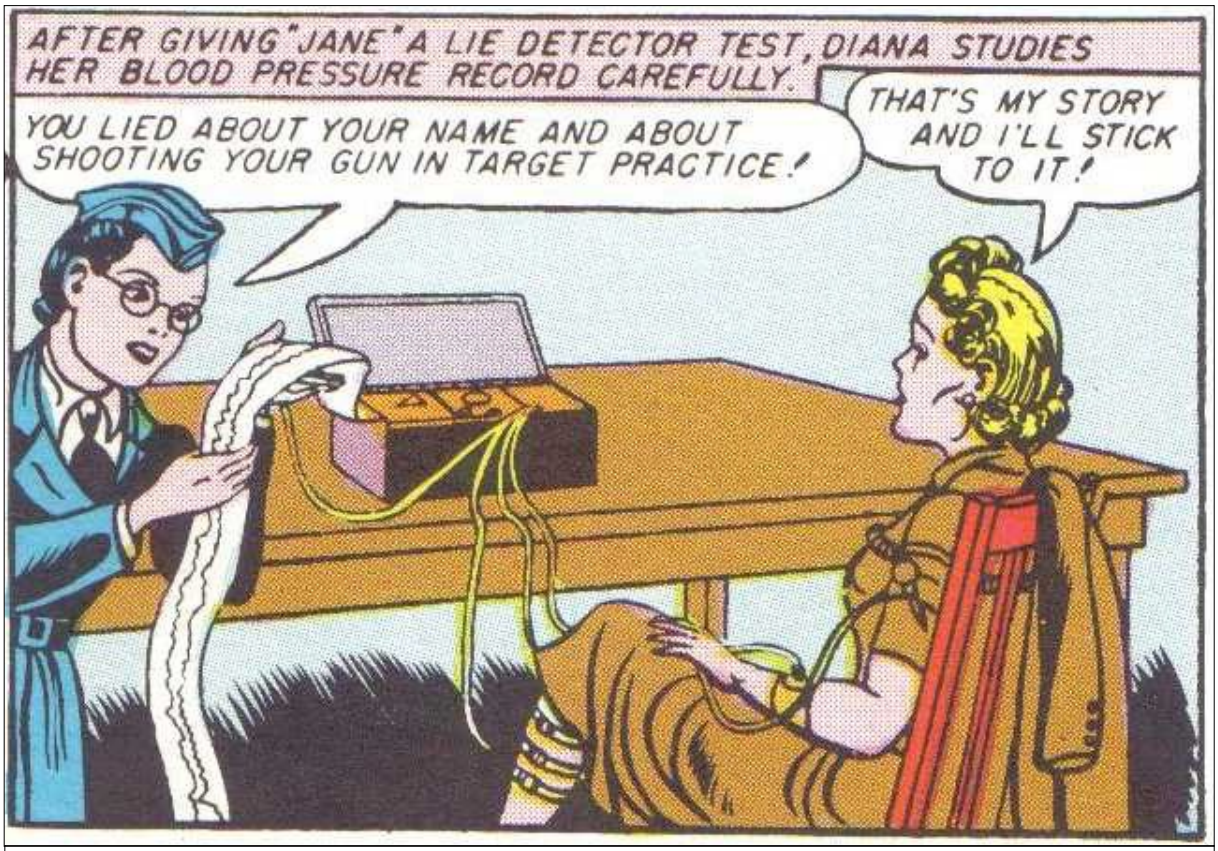

Image 4. Wonder Woman (Diana) uses a mechanical lie detector

Image 5. Wonder woman uses her lasso of truth in Court

[286] Bunn, *The Truth Machine,* 185

3.2 On Big and Small Screens

Fictional (and fictionalised) portrayals of lie detection were not only found in the pages of books and newspapers, however. The instrument also made an impact on the big screen and, later, on television. Relatively little has as yet been written about representations of lie detection in films and on tv. Often, authors mention that the instrument has become a staple of these media, but go no further. The only films mentioned somewhat regularly are *Officer 444* and *Call Northside 777.* This is no wonder; in each of these films an early proponent of lie detection played himself!

August Vollmer, keen to expound the virtues of scientific policing, played himself in *Officer 444,* a ten part silent film serial which "[showed] the machinery of the police in full swing against a sinister gang."[287] Once the master villain dr. Blakley, a.k.a. "The Frog," is captured he is subjected to an examination with "the "lieing machine" — a modern marvel of criminology — recording Blakley's guilt even while he is denying it."[288] Two decades later, in the 1948 Jimmy Stewart film *Call Northside 777,* Leonarde Keeler is called in to examine Frank, a man who, as it turns out, has been wrongfully convicted of murder. In a seven minute scene we watch Keeler explain the workings of the machine to the journalist investigating the case, we watch him perform his 'card trick' and the examination, and we see him begin to analyse the records. His acting was wooden at best, but he did get a great opportunity to demonstrate his instrument for the masses.[289] One notable thing pointed out by Bunn is

[287] "Chapter One. The Flying Squadron," *Officer 444,* directed by Francis Ford, (1926; Goodwill Pictures Incorporated)
[288] "Chapter Ten. Justice," *Officer 444,* directed by Francis Ford, (1926; Goodwill Pictures Incorporated)
[289] *Call Northside 777,* directed by Henry Hathaway, (1948; Chicago, IL: Twentieth Century Fox Film Corporation). https://www.youtube.com/watch?v=x7tq-4LlzI8&t=3346s; See Bunn, *The Truth Machine,* 172; Alder, "To Tell The Truth," 489; Bunn, "Spectacular Science," 162; Stevens, "Biography of Leonarde Keeler," 125

that "Keeler tacitly acknowledged that the examination was an ordeal when he lit up and offered a cigarette to a suspect on the completion of his deception test."[290]

Image 6. Leonarde Keeler (right) in *Call Northside 777*

The lie detector can also be found in the 1931 film *Sing Sing Nights,* the 1942 film *They Raid by Night,* and the 1946 film *The Truth About Murder.* In *Sing Sing Nights* a lie detector is employed to identify who shot the bullet that killed a man, and who merely shot the corpse. Three men are on death row for the murder, but the sense is that the two who did not shoot the fatal bullet should be pardoned. One of the men considering this conundrum suggests testing their physiological reactions while they each tell the story: "I have every confidence in Professor Varney's scientific apparatus in recording the pulse beat during the period in which the brain is concealing the truth." Professor Varney concurs: "If they speak at all, it will be impossible *not* to get the truth."[291] The 1942 World War II film *They Raid by Night*, meanwhile, shows the lie detector in a different light; it is shown to be beatable (by the good

[290] Bunn, "Spectacular Science," 162
[291] *Sing Sing Nights,* directed by Lewis D. Collins, (1934; New York, NY: Monogram pictures)

guy). As he is being questioned by the Germans, Capt. Robert Owen manages to trick "the apparatus" by surreptitiously burning himself with a cigarette at the right moment.[292] The 1946 film *The Truth About Murder* at one point in the production process was know as *The Lie Detector*, and indeed, a polygraph, in the final act, provides all the clues to clear up the mystery.

By the early 1950s at the latest, lie detection had made its tv-debut. In an episode of the science fiction anthology *Tales of Tomorrow,* entitled "Age of peril" a — fictional — lie detector is employed to identify a thief who has been stealing national secrets. The story is set in 1965 and contains the following piece of clunky expositional dialogue:

Chief: "Oh, and it might be wise to use that new lie detector. Get in touch with dr. Chappell in San Fransisco."

Calhoun: "Oh, yes. Dr. Chappell. He's the man who perfected the [lie detector], isn't he?"

Chief: "That's right. It's largely through his efforts that lie detector evidence is becoming fully accepted by our courts."

Calhoun: "Yes, i understand the court's really dependent on it now."

Chief: "Well, I think it's safe to say it's the most important device in criminology today. It's a good weapon, Calhoun. Use it!"[293]

Tales of Tomorrow's use of lie detection differs from earlier depictions in that cold war concerns about national security had crept into the story. It is also striking that the lie detector in 1952 was *still* part of a futuristic conception of policing and law.

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[292] *The Truth about Murder,* directed by Lew Landers, (1946; Los Angeles, CA: RKO Pictures)
[293] *Tales of Tomorrow,* episode 20 "Age of Peril," directed by Don Medfort, written by Fredric Brown, A.J. Russell, aired February 15, 1952.

At the same time it was also very current and very real. *Call Northside 777* was based on a real-life case that Keeler had been involved in; the wrongful conviction of Joseph Majczek and Theodore Marcinkiewicz. By late 1953 *The Billboard* reported that Keeler's cases were going to be the inspiration for another project: "Henry E. Dohney, of Tiffany TV Productions, announced that he has readied a pilot film based on true cases from police files in which the lie detector played an important role. (…) Tiffany has acquired the rights to the complete library of Leonard [sic] Keeler, inventor of the lie detector."[294] It is not clear to me whether this show was ever made. A show with a similar premise did air between October 1957 and April 1958. *The Court of Last Resort* was based on a column that Keeler had briefly been involved with (see section 4.3) and showed fictionalised accounts of real-life exoneration cases.

Aside from such fictional — or fictionalised — accounts of lie detection, the machine was also showcased in educational films. A reel from 1954 set out a scenario wherein an employee at a jeweller's has been stealing the merchandise. The lie detector is presented as a discreet, gentle way of finding out the truth. It is emphasised that an innocent suspect has nothing to fear at all.[295] In a 1951 film about the Detroit Police Department a new recruit is shown to be tested on the lie detector as part of his introduction to "modern scientific crime detection." The entertainment value of the instrument is emphasised: "Some of the police academy work was fun, like the day Joe volunteered to be a guinea pig for a polygraph or lie detector test. Now Joe thought he could fool the machine, but when the machine showed he was lying — just for fun, of course — he readily admitted that the polygraph had outsmarted him."[296] The idea that the lie detector is fun also led to the creation of a 1961 tv programme named *Lie Detector,* which used the instrument on celebrity guests. The show was short-lived, but did get revived in the 1980s.[297] Its entertainment value is also behind the use of the instrument as a gimmick in *The Jerry Springer Show* (1991– present)*, The Moment of Truth* (2008–2009)*, Dr. Phil* (2002– present) and so on.

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[294] "Tiffany Preps Pic On True Cop Cases," *The Billboard,* October 24, 1953: 10 https://books.google.nl/books?id=YgoEAAAAMBAJ&printsec=frontcover#v=onepage&q&f=false
[295] *Armstrong Circle Theater,* season 5, episode 8, "The Lie Detector," written by Irve Tunick, aired October 19, 1954. https://archive.org/details/gov.archives.arc.657141
[296] *This Is Your Police Department,* (1951; Jam Handy Organization) https://archive.org/details/0068ThisIsYourPoliceDepartment
[297] Bunn, "The Hazards of the Will to Truth," 17–18, 291

It is notable that the reality of lie detection was a major selling point for many of the above mentioned stories, films and programmes. So we have seen that Edwin Balmer and William MacHarg, the creators of the Luther Trant stories, made clear that the tools used by their fictional detective were not products of their imagination, but real-life instruments used by european scientists, just waiting to be applied to American policing. We have also noted that the real-life exploits of Leonarde Keeler were seen as an interesting source of inspiration by film makers.

Americans with an appetite for 'real' stories about lie detection could, of course, also get their fix from other outlets. Information about lie detection could be found in popular scientific texts, news articles and advertisements.

3.3 Sensationally Newsworthy

When Hugo Münsterberg, in 1906, injected himself into a fairly high profile murder trial, he provoked "a barrage of attacks on himself in the popular press."[298] Münsterberg, possessing an apparent masochistic streak, collected the angry articles and editorials and even quoted from them in *On the Witness Stand.* Headlines like "Harvard's contempt of court" and "Science Gone Crazy" made it abundantly clear that Münsterberg's applied psychology was not wanted; it merely offered "another way of possibly cheating justice," it would "emasculat[e] court procedure and discourag[e] and [disgust] every faithful officer of the law." Besides, "Illinois has quite enough of people with an itching mania for attending to other people's business without importing impertinence from Massachusetts."[299]

All Münsterberg had done in this instance was write a letter claiming that the suspect in a murder case had probably falsely confessed "in a state of dissociation."[300] Then in 1907, as we saw in Chapter 1, he actually examined the key witness in the trial for the murder of the former governor of Idaho, Frank Steunenberg. Münsterberg was there for *McClure's Magazine,* which wanted him to write

[298] James M. Doyle, *True Witness: Cops, Courts, Science, and the Battle against Misidentification* (New York, NY: Palgrave Macmillan, 2005): 16; for a particularly thorough account of the incident, see Golan, *Laws of Men and Laws of Nature,* 213 — 218
[299] Münsterberg, *On the Witness Stand,* 139–141
[300] Ibid., 165

an article about the trial. He performed his tests and wisely kept quiet about the results while still in Boise, but did something rather imprudent while on the train home; he told a reporter for the *Boston Herald* about his conclusions.[301] The resulting article caused nationwide outrage. As no verdict had yet been reached, Münsterberg's intrusion was thought to be inappropriate and prejudicial. His fellow psychologists, jurists, and journalists all condemned the professor as presumptuous and giving in to sensationalism.[302] *The New York Times* published a devastating satirical article in which they gave the Harvard professor a new name, "Monsterwork," and mocked his "Fibbographs," "his liar-detecting machines."[303]

These clashes with the media did not sour Münsterberg's attitude towards the press or make him retreat into academia. For one, the coverage was not unilaterally negative; the impact of the biting satirical article that appeared in the *New York Times* must have been lessened by the fact that the same news paper ran a glowingly positive article earlier that same week; "Prof. Munsterberg Experiments to Reduce Knowledge of Truth to a Science," proclaimed the writer, "Predicted Instruments Will Keep Innocent out of Jail."[304] Also, as we saw in chapter 1, Münsterberg believed that "if the time is ever to come when even the jurist is to show some concession to the spirit of modern psychology, public opinion will have to exert some pressure."[305] He poured whatever frustration he might have had about the hostility towards him into several articles for popular magazines such as *McClure's*. Then, in 1908, he collected these articles in his famous book *On the Witness Stand,* which was likewise directed at a general audience.

Later proponents of lie detection likewise had complicated relationships with the popular press. For the most part, they were not attacked like Münsterberg had been. In fact, the newspapers loved the lie detector; "they named the device, launched its career, gave it its purpose. The machine

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[301] Solomon M. Fulero and Lawrence S. Wrigthsman, *Forensic Psychology,* 3rd ed. (Belmont, CA: Wadsworth, Cengage Learning, 2009): 8
[302] Alder, *The Lie Detectors,* 48
[303] "I Can Tell If You're a Liar! Harvard Professor with Strenuous Name Invents Machine that Will Make Him Famous," *The New York Times,* September 15, 1907. The article, which is available at https://www.nytimes.com/1907/09/15/archives/i-can-tell-if-youre-a-liar-harvard-professor-with-strenuous-name.html, is well worth reading; it is deeply sardonic and very funny
[304] "Invents Machines for 'Cure of Liars," *New York Times,* September 11, 1907. https://www.nytimes.com/1907/09/11/archives/invents-machines-for-cure-of-liars-prof-munsterberg-experiments-to.html
[305] Münsterberg, *On the Witness Stand,* 11

made great copy, great pictures, great drama."[306] Yet Larson, Keeler and Marston all worried that the coverage might do more harm than good. As Keeler put it:

> "*"Lie-Detector Solves Murder," "Suspect's High Blood-Pressure Thwarts Lie-Detector Test," "Machine Says Suspect Lies," "Suspect Says Machine Lies."* Such newspaper headlines and their accompanying stories are taken up by paper pulp magazines with fantastic elaborations. News stories on this order blossom forth when deception tests are made at police stations, for reporters insist upon being present, photographers attempt to snatch a picture or two, and when the operator withholds results the journalists cheerfully offers to the public his own conception of them. Laymen are led to believe that indicators jump in a defined manner when a subject lies, or that a little red light flashes, or that a bell rings. Certain so-called experts refer to their instruments as "lie-detectors," and give the impression that they really have such a device."[307]

Still, Keeler's professed distaste for sensational articles is a little hard to take seriously, when we consider how deftly he crafted a public persona for himself and how eagerly he took on high-profile cases. In fact, it has been suggested that he was pushed out of his job at the Scientific Crime Detection Laboratory in 1938, because it was feared that his "mania for publicity" would lead him to take credit for solving cases.[308] Marston claimed to take issue with "picturesque press embroidery" and Larson loathed that there was no scientifically accurate information about lie detection available to the public, because "much of the material is being dished out through rewrite men to various magazines and newspaper reporters."[309] Yet both also sought out publicity, although it should be granted that Larson did so far less than Marston and Keeler.

When Larson went to work with his lie detector in Berkeley, journalists were eager to tell the stories and Larson and his boss, media-darling August Vollmer, were initially happy to help.[310] So, when the *San Francisco Call and Post* invited Larson to secretly examine the suspect in a high-profile

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[306] Alder, *The Lie Detectors,* 29
[307] Leonarde Keeler, "Debunking the Lie-Detector," *Journal of Criminal Law and Criminology,* 25, no. 1 (1934): 153
[308] Alder, "A Social History of Untruth," 11; Alder, *The Lie Detectors,* 152
[309] Quoted in Bunn, "The Hazards of the Will to Truth," 120 and Bunn, *The Truth Machine,*" 133; Larson quote from Larson, "The Lie Detector," 893
[310] Bunn, *The Truth Machine,* 163–164

murder case, he obliged and granted the paper the exclusive rights to publish his conclusions. The sensational article stated that the test had shown conclusively that the suspect was guilty. Accompanying the article were the records, big arrows indicating where the suspect had apparently lied. Both Larson and Vollmer were interviewed for the piece and both men made grand claims about the machine's merits.[311]

Apart from encouraging the bay-area journalists in their interest in lie detection, Vollmer himself actively contributed to promoting the device. In 1922 he wrote an article about Larson's very first case with his lie detector, in which he examined a group of female students after a series of thefts had shaken up a sorority house. In Alder's words, Vollmer's article was a "soft-core version" of the story, in which "the Chief wallowed in the hothouse sexuality of the all-female dorm."[312]

Larson's involvement with another high-profile case, meanwhile, soured his relationship with the press. After examining Henry Wilkins, suspected of having ordered the murder of his wife, Larson told the *San Francisco Examiner* that the suspect was not involved in the crime. When an alleged hit-man later confessed to having been hired by Wilkins and the trial proceedings challenged the narrative that Wilkins was an honest man, Larson felt he had been duped.[313] He came to feel that the tales spun by the popular press were detrimental to the instrument's acceptance as a serious policing tool. Yet Larson continued to occasionally talk to the press, if only to challenge Keeler; in 1934, for example, he gave an interview in which he "claimed credit for the machine and disavowed any responsibility for its abuse (…) [he] blamed Keeler for training unethical interrogators. He insisted that the instrument was fit only for psychiatric diagnosis, then offered his services free to the Chicago police to test their suspects."[314]

In the same year that the Bay Area papers gave Vollmer, Larson and Keeler's machinery the name "lie detector," Marston, out in Boston, was working to publicise his own technique. He sent a press release to the newspapers, along with some photographs of him standing over a woman strapped into a pneumograph and blood pressure cuff. The photographs were taken on Marston's own porch and the test subject was the secretary at his (failing) legal firm.[315] On May 14th, the *Philadelphia Inquirer*

[311] Alder, *The Lie Detectors,* 30–31
[312] Ibid., 14
[313] Ibid., 33–35
[314] Ibid., 156
[315] Lepore, *The Secret History of Wonder Woman,* 60–61

ran a headline which read "Machine Detects Liars, Traps Crooks." In later years, when he tried to claim priority over Larson, he would refer to this article.

It would not be the last time that Marston conducted experiments in public to pique the interest of the news media. During the *Frye* case, on "the first day Frye testified, Marston went to court and tested his apparatus, apparently in the hallway."[316] Pictures of this spectacle appeared in the *Washington Daily News* the next day. Marston's reasons for taking the Frye case — without charging a fee, no less — may have been noble. But the impromptu demonstration before the press underscores that he also appreciated what the high-profile case might do for his reputation.

In January of 1928, Marston set up another demonstration in the Embassy Theatre in New York and invited reporters and photographers invited to witness the spectacle. His subjects were six young actresses, three blondes and three brunettes. The question was how blondes and brunettes would react to romantic scenes from 1926's *Flesh and the Devil* and 1927's *Life.* Both films were MGM productions and starred Hollywood's favourite couple: Greta Garbo and John Gilbert. They "were renowned for their seductive eroticism."[317] Marston concluded that the brunettes became aroused more easily than the blondes.[318] This stunt marked Marston's entry into advertising (about which more below).

Though the media were interested in "the lie detector" from the moment they christened Larson's device thus, there was "an explosion of interest in the instrument in the 1930s."[319] By this time Keeler and his new wife Katherine (neé Applegate) were working at the Scientific Crime Detection Laboratory in Chicago.

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[316] Lepore, "On Evidence," 1126

[317] Ana Olenina, "The Doubly Wired Spectator: Marston's Theory of Emotions and Psychophysiological Research on Cinematic Pleasure in the 1920s," *Film History,* 27, no. 1 (2015): 40

[318] Lepore, *The Secret History of Wonder Woman,* 134; Alder, *The Lie Detectors,* 185–186; A newsreel video of Marston conducting experiments on blondes, brunettes and redheads a couple of years after his theatre experiment is available at https://www.youtube.com/watch?v=LZ1YdWIaXdU I highly recommend giving it a watch: It is absurd and kind of magical.

[319] Bunn, "The Hazards of the Will to Truth," 210; As I have argued in the introduction of this paper, the claim that the lie detector was invented at all is nonsensical. Bunn has convincingly argued that 1921 — the year that the papers got wind of Larson's work and baptised his equipment "the lie detector" — was the year in which "the idea that the lie detector was an invention" was invented. See Bunn, "The Hazards of the Will to Truth," 121 and Bunn, *The Truth Machine,* 116–133

The first case that Keeler became involved with while in Chicago, the Canary murder case described in the previous chapter (page 66) was absurd and trivial and no journalist in their right mind would pass on the opportunity to report on it. The judge who had gotten Keeler involved in this case was thoroughly impressed with the result and even arranged for the lie detection expert to perform a test on *him*, in the presence of a reporter for the *Chicago Tribune* and some Chicago notables.[320] Horner became the governor of Illinois In 1933 and "[sent] a hefty chunk of the state's criminal business to Keeler at Northwestern's Scientific Detection Crime lab."[321]

In the years that followed the Canary Murder Case, Keeler took on various high-profile cases and gave demonstrations in front of all sorts of audiences. Newspapers ate it up; the lie detection spoke to the most sensational aspects of crimes, and articles about the Scientific Crime Detection Lab often focussed on the instrument.[322] For his part, Keeler was a handsome, charismatic man, who got along with people easily. In addition, he formed a crime-fighting team with his attractive wife; the mix of all these elements made the story of Leonarde Keeler and his polygraph simply irresistible.

His reputation suffered a major blow, however, when he played a role in the execution of Joseph Rappaport, who had been convicted for the murder of a police officer. Governor Horner had granted five stays of execution, but time was running out. As the story goes, Rappaport's sister went to the governor and, with an emotional appeal, managed to get one last concession; the governor would consider postponing the execution for a sixth time, *if* Rappaport was able to pass a lie detector test. Keeler was called to the condemned man's cell and administered the test. Rappaport failed and died on the electric chair a few hours later.

The media and Keeler's colleagues were less than impressed; many thought it was a brutal and primitive way to determine someone's fate. Keeler's polygrapher colleagues pointed out that establishing a baseline under these circumstances would be near impossible.[323] Indeed, the test was deeply flawed. Not only was it performed in what would appear to be the single most high-pressure situation — the only way to avert the execution scheduled *for that day*, would be to pass the test — but

[320] Alder, *The Lie Detectors,* 113
[321] Alder, "To Tell the Truth," 504
[322] Bunn, *The Truth Machine,* 168–169
[323] Alder, *The Lie Detectors,* 150

the room was crowded with reporters, scientists, lawyers and witnesses.[324]

After he was forced out of his position at the crime lab, Keeler opened his own lie detection firm. This new venture focussed on personnel screening and educating lie detector operators. He and his lie detector continued to make frequent appearances in the press.[325] He took on several high profile cases, one of which —the 1943 murder of multimillionaire Sir Harry Oakes — would "[lift] Keeler to a new level of American Stardom."[326]

Then, of course, there was the case which was made into *Call Northside 777*. In this film, as we have seen, a reporter sets out to prove the innocence of a man who has been condemned by the court. This type of story appears to have had a recent revival with podcasts such as *Serial* and *Undisclosed* and television shows such as *Making a Murderer.* Keeler, for his part, knew that exoneration stories would find an eager audience. In 1949, Keeler teamed up with a novelist and a detective, Erle Stanley Gardner and Raymond Schindler, to create the Court of Last Resort, a column which appeared in *Argosy,* a pulp magazine. Keeler's connection with the project was short lived, as he passed away in that same year, but the lie detector remained an important part of it, with help from Keeler's associate Alex Gregory.[327]

Thus far, I have only discussed non-fictional products that involved Marston, Larson or Keeler, but the fact is that there were plenty of non-fictional articles, newsreels and tv programmes that did not involve these men. For one, any one who made a modification to the technique was hailed as the inventor of a 'new' lie detector. In addition, there were plenty of news articles about crimes that were solved with the help of other named and unnamed lie detector operators.

3.4 Honest Advertising

In the 1960s, Kentucky Fried Chicken ran a commercial in which the brand's founder, Colonel Sanders, was "subjected to a lie detector examination by a group of belligerent housewives

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[324] Bunn, *TheTruth Machine,* 176
[325] Alder, *The Lie Detectors,* 167
[326] Ibid., 232
[327] Erle Stanley Gardner, *The Court of Last Resort. The True Story of a Team of Crime Experts Who Fought to Save the Wrongfully Convicted,* 1952, (New York, NY: Open Road, 2017), e-book; Stevens, "Biography of Leonarde Keeler," 124

seeking the secret recipe for his "finger lickin' good" chicken."[328] This was by no means the first time the lie detector was used for advertising. It bears returning, for a moment, to the relationship between Marston, Keeler and the film industry.

Marston to my knowledge never appeared in a film himself, but he did nurture a close relationship with Hollywood. His earliest interactions occurred when he was still studying at Harvard; during these years, Marston had written several screenplays (among them *Love in an Apartment Hotel*, which was directed by D.W. Griffith).[329] His interest in film was something he shared with his mentor Münsterberg, who had, in 1916, published "the first serious book on film theory, *The Photoplay: A Psychological Study.*"[330] Marston's experiments in the Embassy Theater were a "publicity stunt;" apparently, he had founded an advertising agency.[331] The product he was selling might have been his book *Emotions of Normal People,* which was set to be published later that year. The stunt worked; "overnight, he turned from a little-known psychology lecturer into a minor celebrity."[332]

He next found employment as a psychological consultant in Hollywood.[333] His role had a distinct whiff of advertising to it; as head of the Public Service Bureau at Universal Pictures he not only consulted on the best way to make films attractive to audiences, he also worked on audience engagement (e.g. setting contests) and on reassuring censors and worried citizen groups that Universal was committed to creating morally constructive pictures.[334] He would "[arrange] screenings where he tracked the responses of squirming test audiences so that the studio might fine-tune the appeal of the movie, forestall public controversy, and reduce expensive post-release editing.[335] When Marston lost the gig with Universal Pictures he went on to work with Paramount for a short period of time, conducting experiments on test audiences for *Dr. Jekyll and Mr. Hyde.*[336]

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[328] Bunn, "The Hazards of the Will to Truth," 292
[329] Lepore, "On Evidence," 1107
[330] Olenina, "The Doubly Wired Spectator," 30
[331] Lepore, *The Secret History of Wonder Woman,* 134
[332] Olenina, "The Doubly Wired Spectator," 40
[333] Geoffrey C. Bunn, "The lie detector, Wonder Woman and liberty: the life and work of William Moulton Marston," *History of the Human Sciences,* 10, no. 1 (1997): 97–99; Lepore, *The Secret History of Wonder Woman,"* 138–141
[334] Olenina, "The Doubly Wired Spectator," 44–45
[335] Alder, *The Lie Detectors,* 187
[336] Lepore, *The Secret History of Wonder Woman,* 141

After Marston left Universal, the company hired Leonarde Keeler (who had likewise been fostering a relationship with Hollywood since the 1920s) to study audience reactions to Frankenstein, a movie bound to get the studio in trouble with viewers and censors if they were not careful.[337] Relying on the results from Keeler's tests, the studio "trimmed a scene in which the Monster drowns a little girl; eliminated three close-ups of Fritz torturing the Monster; and deleted Dr. Frankenstein's blasphemous cry, as the Monster rose from the dead: "Now I know what it feels like to BE God!""[338] Universal Pictures appears to have used the fact that *Frankenstein* was fine-tuned with the help of lie detection as part of their advertising campaign.[339]

Other companies, too, realised the lie detector could help them sell their products. In 1938, Walter G. Summers "aided the sale of Conoco Oil in a full page advertisement giving a picture and chart of the "Lie-Detector"," with the help of his pathometer.[340] Marston, in that same year, approached Gillette with an idea for an advertisement; he would test men while they shaved with blades from different brands. Of course, Gillette would come out on top. The advertisement, which appeared in *Life* on November 21st of that same year (see image 7) proclaimed: "Outstanding superiority of Gillette blade proved beyond shadow of doubt in astonishing series of scientific tests." The advertisement was meant to do more than just sell razor blades; it "was advertising at least three things: Gillette razor blades, the lie detector, and Marston himself.'[341]

Marston's ambitions for the Gillette project were partially thwarted by John Larson. After Marston failed to repeat his results while performing the shaving experiment before an audience of Detroit police officers, Gillette called on Larson for a second opinion. Larson failed to replicate Marston's original results, after which Marston tried to bribe his colleague. In an amazing turn of events, the FBI ended up investigating the affair. At the bottom of the report Hoover himself wrote: "I always thought this fellow Marston was a phony & this proves it."[342]

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[337] Alder, *The Lie Detectors,*188; Bunn, *The Truth Machine,* 164–165
[338] Alder, *The Lie Detectors*, 188
[339] Ibid., 189
[340] Jordan, "Evidence-Admissibility of Deception ("Lie-Detector") Tests," 289. According to Jordan the advertisement appeared in the *Saturday Evening Post* of May 21, 1938.
[341] Bunn, "The Hazards of the Will to Truth," 190
[342] Quoted in Lepore, *The Secret History of Wonder Woman,*168; See also Alder, *The Lie Detectors,* 189–190

Image 7. Gillette razor blades advertisement. *Life,* November 21, 1938

3.5 Tall Tales in the Netherlands

It is difficult to gauge how well known American fictional detectives were in the Netherlands. There are a few things we can establish, however; at least some of the Luther Trant and Craig

Kennedy stories were translated and published in the Netherlands, as early as 1910. The *Algemeen Handelsblad* published two of the Trant stories in late 1910 and early 1911; first, "The Fast Watch," in which Trant proved the innocence of one suspect and the guilt of another with the help of a galvanometer, and second, "The Eleventh Hour," in which the detective used a "psychometer — which is really an improved and much more spectacular galvanometer" — to examine four "Chinamen."[343] Beyond these two stories, however, Luther Trant does not seem to have made much of an impact in the Netherlands.

Like the Luther Trant stories, some translated Craig Kennedy stories ran in the *feuilleton* of at least one newspaper in the early 1920s.[344] Unlike Trant, however, Reeve's detective seems to have had some minor staying power; over the next couple of decades we encounter sporadic mentions of the American sleuth. In 1916, for example, the popular tabloid *Wereldkroniek* put out an advertisement which encouraged people to buy (à 10 cents) their newest edition "in which will be started with the interesting, highly exciting novel "Prof. Craig Kennedy." The American Sherlock Holmes."[345] The fact that they used Reeve's story to advertise their magazine should tell us that they were confident that their audience would perhaps be familiar with — or at least interested in — the scientific detective. Reeve is further mentioned by a Dutch literary critic as an example of a serviceable detective-story writer in 1921.[346] In this article the critic also notes that people read "countless" English and American

[343] Edwin Balmer and William MacHarg, "The Fast Watch," *The Achievements of Luther Trant,* (Boston, MA: Small, Maynard & Company, 1910): 43–44, 54–57, 65–69; Edwin Balmer and William MacHarg, "The Eleventh Hour," *The Achievements of Luther Trant,* (Boston, MA: Small, Maynard & Company, 1910): 351–360; These stories appeared as "De Moord op Rechter Bronson," and "Om Elf Uur" in the *Algemeen Handelsblad,* between December 1910 and January 1911 and in February 1911, respectively.

[344] The *Middelburgsche courant* published both "The Diamond Maker" and "The Terror in the Air" in their feuilleton between August of 1911 and January of 1912.

[345] *Nieuwe Rotterdamse Courant,* August 17, 1916. Original "waarin begonnen wordt met den boeienden, hoogst spannenden roman "Prof. Craig Kennedy." De Amerikaansche Sherlock Holmes."

[346] The Dutch author and literary critic E. du Perron would not have agreed with this fairly positive appraisal. In 1929 he had the publisher A.A.M. Stols order him the Kennedy novels from Harper & Brothers in New York. On the day that he received the books he wrote the following urgent note: "Dear Sander, I rush to write to you to tell you that — should those Harper Brothers have the nefarious plan to send you some more Craig Kennedy's — you must dissuade them from doing so, via telegraph if necessary! It is hopeless rubbish, and thank God that they did not send the entire series!" E. du Perron to A.A.M. Stols, Brussel, February 14, 1929, in E. du Perron. *Brieven. Deel 1. 9 september 1922-28 december 1929,* eds. Piet Delen, Jaap Goedegebuure, H.A. Gomperts, J.H.W. Veenstra en Herman Verhaar (Amsterdam: G.A. van Oorschot, 1977), 320. http://www.dbnl.org/tekst/du_p001brie02_01/du_p001brie02_01_0247.php Original: "Beste Sander, Ik hààst me je te schrijven om je te zeggen dat - mochten die Harpers Broeders het snoode plan koesteren je nog wat méér Craig Kennedy's te sturen - je ze desnoods telegraphisch daarvan moet zien af te brengen! Het is een hopelooze rubbish, en God zij gedankt dat zij niet de hééle serie hebben opgezonden!"

detective stories.[347] In the 30s, at least two different Craig Kennedy collections were available to the Dutch public, both as books and in the *feuilleton* of at least one regional newspaper in 1934.[348]

The Dick Tracy comics, meanwhile, were "virtually unknown" in the Netherlands.[349] References to Dick Tracy did pop up in some of the American novels that were translated for the *feuilleton.* For example, *Home Sweet Homicide,* by Craig Rice, saw the young protagonists trying to figure out whether someone is a detective "like Dick Tracy."[350] When one cinema played a Dick Tracy film — I believe the 73 minutes long feature film edit of the 1937 serial "Dick Tracy" — the person responsible for describing the movie for the communist daily newspaper *De Waarheid* expressed their distaste for the film; it was "typical American kitsch, in which murder and manslaughter are warp and weft, and are thereby elevated to entertainment."[351] In an article about kids playing in New York, a journalist for *Trouw* expressed unease about the facts that kids playing cops and robbers were imitating Dick Tracy.[352] To my knowledge, no reference to Dick Tracy's use of forensic technology in general, or lie detection in particular, ever made it into Dutch newspapers.

Lie detection, then, failed to make much of an impact through these fictional American detectives, but perhaps a Dutch author would do better. Jan Walch, inspired by a feature about lie detection in the tabloid *Wereldkroniek,* wrote a novel about a man who lost his ability to lie after an operation. The novel appeared in the *feuilleton* of multiple regional newspapers.[353] It mainly deals with the troubles caused by not being able to lie: The poor mr. dr. Henri van Hoghen Lugt certainly cannot

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[347] W.G.N. De Keizer, "De Nederlandsche detective-roman," *Den Gulden Winckel,* 20, no. 1 (1921): 1–3. Original "tallooze." See also; Mathijs Sanders, "De criticus als bemiddelaar. *Middlebrow* en de Nederlandse literaire kritiek in het interbellum," *Tijdschrift voor Nederlandse Taal- & Letterkunde,* 124 (2008): 325–326

[348] As "Het geheimzinnige schot" in *De Zuid-Willemsvaart* in June and August of 1934. It was also published in book form, but I do not know the publication details. Meanwhile, *The Dream Doctor* appeared as *De Droomuitlegger*, according to the *Boekengids. Algemeen Nederlandsch Bibliografisch Tijdschrift,* 18, no. 1 (1940): 30. http://www.dbnl.org/arch/_boe012194001_01/pag/_boe012194001_01.pdf

[349] "Grandeur en misère van de strip," *Algemeen Handelsblad,* January 21, 1961

[350] The novel appeared as "Marians Kinderen," in *De Waarheid,* between July 4, 1947 and November 1, 1947, and as "Kleine potjes hebben grote oren," in *De Volkskrant,* from April 5, 1952

[351] "Uit de wereld van de film," *De Waarheid,* May 12, 1951. Original: "gebruikelijke Amerikaanse Kitsch, waarin moord en doodslag schering en inslag zijn, en aldus tot „ontspanningsfilm" verheven wordt."

[352] "New York. Gevaarlijk voor straatspel," *Trouw,* December 21, 1951

[353] Among others in the *Provinciale Overijsselsche en Zwolsche courant*, between July 11, 1932 and September 19, 1932; in the *Provinciale Geldersche en Nijmeegsche courant*, between Oktober 21, 1932 and December 31, 1932; in the *Deltsche courant,* between December 10, 1932 and March 1, 1933; and in the *Provinciale Drentsche en Asser courant,* between June 22, 1933 and September 7, 1933; The novel was published in these newspaper as *De gevolgen van een operatie* [The consequences of an operation] and later appeared in book-form as Jan Walch, *Het vreemde geval van Hoghen Lugt* [The strange case of Hoghen Lugt] (Den Haag: Zuid-Hollandsche Boek- en Handelsdrukkerij, 1933), http://resolver.kb.nl/resolve?urn=MMKB05:000038028. I what follows I will be referencing the book version.

remain a civil servant. His brief foray into the financial world is equally unsuccessful; after all, in the midst of a financial crisis, a bank would not want to frighten their clients with the honest truth about the bank's precarious situation. Nor is a career as a judge a possibility, because the patient not only cannot lie, he is also unable to discern lies in other people. For the same reason a job in education is impossible: "Could you imagine a class with boys and especially — I beg your pardon — with girls, who would not, who would *never*, lie to you?"[354]

The lie detector makes an appearance in this story when the main character's wife, Clara, reads the above-mentioned article in the *Wereldkroniek*: "How wonderfully could that [machine] demonstrate his recovery…" she thinks to herself. "Oh, how delightful it would be if the lie-detector had much to accuse him of…"[355] Clara somewhat shyly shows the article to Henri's doctor, admitting that it may well be American "humbug." Dr. Marelman is skeptical, but agrees to read up on the matter. A dear friend to whom Clara shows the article is also initially unimpressed by this American innovation: "The land of unlimited possibilities," he mocks, "That is to say, that they want to make us believe all manner of things are possible there, that are impossible here. Such a mechanical examination of the inner world of a human is precisely in their genre."[356] He also remarks that Henri may be a wonderful object with which to test the machine, rather than the other way around. Indeed, when the doctor decides to order a lie-detector, he is interested in taking Henri to psychiatric conferences as a "demonstration object". To this, Clara objects vehemently: "*No*! We are not in favour of vivisection."[357]

When the lie detector arrives, it turns out to be mainly a very *fun* instrument; Dr. Marelman has as much fun with it "as a birthday boy with his new toy train" and he takes "a kind of perverse pleasure" in testing his friends.[358] This fashionable toy, this Americanism, becomes a great success — raking in money for Dr. Marelman — but purely for its entertainment value. For Henri, the questions

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[354] Walch, *Het vreemde geval,* 234. Original: "kunt u zich een klas met jongens en vooral — pardon — met meisjes voorstellen, die je niet, die je nóóit een iets voor-liegen?"
[355] Ibid., 233. Original: "Hoe prachtig zou dáármee zijn genezing te demonstreeren zijn…O, wat zou het héérlijk wezen als die lie-detector hem véél te verwijten had…"
[356] Ibid., 234. Original: "Het land van de onbegrensde mogelijkheden (…) Dat wil zeggen, dat ze ons daar allerlei als mogelijk willen wijsmaken, dat hier ónmogelijk is. Zoo'n mechanische beschouwing van het innerlijk van een mensch is wel precies in hun genre"
[357] Ibid., 244. Original: "demonstratie-object (…) Néé! Wij zijn niet voor de vivisectie."
[358] Ibid., 266. Original: "als een jarig jongetje met zijn nieuwe spoortreintje;" "pervers genoegen."

asked are embarrassing, but he continues to answer them truthfully, which is painful to both him and Clara. Eventually, they set it aside, because the would-be treatment is "worse than the ailment."[359] Later, once Henri has seemingly regained his ability to lie, the doctor tries the lie detector one more time, "as the culmination of the experiment."[360]

The workings of lie detection in this book are remarkable. In Walch's telling, it is a small machine that is strapped to the chest (see image 8), which can identify the degree of deception with remarkable precision: "The machine shows a deviation of approximately 179 degrees; that is to say: it claims that your answer is approximately diametrically opposed to the truth."[361] The characters in the novel move from extreme skepticism — treating the Americans' claim that such a machine could actually work as laughable — to complete faith in the lie detector. At no point in the book, however, does anyone ever consider using it in any serious manner. Not only is its application to the specific medical problem at the centre of the story utterly unsuccessful, but there is continuous emphasis on the machine's role as a (rather lucrative) toy or party trick. It is implied that the machine cannot (or perhaps ought not) be used for anything serious.

[359] Walch, *Het vreemde geval*, 281. Original: "erger dan de kwaal"
[360] Ibid., 297. Original: "tot bekroning van het experiment."
[361] Ibid., 266. Original: "op hun borst (…) vastgeschroefd"; "De machine vertoont een afwijking van ongeveer 179 graden; dat wil zeggen: ze beweert, dat je antwoord ongeveer diametraal tegenover de waarheid staat."

Image 8. A lie detector as imagined by Jan Walch and Hans Borrebach

3.6 Non-Fictional Portrayals of Lie Detection

When American newspapers told the tale of Münsterberg's involvement in the 1907 trial mentioned above, this did not go unnoticed in the Netherlands. Several regional newspapers picked up on the story, emphasising Münsterberg's instruments over any details of the case.[362] As was true in the American press, there was quite a bit of scepticism surrounding Münsterberg's claims. One journalist found the idea laughable and typically American and played with the idea of testing politicians with the instruments invented by the "soulologist."[363] Another argued that Münsterberg's tools would make "a modern inquisition" possible. They also pointed out that someone with a nervous disposition would easily fall prey to the instruments, while conversely, Münsterberg's determination that the witness was telling the truth might only indicate that he was able to remain cool under pressure.

[362] "Het ontdekken van meineeden langs mechanischen weg," *Provinciale Noordbrabantsche en 's Hertogenbossche courant*, September 7, 1907; "Een zonderling toestel," *Leeuwarder courant*, September 7, 1907; "Nu geen leugens meer," *De Peel- en Kempenbode*, September 14, 1907; "Een inquisitie-machine," *Provinciale Geldersche en Nijmeegsche courant*, October 27, 1907; "Hoe men meineed ontdekken kan," *Nieuwsblad van Friesland*, December 28, 1907
[363] *De Peel- en Kempenbode*, September 14, 1907. Original; "zielkundige"

The first use of the term lie detection in the Dutch news media appeared in a very short 1922 article in the *Rotterdamsch Nieuwsblad.* The article was accompanied by an image of two men, sitting across from each other (see image 9). The man on the right was identified as the chief commissioner of the San Fransisco police department; I suspect this is actually Vollmer — chief of the *Berkeley* police — sitting for a demonstration. He has a strap around his chest and a blood pressure cuff on his right arm. A pair of disembodied hands (presumably Larson's) fiddle with the pump and the pressure gauge. In this article, the machine's workings were explained as follows: "This instrument enables the investigator to establish when a suspect interrogated by him tells lies, as the nervous vibrations of the interviewee show deviations when he lies and these are inscribed."[364] The writer noted that the police could benefit greatly from the machine.

Image 9. The first image of a lie detector in the Dutch newspapers

[364] "Om leugenaars te ontmaskeren," *Rotterdamsch nieuwsblad*, July 29, 1922; Reprinted in *Haagsche courant*, July 7, 1922. Original: "Dit toestel stelt den ondervrager in staat vast te stellen, wanneer een door hem ondervraagde beklaagde leugens vertelt, daar de zenuwtrillingen van den ondervraagde afwijkingen vertoonen, wanneer hij liegt en deze worden genoteerd."

This initial report remained the only mention of lie detection in the Dutch news media until 1929, when the widely read liberal news paper *Algemeen Handelsblad* ran a report about Vollmer's police reforms.[365] The article was written on the occasion of Vollmer's appointment as "Professor of Police Administration" in Chicago. The author praised the various changes that Vollmer had made to police practices and contrasted the success rate of the Berkeley police department with its Chicago counterpart. Clearly, Chicago would do well to copy Berkeley's example:

> "When one reads, that crime costs the US 31,2 billion Guilders [12,5 billion US Dollars] each year (…) and that each year 12.000 people are murdered there; that there are in that country fifty times as many murderers as in England, and that the average number of criminals in Chicago is 10,000, then (…) Vollmer will have a lot of organising and reorganising to do."[366]

In other words, the situation in Chicago was bad enough that a radically new approach was necessary. The author did not discuss whether and how the lie detector might fit in; the author only mentioned the machine as one among the many technologies that Vollmer had introduced. They explained, in general terms, how the "*leugenontdekker*" works, but expressed no opinion on its merits. But we do not have to look very far to find the very first Dutch valuation of lie detection.

In May of 1930 multiple newspapers reported that psychologists at the University of Chicago were planning to conduct a large scale experiment with lie detection. The experiment, which would test more than one thousand subjects, was the initiative of Vollmer. The *Algemeen Handelsblad* reported the facts in a fairly neutral manner, dryly noting that thus far there was no confirmation that the lie detector was causing "a general revolution in the processes of the courts."[367] Several other newspapers, however, ran versions of an article that contained some sensationalist elements. "A dangerous machine

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[365] "Recht en Onrecht: August Vollmer's bestrijding der misdaad,"*Algemeen Handelsblad,* September 13, 1929.
[366] *Algemeen Handelsblad,* September 13, 1929. Original: "Wanneer men leest dat de misdaad de Ver. Staten jaarlijks 31,2 milliard gulden kost (…) en dat daar ieder jaar 12.000 menschen vermoord worden; dat er in dat land vijftig maal zooveel moodenaars zijn dan in Engeland, en dat het gemiddelde aantal misdadigers in Chicago 10.000 is, dan (…) zal Vollmer heel wat te organiseeren en reorganiseeren hebben."
[367] "De leugenontdekker. Een onderzoek bij meer dan duizend menschen," *Algemeen Handelsblad,* May 8, 1930. Original: "in de processen voor de rechtbanken een algeheele revolutie"

for liars," one was titled, while three others dropped the "for liars" part.[368] In the full version of that article, "an evil time for the people" is said to be on its way.[369] Another article — similar in content, but seemingly from the slightly more flowery pen of another journalist — warned that "dark clouds are gathering over the heads of us, liars."[370] Lying, argued these authors, makes the world run smoothly. If we did not bend the truth from time to time, "no husband would last with his wife, no director with his companion, no employer with his employee and no human with his fellow humans";[371] the world would devolve into "hate and envy, murder and manslaughter, more than is sadly already the case."

However this may be, all agreed that lying to a judge was forbidden and "that will come to an end, at least it may come to an end in the United States" because of the introduction of lie detection.[372] This is almost a throw-away remark, however. Instead the focus is on how terrible it would be if such a machine became as easily available as "vacuum cleaners, sewing machines and radio with payment in instalments."[373] Only one newspaper does not reference this worry about lie detection in society-at-large, as it has significantly shortened the earlier article. Even in this matter-of-fact version, the title calls the lie detector dangerous.[374]

This story also led to an entirely different way of talking about lie detection. Columnists and opinion writers enlisted lie detection to chastise politicians for lying. In this case, a short tongue-in-cheek message appeared in the *Algemeen Handelsblad* which suggested that upon hearing the news of the invention of lie detection, Dutch political parties were all scrambling to obtain the exclusive rights to import the machine, "in this case not for re-sale."[375] The use of lie detection for the purposes of gentle

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[368] "Een gevaarlijke machine voor leugenaars," *Provinciale Drentsche en Asser courant*, May 7, 1930; "Een gevaarlijke machine," *Limburgsch dagblad,* May 8, 1930; "Een gevaarlijke machine," *Limburger koerier,* May 10, 1930; "Een gevaarlijke machine," *Provinciale Noordbrabantsche en 's Hertogenbossche courant,* May 10, 1930.
[369] *Provinciale Drentsche en Asser courant*, May 7, 1930. Original: "een kwade tijd voor de mensen."
[370] "Krabbels. Leugenmachine," *Twentsch dagblad Tubantia en Enschedesche courant,* May 9, 1930. Original: "Donkere wolken pakken zich samen boven de hoofden van ons, leugenaars."
[371] Ibid. Original: "dan hield geen man het met zijn vrouw, geen directeur het met zijn compagnon, geen werkgever het met zijn werknemer en geen mensch het met zijn medemenschen uit."
[372] *Provinciale Drentsche en Asser courant*, May 7, 1930. Original: "haat en nijd, moord en doodslag, meer dan dat het nu helaas reeds het geval is;" "Doch daar komt een einde aan, tenminste er komt misschien een eind aan in de Vereenigde Staten."
[373] *Twentsch dagblad Tubantia en Enschedesche courant,* May 9, 1930. Original: "stofzuigers, naaimachines en radio op afbetaling."
[374] *Limburger koerier,* May 10, 1930
[375] "Den bonte boel," *Algemeen Handelsblad,* May 10, 1930.

satire was a fairly common occurrence over the course of the twentieth century, with suggestions of applying the technology to diplomats, civil servants, or even (competing) newspapers.[376]

The connection between lie detection and narco-analysis, which we encountered in chapter 1, was also made by journalists, beginning with an article from February of 1935: "The American inventor Keller [sic], who surprised the world some years ago with his lie detector, has at present invented the counterpart of this, namely a truth serum."[377] This reporting is incorrect; Keeler is not credited with inventing the truth serum. He did, however, take an interest in, and experiment with, the use of such serums in the 1930s.[378] The article illustrates that, by this time, there was an expectation that readers would be at least somewhat familiar with lie detection. Coincidentally, it marked the first time that Keeler was mentioned at all. Marston *did* manage to make a few headlines before this time, but only in connection to his blondes-and-brunettes experiments.[379] The "invention" of lie detection was generally left underexplored in Dutch news-articles.

In 1936 and 1940, three articles appeared which took a critical look at the American police system. According to E. Elias, who wrote all three:

> "The best method to get a suspect to speak out was invented by Dr. Keeler and is named the Keeler Polygraph. It is a scientific method, which is known as "Lie detector." Hard-handedness is ruled out [with this method.] Dr. Keeler's method has already been successful in 3500 cases. However (…) the American police system rejects interference by criminologists, it wishes to invent its own methods. And when Sir Henry Morton Robinson, a prominent officer from the world of policing in Chicago, asked an inspector of the New York criminal police

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376 "????," *Algemeen Handelsblad,* March 4,1937; "Spotternij of Sotternij," *De Telegraaf,* April 22, 1938; "Aangenomen!," *De Waarheid,* October 10, 1947.
377 "Een waarheidsserum? Met funeste uitwerking," *Provinciale Geldersche en Nijmeegsche courant,* February 25, 1935. Original: "De Amerikaansche uitvinder Keller, die eenige jaren geleden de wereld heeft verrast met zijn leugendetector, heeft thans het pendant hiervan uitgevonden, n.l. een waarheidsserum."
378 Stevens, "Biography of Leonarde Keeler," 123; C.W. Muehlberger, "Interrogation under Drug Influence," *Journal of Criminal Law and Criminology,* 42, no. 4 (1951): 515
379 See, for example, "Waarin Blondjes de Voorkeur Verdienen," *De Telegraaf,* February 3, 1928; "Brunettes en Blondines," *Delftsche courant,* February 4, 1928; "Gemengd Buitenlandsch Nieuws," *Nieuwe Apeldoornsche courant,* February 6, 1928; "Dilemma," *De Gooi- en Eemlander,* February 7, 1928; One paper even published a poem about the story. "Ik blijf U trouw," *Voorwaarts,* February 27, 1928.

about the workings of the Keeler-method, the inspector balled his rough fist and answered with a laugh: "This here is the only lie detector!"[380]

This endorsement of lie detection is surprising coming from a Dutch journalist. Closer inspection of the article, however, reveals that all the information in this article is lifted from *one* American source, namely an article by Henry Morton Robinson. The paragraphs concerning lie detection do not diverge from Robinson's opinion. There is, however, one remarkable difference between Elias' article and Robinson's; Robinson contrasts America with Europe as a way to chastise American police institutions:

> "Our American police agencies have not availed themselves of the methods developed by science for the detection and apprehension of criminals.(…) Scientific instruments stand unused, scorned, or unheard of, by those in charge of crime control. The application of science to criminal investigation is one of the outstanding social advances of the last decade; certainly it has brought about a revolution in the methods of detecting, apprehending and identifying the criminal elements of society. This is particularly true in Europe; the practical police results achieved by European criminologists outrival the wildest exploits of fictional Vidocqs."[381]

The problem did not lie with the American criminologists, who were not "laggard in the development of their science."[382] The problem was that US police simply would not adopt these advances. Not so in Europe. According to Robinson, the "Commissioners and Chiefs of Police in England, France and Germany are (…) intellectually alive, scientifically alert, [and] they welcome new

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[380] "Waarom Lindbergh moet vluchten. Verrassend scherpe critiek op het Amerikaansche Politiewezen. Onvolledige opleiding - Slechte organisatie," *Nieuwsblad van het Noorden,* January 3, 1936. Original: "De beste methode om een verdachte aan het spreken te krijgen, vond dr. Keeler uit en is genaamd Keeler Polygraph. Het is een wetenschappelijke methode, welke bekend staat als "Leugenontdekker". Hardhandigheid is hierbij uitgesloten. Reeds in 3500 gevallen had dr. Keeler's methode succes. Doch (…) de Amerikaansche politionele overheid wenscht geen inmenging van criminologen, zij wenscht haar methoden zelf uit te vinden. En toen Sir Henry Morton Robinson, een vooraanstaand beamte uit het Politiewezen van Chicago een inspecteur der New Yorker Crimineele Politie, eens vroeg naar de werking der methode-Keeler, balde de inspecteur zijn grove vuist en antwoordde lachend: "Dit hier is de enige leugenontdekker!"

[381] Henry Morton Robinson, "Our Tipstaff Police," *The North American Review,* 240, no. 2 (1935): 295–296

[382] Ibid., 297

departures in criminology, and their reputations are built upon their successful utilization of laboratory techniques and discoveries."[383] This praise of Europe did not make it into the three Dutch articles. In fact, the 1936 article noted that America was *ahead* of Europe in terms of "modern tools" that are employed by police.[384] The article in the *Haarlem's Dagblad* warned that we should not be too critical of America, after all

> "This country is still so young. Indeed: it is barely *one* lifetime ago, that this large country even started with anything resembling a police force. And the criminals that had to be captured and punished here until some tens of years ago were such that "corporal" punishment methods were the only ones that could make any impression on them at all. (…) In many aspects [the US] has outstripped the old world with flying colours."[385]

The argument regarding America's youth is surely the least remarkable part of this snippet; the author suggested that American criminals were simply more criminal than European ones!

Throughout the twentieth century, the vast majority of American news stories that include lie detection were taken at face value. We can see this in the reporting surrounding the 1936 Ada Rice murder investigation, in which a suspect confessed after a lie detector test: "As is known, American investigators have, for some time now, been using (…) the in American criminal circles much feared "lie detector"," several newspapers reported. "Lie detector brings it to light," "even the cleverest liar no longer safe;" such headlines demonstrated that Dutch journalists were perfectly happy to adopt the same positive, even celebratory, tone that American journalists used.[386]

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[383] Ibid., 303–304

[384] *Nieuwsblad van het Noorden,* January 3, 1936. Original: "moderne hulpmiddelen"

[385] E. Elias, "De Amerikaansche politie. Merkwaardig gebrek aan eenheid," *Haarlem's dagblad,* January 20, 1940. Original: "Dit land is nog zoo jong. Inderdaad: het is eigenlijk nauwelijks één menschen leeftijd geleden, dat dit groote lang pas met iets wat op een politiemacht geleek is begonnen. En de misdadigers die men hier moest pakken en straffen waren uit zulk soort hout gesneden dat "lijfstraffelijke" methoden de eenige waren die een klein beetje indruk op hen konden maken. (…) In heel veel opzichten is [de V.S.] de oude wereld met vlag en wimpel voorbij gestreefd."

[386] "Leugendetector brengt het aan het licht," *Provinciale Noordbrabantsche en 's Hertogenbossche courant,* August 8, 1936; "Ook de knapste leugenaar niet langer veilig,"*Limburger koerier,* August 10, 1936; "Ook de knapste leugenaar niet langer veilig," *Nieuwe Tilburgsche Courant,* August 17, 1936. "De leugendetector brengt het aan het licht! Gevreesd instrument bij Amerikaansche misdadigers," *Nieuwe Venlosche courant,* August 21, 1936. Original: "Naar men weet bedient de Amerikaansche recherche zich reeds geruime tijd van (…) de in Amerikaansche misdaadkringen reeds zeer gevreesde "leugendetector"."

But when an unnamed columnist, inspired by this report, wrote a piece not about the murder investigation, but about lie detection itself, nothing remained of this optimistic tone. First, the author was unimpressed with what he saw as a typically American flair for drama. Second, they believed the instrument was essentially a "modern instrument of torture" and that the "uncivilised medieval torture rack was much milder." Finally, the columnist worried about what would happen should the instrument make its way from criminal investigations into general use; it would surely reap havoc in marriages, but worse, the national socialists could use it to test their followers for the authenticity of their loyalty. Turning this threat into an a potential asset, the author suggested that we might consider using it on those people on the political front lines, to test whether they were not secretly part of the NSB [the Dutch National Socialist Movement.] It should be admitted, however, that at least some of this article was tongue-in-cheek.[387]

The same pattern held true for the reporting about the Rappaport case. Dutch newspapers, for the most part, were happy to simply report on the story. They did not question the validity of the procedure, nor did they question whether it was appropriate to seal a man's fate mechanically, as British newspapers apparently did.[388] The most critical any of them got was to use a less-than-positive adjective: "Murderer in Chicago got *lugubrious* last chance" read one headline. This same article also included the smallest of caveats; the lie detector "is often used in America in criminal proceedings, because it is capable— *it is assumed* — of separating truthful from dishonest answers." The article also stated that the Rappaport lied "*according to the instrument.*"[389] This exact article ran in a couple of regional papers as well,[390] though one made a rather striking change to the title: "The "lie detector" did not fail," wrote the *Limburger Koerier.*[391] This claim, of course, is somewhat bizarre; had the detector indicated Rappaport's innocence, would it have failed then? Most other newspapers ran a different

[387] "Uitvallen. De stille verklikker," *Nieuwe Venlosche Courant,* August 22, 1936. Original: "moderne marteltuig;" "onbeschaafde middeleeuwse pijnbank"
[388] Alder, *The Lie Detectors,* 150
[389] "De Nederlaag geleden tegen den "Leugen-ontdekker"," *De Telegraaf,* March 4, 1937. Emphasis in each instance mine. Original: " Moordenaar te Chicago kreeg lugubere laatste kans;" "dat in America veel wordt gebruikt in strafprocessen, omdat het — naar men aanneemt — in staat is, eerlijke van leugenachtige antwoorden te onderscheiden;" "volgens het instrument."
[390] "De "leugenontdekker" faalde niet," *Limburger Koerier,* March 6, 1937; "De Nederlaag geleden tegen den "Leugen-ontdekker," *Nieuwe Tilburgsche Courant,* March 9, 1937.
[391] See previous note.

article, which had neither critical adjective nor caveat: "The instrument *showed* that the suspect's denial was a lie."[392]

There was one notable exception to this impassive attitude; a few months after the initial reporting, the world renowned psychiatrist and expert on hypnosis Dr. Berthold Stokvis penned an article about the use of lie detection in criminal proceedings. He considered the introduction of such machines a step backwards and warned that we should never use this technology "to, as a modern-day judge made from gummy and steel, adjudicate over life and death." Rappaport, though not mentioned by name, served as an illustration of the dire consequences of doing so. Like others authors before him, Stokvis felt "the modern lie-machine is a dangerous instrument."[393]

In the interwar years, then, the Dutch public slowly became acquainted with lie detection. As would be the case for the rest of the century, many articles which mentioned the technology were simply American news stories. In articles that confronted lie detection directly, Dutch journalists often emphasised that the lie detector was profoundly connected to America and American policing, which in turn was viewed as crude and in need of reform. American crime and criminals were seen to be of a rougher sort than in the Netherlands. Some authors suggested that under such dire circumstances the lie detector might indeed be of use. Many others were utterly unimpressed by the machine. In fact, rather than waxing lyrical about the potential for such a machine to create a more honest society, as some Americans writers did, Dutch writers on the topic seemed to feel that the introduction of such a machine into general society would be detrimental (or at least rather frivolous).

The exact details of how lie detectors worked did not receive much attention from Dutch writers and questions about the limitations of the technology remained unexplored; many appear to have been writing about what Melissa Littlefield has termed *the* lie detector. This refers "an imagined instrument, an accumulation of the lore, desires, hopes, and dreams of the scientific, journalistic, and

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[392] "Executie na onderzoek met "leugenontdekker," *Algemeen Handelsblad,* March 4, 1937; "Executie na onderzoek met den "leugenontdekker," *Twentsch dagblad Tubantia en Enschedesche courant,* March 4 1937; "Executie na onderzoek met "leugenontdekker," *Limburgsch dagblad,* March 5, 1937; "Executie na onderzoek met "leugenontdekker," *Leeuwarder courant*, March 6, 1937; "Executie na onderzoek met "leugenontdekker," *Leeuwarder nieuwsblad,* March 9, 1937; "Executie te New York [sic.] Na onderzoek met den "leugenontdekker"," *Nieuwsblad van Friesland,* March 10, 1937

[393] Berthold Stokvis,"Liegt de leugen-machine?" *De Telegraaf,* August 1, 1937. Original: "om als een moderne rechter uit gummi en staal recht te spreken over leven en dood;" "de moderne leugen-machine is een gevaarlijk instrument."

lay communities."[394] In the Dutch context, however, these desires, hopes and dreams were perhaps more frequently fears and nightmares. Divorced from its technological specifics, *the* lie detector provided a handy rhetorical device for accusing others (such as politicians or competing news outlets) of lying. It allowed a certain flexibility; columnists were free to add literal bells, flashing lights and mechanical voices to this lie detector, and they did so with gusto.

3.7 Up Close and Personal

Though lie detection became well known before the 1950s as an interesting foreign technology, it was not until the G.A.R. case that it well and truly arrived in the Netherlands. Now, suddenly, it needed to be taken seriously. To be sure, in many newspaper articles written before, during, or shortly after the G.A.R. trial the technology was still treated as nothing more than interesting gadgetry. But here and there journalists began asking serious questions about the consequences of its use in the Netherlands.

The Dutch news media wasted no time covering the story. In fact, the first stories about it were entirely premature and inaccurate. The source of this faulty reporting was a press release by the ANP (*Algemeen Nederlands Persbureau*, the joint press agency which supplies Dutch media outlets with news) from November 8th, 1950, which was subsequently retracted.[395] One of the articles based on it read: "justice at Arnhem, for the first time in history, [has] used a so-called "lie detector" (…) and a so-called truth serum."[396] A couple of articles suggest, somewhat absurdly, that the test was "without results, because the machine does not respond to people, who believe in their own lie."[397] One outlet suggested that the results of the "wondrous" test were not accepted because "the prosecutor did not believe in the modern liars."[398] None of this has a basis in fact. At the time of these reports, the lie detector had not yet been used and truth serum was never introduced at all. I assume that the initial

[394] Robinson, "Our Tipstaff Police," 8–9
[395] "Lie-detector," *De Waarheid,* November 9, 1950.
[396] "Proefkonijn voor de "leugenontdekker"," *De Heerenveensche koerier*, November 8, 1950. Original: "de justitie te Arnhem [heeft] voor het eerst in de geschiedenis gebruik gemaakt van de z.g. "Liedetector" [sic] (Leugenontdekker) en een z.g. waarheidsserum."
[397] *De Waarheid,* November 9, 1950. Original: "zonder resultaat, omdat het apparaat niet reageert op personen, die in hun eigen leugen geloven;" *De Heerenveensche koerier*, November 8, 1950
[398] "Allerlei nieuws van overal," *Leeuwarder courant*, November 9, 1950. Original: "wonderlijke;" "de officier van justitie geloofde niet aan de moderne leugenaars."

misunderstanding occurred when Sassen spoke about *potentially* using lie detection and that further mistakes happened as journalists took the sensational story on, without a clear understanding of how lie detection works. Fortunately, subsequent reporting was far better.

When writing about the G.A.R. case, media outlets invariably led with the fact that a lie detector would be used in it. The details of the apparent robbery were barely discussed, but various newspapers gave a overview of how lie detection would be used in the appeal, how the technology worked, where the machine would come from and what the pitfalls would be. *De Tijd* sent a reporter and photographer to the psychology department at the University in Nijmegen to speak with W. Vijftigschild (the director of the institute mentioned in chapter 1). What they learned about the psycho-galvanometer's workings was reported in detail. The initial plan was to have the reporter undergo a low-stakes examination, but sadly the technician capable of operating the machine had already gone home, so they had to be satisfied with a few staged photos.

The reporter appeared neither excited, nor particularly anxious about the instrument. They simply noted the intuitive nature of the procedure, saying that the "principle may be considered generally known, because people can notice in themselves that a physical reaction occurs with intense emotional disturbances: startling, blushing, trembling, etc."[399] They also felt that the eventual introduction of lie detection was unavoidable: "One will (…) have to start with it at some point."[400] They saw no risks of using the technology in Dutch courts, but were sympathetic to the court's reservations, which they felt were only natural given that this case could set a precedent and that there was only limited literature and expertise available in the Netherlands. Like *De Tijd, s*everal other newspapers ran articles which explained in some detail how the instrument worked, but they made no pronouncements about its potential value in the G.A.R. case, or in criminal cases in general.[401]

Once R. had undergone the test, there was a slight shift in the tone and content of the newspaper coverage. First, more journalists began placing a few tentative question marks. Almost all of

[399] *De Tijd,* November 30, 1950. Original: "Dit principe mag algemeen bekend worden verondersteld, want men kan aan zichzelf merken, dat bij hevige gemoedsstoringen een bepaalde lichamelijke reactie optreedt: schrikken, blozen, beven, etc."
[400] Ibid., Original: "Men zal er (…) eenmaal mee moeten beginnen."
[401] "Leugenmeter bij rechtspraak. Eerste toepassing in ons land," *De Gooi- en Eemlander,* December 4, 1950; "Leugen-meter wordt u ook in Nederland gebruikt," *Leeuwarder courant,* December 5, 1950; "Leugenmeter doet intrede in Nederlandse rechtszaal," *Provinciale Drentsche en Asser courant,* December 5,1950

them noted that the court and the prosecutor had rejected the results of the procedure, even in light of the fact that the results were less than optimal for the defendant.[402] A reporter at *De Tijd* expressed some moral unease: "We could not (…) avoid feeling as if the suspect R. actually became a bit of a victim of this novelty in the juridical world. He was psychologically unraveled, tested and taken apart for his character." At the same time, we can see some excitement creeping into the coverage. The same journalist who found lie detection perhaps too intrusive also stated that the value of the procedure had been "indisputably demonstrated."[403]

The majority of the articles was restrained. One exception to this rule appeared in *De Telegraaf,* which, it may be worth noting, had a dubious reputation, in part due to its proclivity for scandal. The superlative-laden lead read: "With a truly sensational success the "lie-detector," which until now had practically never been used in Europe, has proven that it can be of exceedingly great use."[404] They mentioned that it was Sassen's faith in his client's innocence that made him turn to the "revolutionary" instrument and stated that the court in Arnhem had become more and more interested in the lie detector.[405]

It is interesting that one of the most original articles criticising lie detection appeared in the same paper, no more than two weeks later. One of the paper's medical contributors flatly denied that the instrument was revolutionary; in fact, it was not even new. Far from it being a "brand new American invention" — or, indeed, American at all — it had been around in Europe for more than 70 years. They claimed that, "in medical circles, therefore, the "sensational reports" about the "new tests" have been read with unconcealed astonishment."[406] The author illustrated the lack of newness in two

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[402] "Opnieuw toestemming voor gebruik van leugenontdekker," *De Tijd,* February 8, 1951; "Hof te Arnhem aanvaardt leugenontdekker niet. Ondanks averechts resultaat…,"*Algemeen Handelsblad,* February 9, 1951; "Proc.-generaal verklaart: Leugen-ontdekker van geen waarde," *De Telegraaf,* February 9, 1951; "Leugen-ontdekker in de practijk. Verdachte geeft na onderzoek een gewijzigde verklaring. Negen van de zestien vragen onjuist beantwoord," *De Tijd,* February 9, 1951; "Leugenverklikker voor 97% betrouwbaar? Procureur-Generaal hecht er totaal geen waarde aan," *Nieuwsblad van het Noorden,* February 9, 1951

[403] *De Tijd,* February 9, 1951. Original: "We konden ons (…) niet aan de indruk onttrekken, dat verdachte R. eigenlijk een beetje de dupe van dit novum in de juridische wereld is geworden. Hij is psychologisch uiteengerafeld, getest en op zijn karakter uitgebeend"; "Onomstotelijk bewezen."

[404]*De Telegraaf,* January 20, 1951. Original: "Met een waarlijk sensationeel succes heeft de „leugenontdekker", die tot nu toe in Europa practisch nog niet was gebruikt, bewezen, dat hij van uitermate groot nut kan zijn."

[405] Ibid., Original: "revolutionaire"

[406] "Leugen-ontdekker. Al 70 jaar bekend," *De Telegraaf,* February 3, 1951. Original: "een spiksplinternieuwe Amerikaanse ontdekking"; "In medische kringen zijn dan ook de "sensationele berichten" over de "nieuwe proeven" met onverholen verbazing gelezen." The same sentiment is also found in "Aantasting van de geestelijke vrijheid. Kan men iemand dwingen idealen te verloochenen?" *De Telegraaf,* August 10, 1951 and H. Pétillon, "Toch is het zo!," *Nieuwsblad van het Noorden,* September 7, 1951

ways: First, they spoke about the long history of the principles and the instruments that had become well-known parts of lie detection. Second, the author pointed to two Dutch cases in which lie detection had already played a role: "Do not be mistaken: a well known nerve doctor in our country has — a great many years ago — tried to clear up a (…) murder, committed on the [river] Amstel, with the help of similar instruments (…) In 1929 this principle was also used to clarify the well-known Giessen-Nieuwkerk affair."[407]

The latter case is a notorious wrongful conviction case; there is no indication that anything resembling lie detection played a role in the case. The other case is most likely the 1919 murder of thirteen year old Dirk van Leeuwen, although the boy was drowned not in the Amstel, but in the nearby Oostzanergat. The case was recently described in an article by Dutch historians Willemijn Ruberg and Nathanje Dijkstra and, indeed, something resembling lie detection was attempted here.[408] The main suspect, W.V., denied all involvement in the drowning and seemed entirely unperturbed by the allegations. The police called in the nerve doctor Jan Godefroy, who set out to demonstrate the presence of emotions by taking W.V.'s heart rate at the scene of the crime. One of the members of the press present at the scene described the examination as follows:

> "In the meantime dr. Godefroy occupied himself with [W.V.] on the boat, who was left there under the surveillance of detectives. The man was absolutely calm and his voice sounded composed. The nerve doctor checked his heart rate at various moments, made him stretch out his hand and fingers and observed or touched these with care, meanwhile regarding the suspect sharply every now and then. During all these actions there was not a trace of excitement or emotion to be detected in the prisoner."[409]

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[407] Ibid., Original: "veranderingen in de electrische weerstand bij de mens"; "Laat men zich niet vergissen: een bekend zenuwarts in ons land heeft — zeer vele jaren geleden— getracht met behulp van een soortgelijke apparatuur een (…) moord, die op de Amstel was gepleegd, op te helderen. (…) In 1929 is evenzo van dit principe gebruik gemaakt ter opheldering van de bekende affaire Giessen-Nieuwkerk."

[408] Willemijn Ruberg and Nathanje Dijkstra, "De forensische wetenschap in Nederland (1800–1930): een terreinverkenning," *Studium,* 9, no. 3 (2016): 138–141

[409] "De moord of Dirk van Leeuwen. De moordenaars gearresteerd," *Het volk*, May 21, 1919. Original: "Intusschen hield dr. Godefroy zich op de boot met [W.V.] bezig, die daar onder bewaking van rechercheurs was achtergelaten. De man was absoluut kalm en zijn stem klonk zeer rustig. De zenuwarts kontroleerde op verschillende momenten zijn polsslag, liet hem de hand en de vinders uitspreiden en beschouwde of betastte deze dan met aandacht, intusschen den verdachte zoo nu en dan scherp aankijkend. Onder al deze handelingen was bij den arrestant geen zweem van opwinding of emotie te bespeuren."

According to the court files viewed by Ruberg and Dijkstra Godefroy registered the suspect's heart rate with the use of a galvanometer.[410]

Given that each example of lie detection mentioned in the *Telegraaf* article was conducted with the help of a galvanometer, which was used either to measure skin conductance or heart rate, it is remarkable that the author writes that the lie detector registers changes in skin conductance, breathing patterns, blood pressure *and* heart rate. The author, in other words, conflated lie detection with the polygraph.

3.8 After the G.A.R. Case and Beyond

Even after the buzz about the G.A.R. case had died down, journalist kept their ears to the ground for more news about lie detection and so it continued to make appearances in magazines, newspapers and even on television. As before, items about lie detection were often intended to be entertaining or interesting. Ernst Kos, who wrote little poems for the *Nieuwsblad van Friesland,* mused about how lying comes natural to humans and how the lie detector would force us to finally be truthful.[411] And while one columnist jokingly suggested using the lie detector on politicians, another explored the absurdity of a lying lie-detector (which rather than scribbling a graph on a piece of paper, would simply shoot the presumed liar dead).[412] Also in the 'merely interesting' category, we find a story about an American student who built her own lie detector and tested it on her friends and one about a lie detector for kids, developed by an American toy manufacturer. The journalist who wrote the latter article took a decidedly sardonic tone.[413]

Meant to entertain and inform was also the lie detector's first appearance on tv, which, in 1951, was still to make its national debut. The broadcast was one of the 264 experimental programmes

[410] Ruberg and Dijkstra, "De forensische wetenschap in Nederland," 139–140
[411] Ernst Kos, "Leugendetector," *Nieuwsblad van Friesland,* February 9, 1951.
[412] "Dingen van de dag. Leugenontdekker," *De Waarheid,* February 17, 1951; "Kolderiks dagboek," *Algemeen Handelsblad,* February 21, 1951.
[413] "Leugen-ontdekker," *De Tijd,* April 23, 1954; "Deze wereld. Het leugenontdekkertje," *Algemeen Handelsblad,* February, 16, 1954

aired by Dutch technology company Philips between 1948 and 1951 and would have been received on several hundreds of tv-sets in the Eindhoven region. Although most of the public, therefore, would not have been able to view the broadcast, they could read about it in the national newspapers.[414] In the programme, Philips engineer E.E. Carpentier teamed up with Van der Zee to explain some of the basic principles of lie detection and to demonstrate the machine in action. Annie van Vliet, the test subject, was asked to choose between stockings or one hundred guilders, after which she was connected to the psycho-galvanometer. The audience saw her choose the money, but Carpentier and Van der Zee did not. *De Telegraaf* described the experiment as follows:

> "The "guinea pig," miss Van Vliet, held in both hands a small metal plate, which was connected to a transformer, an amplifier and a pen. Mr. J.H. v.d. Zee, a psychiatrist [sic] at the municipal health service in Eindhoven, asked her a few questions, that he repeated time and time again. The viewers could see how the pen barely responded if the test subject answered truthfully, that she had had breakfast in the morning, that she lived in Meerveldhoven and was older than 23 years. But how viciously the pen jabbed back and forth when she — as only the viewers knew — played fast and loose with the truth about the money and the stockings!"[415]

After the experiment, miss Van Vliet was asked to return the money, but was given the stockings as a 'thank you' for "her brave demeanour in the "electric" chair."[416] This casual reference to America's then-preferred method of execution is interesting. It, as well use of the term "guinea pig" to describe the volunteer subject, suggests that the reporter was at least a little uncomfortable about the procedure.

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[414] "Annie van Vliet's leugentje door de waarheid achterhaald. Demonstratie met leugenontdekker," *De Telegraaf*, February 2, 1951; *De Tijd*, February 6, 1951

[415] *De Telegraaf*, February 2, 1951. Original: "Het "proefkonijn", mej. Van Vliet, hield in beide handen een metalen plaatje, dat verbonden was met een stroomomvormer, een versterker en een penschrijver. De heer J.H. v.d. Zee, een psychiater, verbonden aan de gemeentelijke geneeskundige dienst te Eindhoven, stelde haar enkele vragen, die hij steeds weer herhaalde. De kijkers konden zien hoe de schrijfpen nauwelijks reageerde als de proefpersoon naar waarheid antwoordde, dat zij 's morgens ontbeten had, in Meerveldhoven woonde en ouder was dan 23 jaar. Maar hoe venijnig pikte de pen op zij, als zij — wat alleen de kijkers wisten — het met de waarheid omtrent het geld en de nylons niet zo nauw nam!"

[416] Ibid. Original: "haar dappere houding in de "electrische" stoel."

In the aftermath of the tv-broadcast, Van der Zee and Holtzer (the psychiatrist who had also been involved in the G.A.R. case) received a slap on the wrist from drs. Burger and Woldring, of the medical team at Philips. Displeased with Van der Zee and Holtzer's performance in the G.A.R. case, as well as with the publicity that followed it, Dr. Burger argued that the experts had overstepped their boundaries; they had "publicly (…) used a measurement method, for which the instrument was developed by Philips, without the practical value of this method having been sufficiently established."[417] He also expressed concern about the ethics of lie detection, even if the methodology was correct, because it might interfere with the psychological freedom of a suspect. Dr. Woldring likewise felt that Van der Zee and Holtzer had jumped the gun, as not enough was known "about the relationship between psychological factors and the peripheral [that is, relating to the peripheral nervous system] reflex activity."[418] Van der Zee countered that the instrument is not meant to identify any specific emotion, but rather an "anxiety" that comprises of a whole collection of factors. Whatever the case, Dr. Burger remarked, the fact that there was disagreement on the matter, even in this four person meeting, meant that the instrument should not have been publicly used. He also expressed his regret that Philips had become involved in the matter.

Holtzer and Van der Zee appear to have shown repentance during the meeting; they indicated that they were attempting to "cleanse themselves through articles in the scientific and newspaper press."[419] Dr. Woldring objected to this approach; mistakes in experimental work simply happen sometimes and such mistakes ought to be discussed openly in the academic literature. There is no need to undertake any "cleansing" in that case, because nothing improper happened. The key thing was to avoid any publicity that was not scientific in nature; in other words, the psychologist and the psychiatrist should immediately move themselves and the lie detector out of the spotlight.

In the same period, when Joseph McCarthy, the notorious US senator for the state of Wisconsin, demanded that Charles Bohlen, president Eisenhower's nominee for ambassador to the Soviet Union, submit himself to a lie detector test, Dutch newspapers gave this story ample

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[417] S. Woldring, "Verslag van de bespreking over de toepassing van de huid-galvanometer, gehouden in de Bibliotheek van de Medische Afdeling Philips op Maandag 30 April 1951 te 16.30 uur," *Philips Company Archives*. Original: "in het openbaar gebruik (…) gemaakt van een meetmethodiek, waarvoor de apparatuur bij Philips ontwikkeld was, zonder dat de practische waarde van deze methodiek voldoende vaststond."
[418] Ibid. Original: "over de samenhang tussen de psychische factoren en de perifere reflexactiviteit."
[419] Ibid. Original: "zich zelve te zuiveren door artikelen in de wetenschappelijke en de dagbladpers."

attention.[420] Reporters were on occasion quite negative about Senator McCarthy, but they generally remained neutral about the proposed use of lie detection. Some did note that Senate Majority Leader Taft had countered that Edgar Hoover of the FBI felt the "notorious" instrument was unreliable.[421] Closer to home, the highest West-German court decided that the lie detector was not reliable enough to be used in criminal cases, nor in line with constitutional protections of human dignity. No one who covered this story tied it to the discussion that had happened only two years earlier in the Netherlands.[422]

Apart from these straightforward news stories, however, some journalists began writing articles that showed a more critical approach. They questioned the instrument's reliability, as well as the moral and legal implications of its use. The columnist Johan Luger, who used the pen-name Pasquino, and who had previously mentioned the lie detector only as a humorous side note, began seeing a certain urgency after the G.A.R. case.[423] In his view, lie detection was immoral and at variance with the principles of the Dutch legal system. In addition, he felt it was clearly related to various forms of pressure on suspects by police. He quoted the legal scholar Receveur as saying: "The investigating officers should be proud to demonstrate the truth with means, that were not obtained by testimonies or even confessions of suspects." This line, Luger felt, should adorn the walls of all police stations, because this truism had more than once been forgotten in the Netherlands, "especially after the liberation."[424]

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[420] McCarthy eist onderzoek met leugenontdekker. Senator ageert tegen benoeming van Bohlen als ambassadeur te Moskou," *De tijd*, March 24, 1953; "McCarthy wil thans Bohlen testen met leugenontdekker," *Friese koerier,* March 24, 1953; "McCarthy eist ,,leugenproef" voor Bohlen, *Het vrije volk,* March 24, 1953; "McCarthy wil Bohel on leugens onderzoeken. Debat over Amerikaanse ambassadeur te Moskou," *Nieuwsblad van het Noorden,* March 24, 1953; "Uitwas van ,,Isolationisme.' MacCarthy [sic] weer op ,,heksenjacht." Demagoog in de senaat," *De Telegraaf,* March 25, 1953; "Het wereldbeeld. McCarthy op jacht," *De Tijd,* March 25, 1953; "McCarthy en Charles E. Bohlen," *Algemeen Handelsblad,* March 26, 1953; "Uit het wereldgebeuren. Bohlen en Moskou," *Nieuwsblad van het Noorden,* March 27, 1953; "Eisenhower maakte een goede start. De president en TAFT hebben elkaar gevonden," *Algemeen Handelsblad,* March 31, 1953; "McCarthy. Een hoogst onaangenaam mens. Amerikaans communistenjager met allerlei vreemde complexen," *Algemeen Handelsblad,* May, 23, 1953.
[421] *Nieuwsblad van het Noorden,* March 24, 1953; *De Telegraaf,* March 25, 1953; *Algemeen Handelsblad,* March 26, 1953. Original: "beruchte"
[422] "Leugendetector niet ,,geldig" in Duitsland," *Algemeen Handelsblad,* February, 17, 1954; *Het vrije volk,* February 2, 1954; *Leeuwarder courant,* February 18, 1954; "Allerhand in wereld…Leugenontdekkers," *Limburgsch dagblad,* February 18, 1954
[423] Pasquino, "Carnaval," *De Telegraaf,* February 7, 1951; Luger would continue to use the lie detector on occasion, see Pasquino, "In kracht van gewijsde," *De Telegraaf,* May 14, 1954 and Pasquino, "Wat wij denken en wat wij doen," *De Telegraaf,* April 3, 1956
[424] Pasquino, "Leugenontdekker," *De Telegraaf,* Juli 16, 1951. Original: "De opsporingsambtenaren moeten er een eer in stellen met middelen, die niet verkregen zijn door verklaringen of zelfs bekentenissen van verdachten, de waarheid te bewijzen"; "vooral na de bevrijding"

In an article with the evocative title "Derogation of psychological freedom. Can one force someone to betray ideals?" the lie detector was mentioned in the same breath as Third Degree measures.[425] The author noted that the use of lie detection was rare in the Netherlands and would be impermissible if the aim was to make someone confess to something they otherwise would not have. Journalist Joost de Klerk, in an article for *Elserviers Weekblad,* similarly worried about the implications of the technology. Not only did he feel that the 3% margin of error was enough to make the use of lie detection irresponsible, he also laid out various moral grounds for objecting to it; in the face of being hated by society and the scientific arsenal at the service of the prosecution, the suspect ought to be granted their lies. In addition, if we drain the the truth from a suspect "like the blood from a pig," we lose the redemptive quality — the beauty —of a voluntarily given admission.[426]

A journalist at *Het vrije volk,* responding to a piece published in the *New York Herald Tribune* by the celebrated political journalists Joseph and Steward Alsop, issued a warning: "That this evil, which it is, is not only spreading [like weeds] in America, but also gnawing at Europe, is proven by an advertisement which appeared in the *Neue Zürcher Zeitung* on February 28. Herein a psychological institute in Zürich offers to track down unreliable and dishonest employees with the lie-detector." The writer felt that the Dutch ought to take a stand against lie detection. First, they noted, the lie detector is entirely "unsound," registering only emotional responses. Emotions say nothing about whether someone perpetrated a crime. Second, no one has "the right to invade the mental world of any subject in this sly manner." Even if suspects were granted the freedom to refuse to undergo the test, this would be a pseudo-freedom, because refusing the test would make one appear suspect. "The respect for the human person requires that the lie-detector (…) does not get a foothold in society."[427]

Prompted by another article in the *New York Herald Tribune,* in which a journalist reported that he had become convinced of the instrument's efficaciousness after being caught in a lie himself, a journalist identified as L.A. penned a response in the *Algemeen Handelsblad.* L.A. seemed to be confident

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[425] "Aantasting van de geestelijke vrijheid. Kan men iemand dwingen idealen te verloochenen?" *De Telegraaf,* August 10, 1951.
[426] De Klerk, *Elseviers Weekblad,* May 12,1951. Original: "als het bloed uit een varken"
[427] "Ernstig gevaar," *Het vrije volk,* March 13, 1954. Original: "Dat dit kwaad, want dat is het, niet alleen in Amerika voortwoekert, maar ook Europa aanvreet, bewijst een advertentie, die op 28 Februari in de Neue Zürcher Zeitung stond. Daarin biedt een psychologisch instituut in Zürich aan met de lie-detector voor particulieren onbetrouwbare en oneerlijke personeelsleden op te sporen;" "ondeugdelijk;" "het recht op deze slinkse wijze door te dringen in het gedachtenleven van welke proefpersoon dan ook;" "Het respect voor de menselijk persoon vergt, dat de lie-detector (…) in het maatschappelijke leven geen voet aan de grond krijgt."

that lie detection (using both the pathometer and the polygraph) worked, but disapproved of it nonetheless. With distaste they noted that "as with so many phenomena with a somewhat sensational character in the Utd. States," the lie detector business was doing rather well. The news that there were even lie detectors on the market to catch fibbing kids was a shock to L.A. Subjecting a child to "such manipulations" would be a "terrible mistake." They also note that lie detection played a part in "the abhorrent procedures of the McCarthy commission."[428]

3.9 Selling Copy in the US and the Netherlands

Making sense of media representations of lie detection is key to understanding how the instrument came to be so widely used in the US. Writers of detective fiction did much to create what Melissa Littlefield has called *the* lie detector (applying it to non-pathological criminals before psychologists, criminologists and real-world detectives did so), and to make the technology appear viable to the American public. Similarly, news media narratives about Münsterberg's experimentations made the lie itself the object of interest before the professor did so himself. When Larson began using lie detection as part of Vollmer's new scientific policing, Americans had already had the chance to learn about policing aided by psychological tools. In fact, they had been introduced to specific protocols for *how* lie detection might be useful to law enforcement.

These early narratives also found their way into Dutch newspapers. It is immediately clear however, that Dutch readers would be confronted with far fewer stories than their American contemporaries. News stories that were 'big' in the US often became interesting titbits for the 'short foreign news' section. In addition, though some of the Luther Trant and Craig Kennedy stories did get translated and printed in some regional newspapers, these were newspapers with relatively low readership. Besides, only Kennedy seems to have made any kind of lasting impression, but even Kennedy cannot be said to have been popular or particularly well-known.

[428] "Van overal. „Leugenontdekkers" en jokkebrokken. Al is een leugen nog zo snel, de (Amerikaanse) „Lie Detector" achterhaald haar wel…," *Algemeen Handelsblad,* October, 23, 1954. Original: "Zoals bij zovele manifestaties met een enigszins sensationeel karakter in de Ver. Staten;" "de weerzinwekkende procédé's van de commissie van McCarthy"

The one Dutch author who, in 1933, played around with the idea of lie detection took a very different direction than American writers had. Walch did not even consider the use of the instrument in a law enforcement context, but instead mused about how important lying was for the functioning of society — a sentiment apparently shared by the nation's columnists and reporters as well. He also portrayed lie detection as frivolous and wholly unsuitable to any serious application.

Walch found the lie detector to be a typically American instrument, which was clearly meant in a derogatory sense. This was picked up on again and again; lie detection, the suggestion seems to be, was simply too dramatic, too technology-oriented and too temperamental for the level-headed Dutch. In addition, lie detection is the solution to a typically American *problem*; Dutch reporters noted that the crime-rate in America was very high, that the crimes committed there appeared to be of a particularly brutal nature and that police corruption was widespread. Under such dire circumstances it might have made sense to reach for a technological solution like lie detection, but clearly the Netherlands should not bother.

Almost entirely absent from the Dutch discourse is the notion that lie detection is an alternative to, or diametrically opposed to, methods of torture. American lie detector proponents generally argued that lie detection would render the Third Degree unnecessary;[429] Dutch media, by contrast, often equated lie detection with torture. In fact, it was suggested that this instrument was *worse* than physical torture, because it violated the human psyche. Of course, such arguments were not unique to the Netherlands — lie detection had harsh critics in the United states too. The difference is that the opinions read in Dutch newspapers and magazines were almost *exclusively* negative. In the US the conversation was dominated by the proponents of lie detection.

As we have seen these proponents enjoyed substantial celebrity. Vollmer, Keeler and Marston in particular were adept at putting themselves and their ideas on the front pages of newspapers, in magazines, in films and on tv. They were hardly known in the Netherlands, however. Thus the Dutch missed out on the salesmanship that these men obviously possessed; it is no surprise, then, that they were less likely to buy into the product. The media campaign started by the Dutch psychologist Van der Zee (and perhaps Holtzer) was cut short by the intervention of Woldring and Burger of Philips.

[429] Bunn, *The Truth Machine,* 135–137

Besides, the men confessed to some discomfort about their visibility in the media and aimed to retreat a little, reintroducing some nuance that had been lost along the way. Though the American lie detection proponents frequently complained about the media's portrayal of the technique, they made sure to remain in the spotlight. Only Larson actually turned away from popular publications (though he did at times slip back into his old habits).

All in all we see some clear differences in the portrayal of lie detection in Dutch and US media. Not only was lie detection simply more visible in the US, Dutch opinions were also much more unilaterally negative than in the United States. Some of the strongest arguments for lie detection in the US (that it could help in the fight against crime and corruption and that it could replace the inhumane Third Degree) simply did not resonate in the Netherlands. In addition, the lie detector was sold, at least to some extent, by the charismatic personalities of its so-called 'inventors.' These men never became known in the the Netherlands and no Dutch person filled the void.

Conclusion
"Only in America"

In the opening paragraphs of this paper I remarked that I had set out to write a history of the *absence* of lie detection in the Netherlands. Perhaps this pronouncement seems a little disingenuous now that we have reached the end of the story; although lie detection was very far from ubiquitous in the Netherlands, it was also not entirely absent. Indeed, I noted from the outset that lie detection is well known to the Dutch, but as has become clear there is more to the story than the mere transmission of American portrayals of the technology. Serious discussions were had about lie detection in the Netherlands and there were even a couple of attempts at introducing the technology here. The fact remains, however, that lie detection did not take off in any significant way. So what, then, were the reasons for this? How did lie detection come to be such a widely used technique in the United States, and why did it fail to make any significant inroads in the Netherlands?

I think it is important to reiterate that there are some key differences related to the scale of both countries. In a country as small and with as low a crime rate as the Netherlands, there may simply not be a market for a technology like lie detection. Aspiring examiners would have a difficult time getting the necessary experience if there were relatively few cases in which they could hone their skills. It is not a coincidence that Chicago was an important hub for the development of lie detection in the US; it was a city known for its high rates of crime and corruption; people like Keeler would never have a dull day. The problem of the Netherlands' smallness was also clear to the historical actors who made an appearance in this paper; specifically, Meyjes pointed out that the debate about lie detection might be entirely academic in the Netherlands because of it.

Related to the question of size is the fact that the American government is far more fragmented

than the Dutch — laws vary in each state and there are various law enforcement agencies that are able to operate fairly independently, for example. This created a situation in which lie detection could be introduced on a local level in the US through the advocacy of one — or a few — people. There, it could gestate, be developed and build a reputation, which then enabled the spread of the practice. In the Netherlands we saw that rumours about the use of lie detection were immediately taken to the highest level of government; the minister of justice, more than once, had to make assurances that the technology was not being used by law enforcement.

Another related hindrance to lie detection's entry into Dutch society, is that there were simply too few people working on the problem. In America, lie detection was being developed and publicised by multiple people from the very start. It has been argued that the (occasionally bitter) rivalries that existed between American proponents of lie detection slowed the acceptance of the technology in various domains of society, but I do not find this argument particularly convincing; if anything, internal disagreement made for a lively field, that, first, effectively imitated the normal workings of science and second, kept the media interested. Thus anyone who had put together a lie detector of their own drew the attention of the media, which promptly declared them the "inventor" of a new kind of lie detection.

In the Netherlands meanwhile, only two people made a notable effort introduce lie detection in Dutch society; in the 1950s Van der Zee attempted it, supported, to some extent, by Holtzer and in the 1970s the private detective Hoffmann gave it a shot. No matter their skill in promoting lie detection, a lone voice promoting *anything* is unlikely to sell that thing. Apart from having to go it alone, neither Van der Zee and Hoffmann were all that committed to lie detection. Van der Zee held a job as a psychologists, a role in which he did not employ a lie detector. It seemed lie detection was a mere side project that unexpectedly demanded his attention in 1950. Though he was initially quite willing to engage the media to promote the use of the instrument, he backed down fairly quickly when he received criticism from the medical department at Philips. He also expressed some discomfort about the public role he had taken on. Hoffmann likewise had a job that was much broader than lie detection alone. To him the technology was a way to increase the efficiency of his detective work, as well as a new way to draw customers. Yet the increased efficiency could not be actualised so long as the company was sending the tapes to a company in the UK and when it became obvious that the PSE did

not attract many customers Hoffmann abandoned the technology.

A key difference between the US and the Netherlands was that American proponents of lie detection received institutional support (from police, research institutes, insurance companies, the US army, national security agencies, etc.) that enabled them to pursue lie detection "full time," as it were, and gave them credibility. It is clear that Dutch proponents of lie detection would never have been able to get the same type of institutional support, mainly because of the government's dismissal of the technology. I also believe that Marston's lack of such backing — in combination with ever shifting interests and pursuits — is what kept him from becoming as successful as Keeler, who, when he opened his own business, already had a long list of clients to whom he had originally sold his services while working for other institutions.

It should be noted that the American proponents of lie detection (especially Keeler) enjoyed quite a bit of celebrity. The myth of the men behind the lie detector became entangled with the myth of the instrument. This did not translate at all to the Dutch context; for one, newspaper reports about famous American lie detection cases were printed here without mention of the men behind the machine. It has been noted that there was a strange duality in the way that lie detection was presented in the US; on the one hand, it was meant to be able to objectively establish whether a person was lying, without the involvement of biased human observers, on the other, they emphasised the importance of their own skill. In the Dutch picture the operator fades into the background.

This can also be tied back to the fact that the American fictional detectives that laid the foundation for later real-world uses of lie detection, remained relatively unknown in the Netherlands. When Larson began testing students in Berkeley sorority houses and when Marston set up his instrument in the hallway outside the courtroom in which Frye was tried, they connected their own actions to an already existent myth. The myth that had been created by the authors of detective fiction and through the hopeful predictions expressed in popular works such as Münsterberg's. This helped journalists and authors interpret and accept the claims made by the early lie detector operators. Though the Dutch could read real-world stories of lie detection in the "interesting foreign news" sections of the newspapers, "*the* lie detector" was simply less fleshed out here. This left space to incorporate negative aspects of American uses of lie detection into the picture. Thus "the lore, desires, hopes, and dreams" that made up *the* American lie detector, were replaced by worries, fears and

nightmares in *the* Dutch lie detector.

Is lie detection an essentially American technology? The people whose opinions I have referenced in this paper certainly think so. It has been one of the most striking results of this research that the perceived "Americanness" of lie detection had such a major influence on how the technology was viewed by the Dutch. Calling lie detection American was never a compliment; it was a shorthand for the instrument's grandiosity and theatrical nature, its ties to violence and its crudeness as a solution to delicate societal problems. It went against some of the key characteristics that the Dutch believed they possessed, such as a no-nonsense attitude and a profound belief that one's mind is one's own. In other words, the lie detector was rejected by the Dutch partially because it was seen as a particularly American technology. But the opposite was also true; the distaste that was felt towards lie detection served to reinforce prejudices about American culture. By thus "othering" the US (in combination with all the other ways in which this was achieved), the Dutch worked to construct their own national identity. "Americanness," thereby, somewhat paradoxically, became a key feature of *the* Dutch lie detector.

Many of the key selling points of lie detection in the US — that it could streamline the operation of an overburdened justice system, that it had the potential of bringing justice in cases that would otherwise remain unsolved, that it would eradicate police corruption and the Third Degree, that it could render the act of "trusting" obsolete in increasingly large and impersonal workplaces, that it could protect the country from being infiltrated by foreign and homegrown detractors — did not resonate in the Netherlands. Thus, the only use of lie detection that was ever seen as a serious option here was in the context of the legal system. Deceit by suspects and witnesses was a problem in the Netherlands as it was anywhere else.

Yet it would seem that it is this domain of society that was most disinclined to use lie detection. This is clear when we look at the American history of lie detection. In the Netherlands, the attempt at using lie detection evidence in the G.A.R. case was unsuccessful, just as Marston's attempt had been in the *Frye* case. In fact, I have shown that the cases played out in a remarkably similar manner, despite the seemingly substantial differences between the two legal systems. In both cases the contentious reliability of the instrument played a key role in the judges' choice to disregard the evidence.

When we take a broader look at the discussions about lie detection in the legal profession in both

countries, we do see a few important differences. American concerns about the effect that the introduction of lie detection evidence would have on the fact finder's ability to do its job do not carry much weight in the Netherlands. Perhaps this is to be expected, given the different nature of the fact finder in each system. In the Netherlands, judges were trusted to make sensible determinations about the value of scientific evidence, aided, if necessary, by experts whose role it was to support the court. In the US, juries were made up of laymen and the expert witnesses argued different sides of the same coin, depending on whether they were a witness for the prosecution or for the defence; worries about laypeople's ability to discriminate between good and bad evidence were to be expected. It is not at all clear that judges would be able to make an accurate determination and that juries would not, however. What is at issue here, is the confidence that people have in judges and juries, not necessarily their actual abilities and weaknesses.

Dutch legal minds were far more concerned with the integrity of the person and protecting suspects against the power of the government. Concerns about whether lie detection was scientific or reliable were far less pressing. Even if the technology worked perfectly, it was argued, one still should not wish to use it on a fellow human being. Feber argued that this concern for the integrity of the mind was particularly important to the Dutch, who, in his view, were especially preoccupied with personal freedom. To be sure, the Netherlands has a long history of valueing freedom of conscience, of allowing people to think without interference, but it is still somewhat curious that the self-proclaimed "land of the free" would not share these worries to the same degree.

There can be no doubt that the memory of the Second World War and the occupation by the Germans had an influence on how the Dutch thought about such freedoms. They frequently connected lie detection to the methods used by totalitarian governments to oppress the people. Some did push back against this, drawing attention to the American assertion that lie detection was diametrically opposed to violent methods (particularly of the Third Degree), but the argument did not land. In part, this was because commentators knew about examples in which lie detection had been employed to intimidate suspects, in a clear continuation of Third Degree methods. It seems to me, however, that the more important argument was that gaining entry into someone's mind was essentially violent, no matter the means. This was not expressed in so many words, but it seems to underlie many of the arguments made by journalists, jurors and other commentators; the aversion to

the technology was related to the what, not the how.

I ask again: is lie detection an American technology? I think the answer is yes, though not *essentially* so. The failure of lie detection in the Netherlands is nothing more than a failure of translation. When American stories about lie detection were told in the Netherlands, they did not seem to belong. They were stories of another type of society, one that the Dutch defined themselves in opposition to. But lie detection is an incredibly flexible technique — as is demonstrated by its use in many different contexts in the US — and there is most certainly a story that can be written to suit Dutch society. Perhaps, this will soon be the case.

I have ended my story about lie detection in the 1980s. This is not because it stops being of interest to the Dutch at this point; to the contrary, the nineties saw quite a bit of debate about lie detection. For one, in 1990 Dutch journalist and media-personality Gert Berg began presenting a new talk-show, in which the answers of his interviewees were analysed with the help of voice stress analysis. The use of lie detection was seen as a gimmick and the programme was received badly; in 1991 it was decided that it would continue without lie detection. A few years later, the government commissioned a set of reports about the possibility of using lie detection in the context of policing. The recommendations were optimistic and some suggestions were made about how to develop the necessary expertise to move forward. In the end, however, nothing came of it. In the 2000s, lie detection was used in the *Van Mesdagkliniek*, a secure psychiatric facility. The practice was hotly debated and has since stopped; the person in charge of the programme, Jos Buschman, later established a private practice, where people could submit themselves to lie detection to, for example, prove to their significant other that they had been faithful, for approximately 700 euros. The company has since stopped providing such tests "due to circumstances."

There is obviously an interesting story to be told about lie detection in the Netherlands since 1990. I have chosen to not delve into this here, however, because this story has to be placed in a wider European context, which is beyond the scope of this project. The 1990s marked a shift in European views of lie detection and various countries began experimenting with it. To investigate the reasons for this change and to examine the differences in the reception of lie detection in various European countries in this period would make for an interesting future project.

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