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Man as Magician, Man as Machine: Narrative, Wonder, and Politics in Twentieth-Century Lie Detection

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Man as Magician, Man as Machine Narrative, Wonder and Politics in Twentieth-Century Lie Detection

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Contents

1	Introduction	
PART I	MAKING THE MENTAL PHYSICAL 3	
	 Electric Current and Divine Flow 6 	
	 Healing, Exorcism, and Therapy 10 	
	 Objectifying the Subjective 14 	
	4. Ocularcentric Sciences	17
PART II	PERFORMED AUTHENTICITY	20
PART III	GENDER, RACE, POLITICS 28	
	1. Wonder Woman, <i>Femmes fatales,</i> Black Widows 29	
	 Racial Phrenology and Communist Criminality 41 	
	Concluding Remarks 49	
	Sources	51

"Since that disastrous day in Eden when the subtle serpent said to Eve, "Eat the fruit, for surely thou shalt not die," lying has been the rule in human behavior and not the exception. Eve and Adam ate of the forbidden fruit and knew that they were naked...Then God knew that Adam and Eve were guilty of stealing the fruit because had they not eaten it they would not have known that they were naked. This is the earliest instance of lie detecting on record. God's method was wholly scientific. He observed the suspects' behavior and reasoned logically that this behavior was an outward, visible expression of hidden emotions and ideas of guilt which the man and woman were attempting to conceal. This is the true principle of lie detecting."¹

Although modern technologies of lie detection—from the crude to the cutting edge—are made up of metal, wires, graph paper, and ink, this excerpt from one of the first manuals of lie detection technique in the twentieth century reveals that, at its foundation, deception and its detection are wrapped up in cultural narrative and ideological allegory. Operating under the premise of being "wholly scientific," the process and technology of lie detection is nevertheless made up of the immaterial, subconscious, mythological, and even spiritual realms of the human psyche. Numerous scholars and studies have asserted the shaky ground the lie detector stands on with regard to its legitimacy and accuracy in correctly segregating the guilty from the innocent, the truth from lies.² Yet its existence has been pervasive in American culture, drawn from both as an interrogative tool of positivist criminology and as a fictional motif in the entertainment media. How, then, did lie detection come to be seen as legitimate in the popular

¹ William Moulton Marston, *The Lie Detector Test* (New York: Richard R. Smith, 1938), 7.

² Key works include Rachel Adelson, "Detecting Deception," *Monitor on Psychology (American Psychological Association)* 37:7 (2004); Elizabeth Preston, "Detecting Deception," *Observer* 15:6 (2002); *Scientific Validity of Polygraph Testing: A Research Review and Evaluation* (Office of Technology Assessment: U.S. Congress, 1983).

imagination?

Work on the lie detector's emergence in the early 20th century, as well as general theory in narrative studies, has indicated that far from simply serving as a representation of objects, persons, and concepts of "reality," pop culture constructs conceptions of these objects, persons, and concepts (see Bruner 1991, Bunn 2007, Littlefield 2011, Thomas 1999)—narratives in all of their diverse forms construct and are constructed by the experiences of human practice and belief. Even William Moulton Marston, one of the many self-proclaimed "inventors" of the lie detector, makes this connection in his manual on the aesthetic technique of filmmaking (Marston had many different—and sometimes problematic—academic interests beyond lie detection, as we will see). "If the producer has a powerful enough story," writes Marston, he wields "...stupendous power over the thinking and feeling of myriads of men, women, and children."³ Marston is of course referring to stories as represented in film—but the lie detector, like any human-created object, is likewise circulated with attached stories and narratives. However, despite its irrevocable tie to socially constructed and story-based origins, the lie detector has mythically been set apart from its historical context, conceived of as the ultimate arbiter of human innocence and criminality, and "evolved from the 'nature' of things"⁴. Taking this cue from Barthes, Foucault's notion of genealogy,⁵ and from Donna Haraway, who has shown

³ Walter B. Pitkin and William M. Marston, *The Art of Sound Pictures* (D. Appleton and Company: New York, 1930), 13.

⁴ Roland Barthes, *Mythologies*, trans. Annette Lavers (New York: Hill and Wang, 1972), 110.

⁵ Michel Foucault, "Nietzsche, Genealogy, History," in *The Foucault Reader*, ed. Paul Rabinow (London: Penguin Books, 1991).

the "situated" nature of all knowledge claims and rejected the notion of science as a naturalized truth free from human interference,⁶ I hope to show the historical and social actions that gradually reified and legitimized the lie detector by situating it within several genealogies. First, I will locate the lie detector's origins within the late 19th and early 20th century American fascination with the "wonder show," focusing on the Spiritualist religion in particular. This spectacular philosophy of séances and spirits became fetishized by a public enamored with performativity and the possibility of accessing the marvels of the "technologically sublime" subconscious. Second, I will delve into the ways in which lie detection performatively expressed itself within this turn of the century period. Through carefully self-aware display of its wonders, lie detection shaped itself to be a valid, scientific entity that was yet still enamored with the mystigue and entertainment of the wonder show. Thirdly, I will position the lie detector within the context of narratives of the Second World War era based in both fiction and reality in order to examine the often problematic effects of lie detection and what was at stake in this era's construction of the lie detector's legitimacy. In this later era, the polygraph not only appealed to the desire for awe and spirituality which earlier wonder shows contributed, but also functioned politically to "save" Americans from various threats of the Other, be it communism, crime, or deviant sexuality.

I. MAKING THE MENTAL PHYSICAL Historical and Thematic Foundations of Lie Detection When the mother of Kate and Margaret Fox told her neighbors of her

⁶ Donna Haraway, "Situated Knowledges," in *Simians, Cyborgs, and Women* (London: Free Association Books, 1991).

daughters' eerie ability to talk to spirits of the deceased, one wonders if she could have ever imagined that the eerie tappings her daughters channeled from the spirit world to curious séance-members sitting at their dining room table would evolve from simply an after-dinner parlor trick to a full-fledged ideology with its own traditions and political worldview. Although initially a curiosity of small-town gossip, Spiritualism became a major force in reform-era America's politics and ideology. In this section, I will show the parallels of Spiritualism with lie detection, and how it contributed thematically to the later emergence of the lie detector, making the lie detector's claims and sensationalized depictions appear legitimate and naturalized in the post-Spiritualist era. Firstly, both Spiritualist séances and lie detector interrogations were particularly concerned with performatively translating the "flowing," ephemeral substances of one's psyche and personality into a visual format—whether the etched scribbles of a polygraph or the ghostly apparitions of one's deceased ancestors—implicitly given credence to the ideological backdrop lie detector practitioners or Spiritualist mediums were asserting. This mirroring of motifs between polygraph operators and séance mediums marks a second point of comparison between the two practices. Both Spiritualism and lie detection became pervasive entities in American society through the charismatic performance of their mysteries to an audience for the purposes of healing—reinforcing the conception that human mastery of technology could bring about miracles and creating a thirst within their audiences for the thrills and healing

Although I argue that Spiritualism serves as a helpful tool for thinking of how "objective" science surrounding lie detection emerged from an already existent tradition of awe and mystery, this is not to say that Spiritualism is an *a priori* philosophy; it of course also emerged from a tradition of hypnotism, psychic performances, and other wonder shows. One could just as easily compare lie detection to these displays of marvels. However, I think Spiritualism serves as a strong analytical tool due to how it institutionalized these otherwise disparate philosophies and spiritualities into a definitive "religion" adhered to by its constituents—an appeal to legitimacy that lie detection (which, as I will show, parallels Spiritualism in many characteristics) also successfully capitalized upon (although, of course, it defined itself as a legitimate "science" rather than a legitimate "religion") in order to authenticate itself as more socially acceptable and "valid." Spiritualism, along with hypnotism, telepathy, and other

pseudo-sciences in the early 20th century, was concerned with the concept of a "divine flow" or ray as existing within the human body that, if channeled and accessed correctly, would allow one to probe into some sort of deeper consciousness.⁷ In séances held in respectable individuals' parlors or performed to greater audiences in large concert halls, the consciousness that was uncovered was that of a deceased spirit—communicating through a medium to séance attendees through "rappings" or knocks audible to all. Certain individuals claimed to be able to see ethereal bodies, ghosts returning to the mortal plane by taking shape as ectoplasm. Bodies and

⁷ Nadis, *Wonder Shows*, 18.

visages also appeared in "spirit photography," in which a portrait of living persons would have superimposed around it a ghostly figure usually resembling a deceased loved one. All such Spiritualist modes of contact with the dead were based upon a sort of mind-body dichotomy, in which the material body perished after death but the psychical one lived on, allowing for the actualization of ethereal spirits amongst the living.⁸

Lie detection, despite being less explicitly concerned with a mind versus body division, shares a fundamental characteristic with Spiritualism's attempts to access the psychic, non-physical plane. Like the ghostly specters that appeared on photo prints and the "spirit rappings" channeled by mediums, lie detection, too, is interested in the translation of subjective thought into objective audiovisual representations. Just as the sound of knocking or the appearance of ectoplasmic specters served as "proof" in Spiritualism—translating psychical, ephemeral characteristics into something physical, material, and verifiable (at least to a culture preferring the ocular sense—"seeing is believing," after all)—the etched ink-and-pen recordings of a polygraph likewise provided a hard-copy representation of one's innermost mental gualities, proving one's guilt or innocence and also translating into text an ostensibly understandable read-out of the otherwise inaccessible "lying" oriented area of the brain. This section will focus on these thematic similarities, comparing the philosophical underpinnings of several key characteristics of Spiritualism and lie detection in order to show the corresponding ways in which both conceived of the wondrous nature of the

⁸ Arthur Conan Doyle, *History of Spiritualism, Volume 1* (London: Cassell and Company, Ltd. 1926), 45.

human mind and the modes in which this wonder was physically manifested.

Electric Current and Divine Flow

The substance or material being analyzed or tested for in lie detection, although it may vary—blood pressure, galvanic skin response (the sweat released from the application of electric current), etc.—operates under the principle that some common human physiological force can provide proof or evidence to determine whether or not someone is lying. The fact that upon its acceptance into the juridical sphere in America it was sometimes seen as "magic or voodoo"⁹ shows just how intimately connected this operational characteristic of the lie detector is with the pseudo-magical characteristics of Spiritualism and other wonder shows.

The "force" being channeled and revealed in Spiritualism was more vaguely defined than the scientific variables of the lie detector, but the message, mysterious knocking, or apparition being brought forth during a séance by a medium was an event that occurred ostensibly due to the transmission of an energy or flow that existed at some level within the human body.¹⁰ This divine energy being channeled by mediums was inspired by the work of Anton Mesmer and his theory of animal magnetism, which postulated that the world was rife with a mystical, weightless, fluid-like substance that one simply needed to transmit into an afflicted individual to heal them.¹¹

Lie detectors, although predicated upon a more "scientific" basis than these explicitly sacred energies, likewise conceive of a universal substance

⁹ Marston, *The Lie Detector Test*, 66.

¹⁰ Nadis, *Wonder Shows*, 19.

¹¹ Ibid., 87.

linking all life forms that can be utilized to produce a materialized depiction of an immaterial mental quality. The inked etchings of the lie detector's needle—recording and quantifying the subject's "flow," whether it be heart rate, blood pressure, or galvanic skin response—is read by the interrogator to ostensibly determine the validity of the subject's statements. At its foundation, lie detection revolves around the translation of this "flow" into "objective" and explicit texts or images—supposedly material and objective representations of one's deceptive gualities.

William Moulton Marston's lie detector test, based on the principle that one's blood pressure rises when telling a lie,¹² may not be as mystical as Mesmer's "flowing" animal magnetism, but similarly functions through harnessing the power of a flowing substance—whether it be blood or some more mystical material. Clive Black, a student of Leonarde Keeler (who, like Marston, was a fellow inventor of a type of lie detector) and founder of the ClA's polygraph section in the 1960s, hooked up a galvanometer (measuring galvanic skin response [GSR]) to his plants and discovered dramatic readings when he threatened to burn them—"evidence, he said, of a 'primary perception' that linked all living things."¹³

This comparison that I am making is not novel; Thomas Edison conflated the new powers of electric current (another "flow" utilized by lie detectors) in the early 1900s with spirit, asserting that the spirits being manifested in Spiritualist séances were probably previous "telegraphers or scientists, or others thoroughly understanding the use of delicate

¹² Marston, *The Lie Detector Test*, 52.

¹³ Ken Alder, *The Lie Detectors* (Lincoln: University of Nebraska Press, 2007), 253.

instruments and electric currents."¹⁴ Indeed, just as GSR-recording lie detectors of the 20th century utilized electric current to detect deception in their subjects, Spiritualists in the late 19th century who were similarly enamored with the mystical power of electricity utilized seemingly mundane objects to channel voices from the beyond. "Spirit telegraphy," just as it sounds, utilized the telegraph to receive messages from spirits¹⁵—granting their religious enterprise an air of legitimacy through engaging with a contemporary technological form while also imbuing the telegraph (and, by extension, electricity) with the mystical aura that lie detectors also utilized. But whereas Spiritualists drew from contemporary technological

innovation in order to define themselves as a current and scientifically valid enterprise probing the depths of both the human psyche and the divine beyond, lie detection did the opposite. It rejected the overlay of psychical research and religious devotion attached to Spiritualism, attempting to further propel itself into the realm of positivist science. However, this divergence was done more in theory than in practice; paradoxically, it moved away from Spiritualism and its accompanying sense of wonder at the techno-sublime while utilizing the same tactics to garner attention for itself. Fred Nadis devotes a chapter in *Wonder Shows* to a similar competition of traditions—the conflict between Spiritualism and stage magicians of the same era. Although both performed similar wonders in similar contexts, utilizing the stage or parlor room to read minds, channel spirits, and prove the unbelievable (they even purchased their tricks from the same

¹⁴ Forbes, "Edison Working," 11. In Nadis, Wonder Shows, 81.

¹⁵ Nadis, Wonder Shows, 117.

catalogues¹⁶), magicians promoted themselves as scientific enguirers keeping to only the "true" mysteries of the world and labeled Spiritualists as charlatans and illusionists who deceived people by operating as a religion rather than a valid scientific community.¹⁷ Like stage magicians at this era, lie detector innovators several decades later took a similar approach. Charles Keeler, inventor Leonarde Keeler's father, wanted his son to use his lie detector for more than simply criminal investigations; he wanted Leonarde to use it to defraud psychic "quacks" and instead prove the legitimacy of "real" psychic powers, beginning a renaissance in science-based psychical research. ¹⁸ As will be discussed below, this is a paradoxical assertion due to the correlations in both theory (the translation of thought into text) and context of Spiritualism and lie detection. Charles Keeler's statement comes off as especially hypocritical when considering his identity as a poet, naturalist, inventor of the Eastern philosophy-inspired "Cosmic Religion," and dabbler in Spiritualism and telepathic experiments.¹⁹ Leonarde, too, continued to practice his boyhood interest in magic tricks throughout adulthood,²⁰ making the positioning of his lie detector as a purely scientifically oriented object unbelievable. Based on his family's background in transcendentalism and a mystically-oriented worldview, along with his interest in magic and performance, it is not unfounded that he went into lie detection—a field predicated upon harnessing a physiological force in order

¹⁶ Nadis, *Wonders Shows*, 120.

¹⁷ Nadis, Wonder Shows, 113-137.

¹⁸ Alder, *The Lie Detectors*, 80.

¹⁹ Alder, *The Lie Detectors*, 57.

²⁰ Ibid., 56.

to channel and translate it into physical, material form—due to a carried-over interest in marvels and parapsychological philosophy. The desire to claim the scientific legitimacy of the lie detector is understandable, but it would be wrong to ignore its grounding in wonder and mysticism.

Healing, Exorcism, and Therapy

This "divine flow" both Spiritualism and lie detection were fundamentally interested in accessing, harnessing, and then converting into tangible form was more than an entity emblematic of human attempts to access the divine or marvel at the mysterious—it served a function in the real world in healing and therapeutic applications. Both types of "flows" were defined by the technological rhetoric of electricity—a relatively recent invention still imbued with some sense of fantastical mystery. Just as other "electrical medicine,"²¹ which was "conceived as an energy flowing between mind and body, merged with new therapeutic conceptions of the psyche and the self,"²² through tapping into the electricity-like "flows" channeled through Spiritualism and lie detection, the deceased could be contacted, pain could be lessened, and criminality could be brought to the surface.

Passionate supporters of the validity of spirit photography, it has been argued, were oftentimes parents, friends, or relatives of those who had lost someone—their grief and need for therapy and closure at this time of mourning making them more gullible and susceptible to believe in the medium or photographer's ability to convey their lost loved ones' spirit to their side.²³ Although I think in this specific case it is rather essentializing to

²¹ David E. Nye, *Electrifying America* (Cambridge: MIT Press, 1990), 155.

²² Ibid.

²³ Marina Warner, *Phantasmagoria* (Oxford: Oxford University Press, 2006),

dismiss the role of spirit photography and Spiritualism as simply outlets for grieving parents and widows—it influenced future scientific research and proved to be an important political sphere for debate during its heyday—the therapeutic nature of reuniting with deceased loved ones cannot be denied. The lie detector, too, created a therapeutic result through the

harnessing of the "flow" of electric current, blood, or sweat. By being concerned with separating truth from falsehood, it attempted to exorcise or bring to the surface criminality (lies) or innocence (truth). Early GSR research, which would of course later be used as a type of lie detection, was also used to treat mental ailments. GSR's impact on the correlation of physiology with psychology came about in 1904, when Otto Veraguth noticed that evoking pleasant or unpleasant emotions in a subject hooked up to a galvanometer created fluctuations in the values of the patient's galvanic skin response.²⁴ This new application of GSR was utilized by psychologists of the era to study or therapeutically treat inner mental characteristics—notably, by Carl Jung and his word association experiments²⁵.

"It is a psychological medicine," William Moulton Marston said, "which will cure crime itself when properly administered."²⁶ Marston's lie detector did not simply decide who should go to jail and who should be released, but upon its invention was meant to go further, to discover who was criminal and then go about ways to "cure" the individual of this "other" psychological trait. Crime was not simply an action one carried out but a psychological

^{246.}

²⁴ Eva Neumann and Richard Blanton, "The Early History of Electrodermal Research," *Psychophysiology* 6.4 (1970): 468.

²⁵ Ibid., 469.

²⁶ Marston, *The Lie Detector Test*, 15.

ailment requiring treatment, and lie detection was the first step on the road to recovery. The purifying quality of "truth" in this context was perhaps foreshadowed by Charles Keeler's poem "The Truth": I crave the truth, stark naked, unashamed: And should it smite me, let me face the pang, Aye, turn the other cheek, and cry, again!²⁷ This depiction of the truth as a painful yet healing tool of cathartic purification seems so in line with Marston's concept of lie detection as a therapeutic tool that one wonders if perhaps Charles' son Leonarde ever saw his father's poem before he created his version of the lie detector. Marston's "truth" therapy, however, was more vernacular than psychological. Marston saw the lie detector's niche based not in criminology but in romance particularly in couples' therapy. Concerned with the moral fortitude of relationships, Marston saw it as

his duty to ensure strong unions and provide "healthy love adjustment."28

The translation of lovers' otherwise inaccessible subconscious thoughts into

a "scientific" printout enabled truth (which Marston conflated with a stable

relationship) to be uncovered.

Healthy love adjustment requires, first, the cutting away of

disguises, the elimination of false expressions of the true

emotions underneath. When this has been done with the aid of a

deception test, the honest feelings often adjust themselves.²⁹ In Marston's application of the lie detector, the "flow," the ephemeral

substance requiring processing by the lie detector before being visible, is

rhetorically described as emotion, not blood pressure or sweat. Nevertheless,

²⁷ Charles Keeler, "The Truth," *The Victory: Poems of Triumph* (New York: Gomme, 1916): 35. In Alder, *The Lie Detectors*, 59.

²⁸ Marston, *The Lie Detector Test*, 119.

²⁹ Ibid., 120.

like other usages of the lie detector and Spiritualist séances, this instance provides another example of how ephemeral substance is channeled into physical form for therapeutic effect in these practices.

John Larson, the third of the "big three" lie detector inventors in the early 20th century (the other two being Keeler and Marston), urged the therapeutic benefits of the lie detector after getting annoyed with Keeler (who was his protégé). Keeler, who relished using his lie detector in sensationalized court cases of the era, was more interested in using it as a machine of "objectivity" keeping innocents safe and deviants behind bars, whereas Larson envisioned the lie detector as a key facet of psychological research—changing it from being "a method of inducing anxiety into a technique to relieve it, from a pseudoscientific oracle into a diagnosis of the self."³⁰ Although public opinion and interest dismissed Larson in favor of Keeler's charismatic showmanship of the lie detector in the court system (a characteristic he shared with Spiritualist mediums and their self-aware performances), his goals for the lie detector explicitly revolved around psychiatric treatment.

"The highest and most active of all the elements constituting life is electricity; it is the organizing, the vitalizing, and equalizing Agent of Nature's God"³¹—such was the tagline on posters advertising electrical stage healer Charles Came in the late nineteenth century. While hawking the "science" of folk medicine and boasting of his electricity-based cure-alls, he simultaneously decorated his stage with awe-invoking urns spitting flame

Wikey 14

³⁰ Alder, *The Lie Detectors*, 155.

³¹ Nadis, *Wonder Shows*, 33.

and machines that gave off small arcs of electric lightning.³² Came, who purported to be a medical authority yet also sold tickets through the allure of his pseudo-stage magician identity, is emblematic of the paradoxical middle-ground between positivist techno-medicine and wonder shows that both Spiritualism and lie detection grew out of. Enamored with the existence of a worldwide, unifying force that could be harnessed by the powers of the human mind and converted into material form—whether electricity, blood, sweat, ectoplasm, or spirit—these two cults of techno-wonder took advantage of these forces' purported existence in order to provide healing, therapy, exorcism, or unveiling through the cathartic properties of "truth."

Objectifying the Subjective

As technologies of translation, converting ephemeral beings and qualities into a visible form for a therapeutic purpose, the "spirit camera" and the lie detector also reflect a predilection for the technological over the organic. This privileging of the "objective" assertion of a machine over one of a human was not intrinsically and automatically "truth;" the means by which the mechanical became seen as definitively valid was a process that depended not simply on the positivism of tests and labs but also on human subjectivities.

"The camera undid problems about human perception and fallibility...it could be trusted, because it did not have consciousness, and acted mechanically, objectively, and independently of the mind of its user."³³ For Spiritualists and the skeptical layman alike, spirit photography provided

³² Ibid., 30.

³³ Warner, *Phantasmagoria*, 223.

objective "proof" of the new religion's wonders. Arthur Conan Doyle, the creator of Sherlock Holmes—a character of decidedly "rational" philosophy and deductive reasoning—utilized what he saw as equally deductive observations to state unequivocally "every reader with an open mind will agree that the evidence for the reality of psychic photography is overwhelming."³⁴ It is not difficult to see how the truth claims of mediums and séance-attendees' experiences of "spirit rappings" may have been seen as simply hearsay, whereas concrete "proof" in the form of spirit photography could be seen and thus believed. "Photography as impressions of mental powers, as translations of thoughts into images, as 'psychographs': this conception of the medium shaped the trust which Victorians placed in spirit photographs."³⁵

This emphasis on the "translation" of thought of course hearkens to the transcriptive nature of the lie detector, which likewise gained the public's trust through producing a visual output. Simply declaring someone to be a liar (and thus possibly declaring them guilty of a crime, confirming their prison sentence, etc.), would have been seen as untrustworthy, biased, and "unscientific;" having a machine "objectively" determine the outcome was seen to be free of human influence and by extension more legitimate. However, this machine was far from a independent entity—even authorities on lie detection during its rise to prominence agreed that "lie-detector evidence…would consist largely of an expert's opinion based upon a set of

³⁴ Arthur Conan Doyle, *The Case for Spirit Photography* (New York: George H. Doran Company, 1923), 132.

³⁵ Warner, *Phantasmagoria*, 228.

recordings."³⁶ Reading the body is not free from politics, it "is not innocent or transparent; at best, bodily reading is translational."³⁷ Lie detection's objectivity was thus constructed by the subjective opinion of an "expert," which was granted legitimacy due to its supposed grounding in technology and "science,"—realms that were taken as inherently truthful in their abilities to detect truthfulness.

The wonders of spirit photography and other paranormal enterprises also were granted an air of scientific validity through the application of "strict laboratory standards" to these events, seen as "experiments" testing the existence of things otherwise thought to be superstition or the supernatural.³⁸ Conan Doyle's pro-spirit photography text discusses many such "experiments;" one instance testifies to the stringent procedure of keeping photographic slides sealed and unable to be tampered with at every point in between the photography studio and the developer, in order to be "perfectly satisfied that no trickery or deception was practised."³⁹ The dryly narrated text of technical manuals on lie detection shows that the polygraph was equally concerned with utilizing "scientific" technique, showing graphs and tables of heart rate increases along with question types and the correlations between physiological responses and deception.⁴⁰ This use of scientific and laboratory rhetoric, hearkening to concepts of coldness and

³⁶ Fred E. Inbau, *Lie Detection and Criminal Interrogation* (Baltimore: The Williams and Wilkins Company, 1948), 88.

³⁷ Melissa Littlefield, *The Lying Brain* (Ann Arbor: University of Michigan Press), 5.

³⁸ Warner, *Phantasmagoria*, 239.

³⁹ Conan Doyle, *Case for Spirit Photography*, 93.

⁴⁰ Inbau, *Lie Detection*, 1.

austerity, free of human interference, once again underlines the conflation of the scientific and the mechanical with legitimacy. Through describing spirit photography and lie detection using this terminology, these technologies were narratively constructed as bearing the qualities of truth and validity. This automatic privileging for the laboratory is reminiscent of Bruno

Latour's premise of the "black box,"⁴¹ in that once techniques of spirit photography and lie detection are observed and/or "proven," they are taken for granted as legitimate mechanisms for accessing and transcribing the psyche. Utilizing these machines—the spirit camera or the polygraph —"without question or believing a fact without question...strengthens the case of whatever is bought or believed."⁴² The genealogical backdrop of wonder, mainly ignored in the construction of the lie detector's validity, shows how the process of testing and "proving" its ability to detect lies predicated on the psychical and Spiritualist research of an earlier era—made the polygraph begin to be seen as a machine of truth; to "hold," in a Latourian sense.

Ocularcentric Sciences

As a machine concerned with uncovering the legitimacy of individuals' alleged "truth" claims, the lie detector presents itself as an explicit symbol for truth—which is a symbolic concept in itself associated with innocence, kindness, moral uprightness, trustworthiness, responsibility, and other characteristics assumed to be indicative of "good" citizenship in American society. This symbolic "truth" the lie detector represents is

 ⁴¹ Bruno Latour, *Science in Action* (Cambridge: Harvard University Press, 1987).
 ⁴² Ibid., 29.

multivalent, however—it not only represents truth through being situated in criminal investigations and within the sphere of law enforcement (areas that are especially interested in separating truth from lie and innocents from criminals), but also through the material entity of truth that it produces. In the format of a printed-out, ink-and-paper physical object, the lie detector also produces its own meta-symbol of truth—it not only represents truth, but also *produces* symbolic truth through the inked etchings of a metal needle attached to a machine measuring physiology. Based on the height and frequency of the needle's swings, what otherwise is simply graph paper and a pen collaborate and create an image which can allegedly determine the validity of a subject's statements—symbolizing the degree of truth to which they belong.

Through privileging a paper printout over the aural statements of the subject being interrogated, the lie detector's symbolic "truth" is only valid if it can be visually or physically represented; as argued previously, it must translate the ephemeral mental qualities of deception or truth into a textual (and supposedly "objective") format. I would argue that the lie detector, functioning as a tool attempting to turn subjective, non-visual things into objective, visual ones, serves as another example of the Western preference for sight over the other four senses, an "ocularcentrism"⁴³ rejecting other formats of truth claims.

In his *Critique of Pure Reason,* Immanuel Kant, before discussing Western culture's visual bias, prefaces modern ocularcentric discourse in

⁴³ As expounded in Charles Hirschkind, *The Ethical Soundscape* (New York: Columbia University Press, 1999).

describing truth as being the "agreement of cognition with its object."⁴⁴ To accurately symbolize truth, the statement of the subject must agree with the printout of the lie detector; the ephemeral mental quality (one's inner "truth") must be accurately translated into its physical representation—there must be no sudden increases in the amplitude of one's blood pressure report.

This privileging of visual proof can be traced to the Enlightenment, in which the search for scientific objectivity and the quest towards positivism first rose to prominence.⁴⁵ Once the scientific validity of vision and its location within the material body could be proved, other senses, too, could be made measurable—embedding "human perception in the domain of the quantifiable and the abstract."⁴⁶

The fact that even the objectivity of vision itself comes from a historical genealogy shows that lie detection and other wonder shows' emphasis on proving themselves through the believable marvels of sight and vision obscures their processes of formation (that is, how they became seen as legitimate scientific or religious entities). Art theorist and historian Jonathan Crary argues that "spectacular culture is not founded on the necessity of making a subject *see*, but rather on strategies in which individuals are isolated, separated, and *inhabit time* as disempowered."⁴⁷ Wonder shows—characteristically defined as spectacles—thus focus their

 ⁴⁴ Immanuel Kant, *Critique of Pure Reason*, trans. Paul Guyer and Allen W.
 Wood (Cambridge: Cambridge University Press, 1781/1787), A58/B82.
 ⁴⁵ Leigh Eric Schmidt, *Hearing Things: Religion, Illusion, and the American Enlightenment* (Cambridge: Harvard University Press, 2000), 16-17.
 ⁴⁶ Jonathan Crary, *Suspensions of Perception: Attention, Spectacle, and Modern Culture* (Cambridge: MIT Press, 1999), 12.
 ⁴⁷ Ibid., 3.

efforts on constructing "proof" through the production of visual materials (lie detector reports, spirit photography, etc.), which symptomatically distract the viewer from the process by which these images could be "isolated, separated," and constructed as truths. Perception, as a type of visual attention, necessitates that one focus upon one particular object or narrative and neglect the others. Perception is thus also "an activity of exclusion, of rendering parts of a perceptual field unperceived."⁴⁸ By privileging the visual, appeals to legitimacy could be proven through the transmission of photographic or image-centered proofs to the general public in other visual media like posters and newspapers—materials that likewise appealed to an audience's preference for the ocular. Through utilizing vision as an authoritarian arbiter of truthfulness, the genealogical emergence of lie detection could be dismissed, ignored, and forgotten.

II. PERFORMED AUTHENTICITY How Performance Institutionalized the Lie Detector While lie detection thematically exemplified the Latourian "black

boxing" of the concept that psychological traits were conflated with physiology, Spiritualism quite literally utilized a "black box" to make the mystical nature of séance performances more mechanized and scientific. Indeed, wonder shows straddled this divide. They played to an audience's dual interest and horror by implicitly pulling from tropes of marvels and mysteries while simultaneously explicitly asserting themselves as realms of scientific legitimacy—a dichotomy also present in the lie detector, which saw itself as both magical and objective.

⁴⁸ Ibid., 25.

The literal "black boxing" of Spiritualism is exemplified by Margery Crandon, a medium who would be secured within a wooden box while paranormal activity was being tested for. Locked up in a contraption alike to the camera, she became "an instrument both receiving and transmitting, like a camera or a radio or a gramophone," replacing the film or material substance of a normal camera and instead becoming a sort of human film, awaiting imprinting and transmissions from the spirits of the paranormal realm.⁴⁹ Wholly neither human nor machine, Crandon represents a blended form, a cyborgian figure ostensibly more attuned to accessing the hidden recesses of reality.

The lie detector, too, operated through the merging of man with machine. The interrogator's questions and the swings of the polygraph needle are two different entities, different practices that distract the subject being interrogated—"a classic misdirection, familiar in stagecraft—the 'software' allowed the operator to work his will."⁵⁰ Taken away from each other, neither the lie detector interrogator nor the lie detection machine itself could function as an effective detector of deception; it was the machine's data which had to be filtered through by the practitioner, who used his expertise and pseudo-mystical understanding of the technology to ascribe a meaning to the otherwise non-textual and incomprehensible narrative of a lie detector read-out. Only through working together could man and machine function as a "true" lie detector. In the case of Spiritualism, the adoption of cyborgian characteristics by

⁴⁹ Warner, *Phantasmagoria*, 230.

⁵⁰ Alder, *The Lie Detectors*, 81.

mediums (who were by and large made up of women) granted this marginalized gender a sort of agency in a sphere which they normally only passively participated in. Much work has been done in telling the stories of how mediumship gave female mediums a soapbox to stand on, not only spreading the "gospel" of Spiritualism, but also a political message especially in the push for women's suffrage.⁵¹ Through being imbued with religious authority, women—as figureheads of the movement—were symptomatically imbued with political authority as well; by tapping into the technological marvels of the era, they could participate more fully in other issues facing the nation. Additionally, as the camera—such a vital component of Spiritualism in its later years—became more commonplace, it became a regular object in the female-dominated sphere of the family home. "The camera was becoming a domestic appliance, and it allowed Victorian women…to distinguish themselves in the new medium."⁵² Of course, to argue that this technology's positive impact on gender

agency was this simple hides the fact that it was, of course, more complicated. As will be discussed in Part Three, Spiritualism's almost Bakhtinian obsession and interest in the ectoplasmic emissions from entranced mediums, along with lie detection's more obvious depictions in pop culture and literature of "black widows" and "damsels-in-distress" seduced by the wiles of the polygraph—both show that these technologies also were tied up with narratives of exploitation and sexual titillation. Like the mechanized medium, the lie detector interrogator was often

 ⁵¹ e.g. Ann Braude, *Radical Spirits: Spiritualism and Women's Rights in Nineteenth-Century America* (Bloomington: Indiana University Press, 2001).
 ⁵² Warner, *Phantasmagoria*, 225.

characterized as a cyborg figurehead promoting science but also magic—and through human mastery of this ephemeral quality, miracles could be made manifest. Both lie detection and Spiritualism were expressly concerned with playing out their processes to an audience—literally on a stage or simply promoting their wonders to the public sphere. Newspaper headlines portrayed both mediums and lie detector operators as "magicians" who could materialize the "truth"—the truth of what lied beyond the mortal plane, or the actual truth as distinct from lies.

Despite, as discussed earlier, the man-and-machine duality that lie detector operators took on, it was still the person rather than the machine that was reified—the technology did not gain power through the aid of a human; rather, the human became powerful through harnessing technology. "...The actual operation of the instrument itself requires very little ability or training. The examiner's most important task and responsibility consists of the diagnosis of deception,"⁵³ according to polygraph developer Fred Inbau. It is ironic, perhaps, that a technology so concerned with being seen as scientifically valid and objective would emphasize the human component as so key. By emphasizing the role of the operator, these narratives hint at how the mechanized, ostensibly objective technology was actually controlled by man and his human subjectivity.

Perhaps this was simply the price paid for utilizing the "magician" trope that Spiritualism and other wonder shows capitalized upon so effectively in the decades leading up to the lie detector. Why ignore a public enamored with a charismatic, pseudo-paranormal figurehead? Leonarde

⁵³ Inbau, *Lie Detection*, 80.

Keeler consciously or inadvertently drew from this stage magic cliché when he was perfecting his prototype of the polygraph as a student at Stanford. Using the seemingly simple game of the "card trick," he hooked up fellow students to his lie detector prototype to record their responses as he attempted to prove his ability to discover which card they had drawn from the deck⁵⁴--an obvious allusion to magic tricks and an illusionist's sleight-of-hand. Just as the Fox sisters charged admission to their séances,⁵⁵ capitalizing upon the public desire for their perplexing wonders, newspapers at the era of lie detection's prominence sensationalized the use and aftermath of the lie detector. Articles with headlines exclaiming "Lie Detector Traps Bride" or "Science Indicates Hightower's Guilt"⁵⁶ were meant, like any headline, to entice the reader to read on and, in this case, to decide for themselves of the validity of lie detection—eerily familiar to the rhetoric on Spiritualist and magic show performance posters asking the viewer to withhold judgment and to first "come and investigate."57 As is implied by this sort of enticing guestion to the viewer, wonder

shows and lie detection also could play with the sense of the sinister or



malevolent. Polygraph interrogators functioned like the hypnotic Mesmerists of wonder shows, looming over the passive individuals they were subjecting to their mind-probing technological powers. The 121.

"Et maintenant dors, ma mignonne!" Figure 1 - In this engraving by du Maurier for the first edition of the book, Svengali looms over the submissive female under his thrall, uttering "And now sleep, my beauty!"

very nature of both Mesmerism (a precursor to Spiritualism) and lie detection set up a divide between interrogator/hypnotist and the subject, often representing an unequal power dynamic indicative of social anxieties and norms at the time. George du Maurier's 1894 novel (and then play) *Trilby* depicts one instance of the power inequalities between a hypnotist and his subject.



Not a suspect, but a volunteer for the test, this grave-faced girl is answering questions put to her 1 Leonarde Keeler. Automatically controlled pens will record the slightest deviation from the trut

How Leonarde Keeler's

The Magic Lie Detector

By ALVA JOHNSTON

LOVD'S of London will bet on almost anything. It made one of its most peculiar bets in Chile caps hat feeptmer. It gove warmons odds the second second second second second second the second second second second second second sites second second

be can be tripped up again if he makes another also move. Getting caught on the lin detector is a sort of mostl vectoristication, a short of integrity in the arm, fir William Ohier said that nothing promoted larvity aro much as the early discovery of a frace of rgnnic disease. In the same way, nothing seems to ensmote bonney on much as the early discovery of a

Lloyd's made its gamble on the lie detector after taking its performance in the Chicago area for thirny years. Leonarde Koeler, investor of the Koeler hyproph, a form of the detector, was called to Chira in 1930 by Northwaters University, which had ounding invention tracks own murderers, unmasks that arts and the larcenous, and an tell just how honest you re-and intend to be. d to make childraic transformed and d to make childraic transformed and g guily averth has been thoroughly established, graph which negiter emotional data and the polygraph is output with the transformed and graph which negiter emotional data the mask of the state of the splication of the splication of the state of the splication of the splication

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hypnotist-cum-music-instructor (an unlikely career blending if there ever was one), finds a young musical ingénue to put in his thrall; he gives her musical prowess that she can only access while under hypnosis. When he dies, her musical abilities are lost forever. *Trilby* is obviously representative of the general public fascination for hypnotic wonder shows in the late 1800s,

but Svengali's hypnotic gaze functions as more than a simply sensationalistic fantasy. The puppet-like submission of Svengali's ingénue is mirrored in drawings and posters of hypnotism, mesmerism, and other spirit-channeling or therapeutic magic shows.⁵⁸ The passive subject being probed or interrogated by the rays of the hyptonist's gaze (or the electric current of the polygraph, as we shall see) was often female—which not only conveyed an implicit degradation of the female by stereotyping the gender as the typical

⁵⁸ For more see Nadis, *Wonder Shows*, 100.

hypnotist subject (and thus, highlighting their lack of agency⁵⁹), but also

ascribed a sexually problematic power dynamic to the male hypnotist and his

weak female subject. The "weaker" sex, as it was "trained to obey,"⁶⁰ made

for a perfect hypnotist subject-women already prone to gendered mental

weaknesses and dysfunctions like hysteria.

Prefacing the lie detector's seeming appropriation of this rhetoric,

Freud discusses how the treatment of criminality is almost identical to the

treatment of hysteria:

In both we are concerned with a secret, with something hidden...

The task of the therapist, however, is the same as that of the

examining magistrate. We have to uncover the hidden psychical

material; and in order to do this we have invented a number of

detective devices.61

The device in question, of course, would be the lie detector, which utilized

similar imagery as the hypnotic wonder shows discussed earlier in

Figure 2 - In this article from a 1944 Saturday Evening Post, Leonarde Keeler takes on the role of Svengali (albeit to a lesser extent), looming over a female subject passively looking off in the distance

marvels (e.g. calling it the

sensationalizing the technology's

"magic lie detector" in Figure 2). Even comic strips highlighted the

controlling powers of male interrogators in extracting the truth from weak or

flighty women. A 1932 comic of "Dick Tracy" depicts the eponymous

detective using his trusty lie detector—which he had just used to defeat his

adversary-to ask his girlfriend, Tess Trueheart (perhaps the ideal name for

a lie detector subject) of her true feelings. "You are madly-yes-violently-

⁵⁹ Ibid., 90.

⁶⁰ Ibid., 32.

⁶¹ Cited in Thomas, Ronald, *Detective Fiction and the Rise of Forensic Science* (Cambridge: Cambridge University Press, 1999), 33.

in love with a certain chap by the name of Tracy—are you not?" he asks. Despite her protestations, in the end the machine has uncovered the truth —"she's guilty," he exclaims, "just as I suspected!"⁶²

⁶² In Alder, *The Lie Detectors*, pl. 17.

Thus, despite being tied up with wonder and benevolent awe due to their characteristic performed nature, the wonder show and lie detection also spliced in slightly malevolent threads to their constructing narratives; they were performed as miracles yet also as tools of powerful seduction. In a real-world exemplification of this, the two prominent lie detector creators



Leonarde Keeler and John Larson both met their wives through the utilization of this technology of seduction—some historical trivia the writer of the "Dick Tracy" strip above must have been inspired by. Keeler met his wife at Stanford while testing his "Keeler polygraph" on her, hooking her up to a lie detector and trying to guess the playing card she had seen—although in this case, unlike a stage magician's prestige, he uncovered the truth not through

sleight-of-hand but through seeing which card made her heart rate increase while he was guessing. Larson interrogated his future bride while trying to discover who had stolen jewelry from her sorority house—she was one of the suspects (see Figure 3). These technologies are conflating entrapment with love, control with desire—and criminality or some other mental "deficiency" with sexual attraction. "He placed the instrument on the girl's wrist and the love god manacled him for life," says the Examiner article in Figure 3—love and imprisonment are depicted as going hand-in-hand rather than as opposites. As we will see in Part Three, lie detection's conflation with this pseudo-sadomasochistic allure would blossom into perhaps less sexist depictions of interaction between the male interrogator and the female subject in the comic superhero Wonder Woman—however, the sinister overlays in these technologies of detecting deception and hypnotic wonder shows would still be present as tactics of sexual titillation and a thinly veiled appeal to an audience's excitement and fear.

III. GENDER, RACE, POLITICS Political Mythologies of Lie Detection

As performative enterprises straddling the era of the American women's suffrage movement, it would be amiss to neglect discussing issues of gender surrounding both Spiritualism and lie detection. Much work has been done discussing how Spiritualist religion provided a space for women to speak out politically and ascribe themselves with more agency than the

Figure 3 - San Francisco Examiner article discussing how the wily Larson "caught" his bride through the lie detector (August 9, 1922). traditional confines of the Christian church (e.g. Braude 2001). Lie

detection, however, had a more complicated sense of gender. Whereas many depictions in reality and in popular folklore at the time were similar to Spiritualism in allowing for or relying on certain expressions of femininity (the lie detecting figure of Wonder Woman, for example), other representations ascribed women with the more negative characteristics of figures in pulp crime novels—femme fatale, damsel-in-distress, etc. In the first part of this section, I will delve into how this ambiguity reflects the tenuous societal understanding of gender and sexuality at the time, and also the way in which what the lie detector saw as "deviant" or "criminal" (which often went hand-in-hand with things deemed to be too "soft" or "feminine") was constantly in flux and being collectively determined by society. This relationship between political groups uneasily tolerated by the

governmental regime and groups who were seen as a "typical" lie detector subjects shows how the lie detector's "truth" could be manipulated as a way to marginalize specific realms of American society. In the second section, I will explore how the correlation between outer characteristics and inner morality almost effortlessly created a seemingly obvious link between race or sexuality and deviance, which was a fundamental correspondence slyly—if subconsciously—pulled from by prejudiced political ideologies (McCarthyism) and racist social science (anthropometry and phrenology). As a machine fundamentally concerned with linking the inner psyche to the outer soma, judgments based on physical characteristics became scientifically backed up and were able to go unquestioned.

Wonder Woman, Femmes fatales, Black Widows

"Hold out your hands!" "W-what are you going to do to me?" "I shall make you tell the truth – while bound with this golden rope you must obey me!" "Oh no – no! You can't do this to me!"⁶³

With the use of her magic lasso—a lie detector of golden cord rather

⁶³ Les Daniels, *Wonder Woman: The Complete History* (San Francisco: Chronicle Books, 2000), 49.

than metal wires, but a lie detector nonetheless—Wonder Woman in this passage uncovers the true identity of her adversary Marva Psycho. Created by William Moulton Marston, a self-proclaimed "inventor" of the lie detector test, his Wonder Woman comics were explicitly concerned with getting across his unlikely-partnered philosophies of proto-feminism and criminological "science." As a part of the lie detector's later genealogy, Wonder Woman is thus intrinsically connected to the lie detector's origins and circulation in the popular imagination. As such, this comic strip can be read as a mythological representation of the role and applications ascribed to the lie detector by Marston and other authors or pop cultural "scientists" of the early 1900s. After first connecting Wonder Woman with Spiritualism and other wonder shows, bringing the genealogical link argued for in the first section of this paper full circle, I will examine how Wonder Woman and other female figures in pulp crime novels or comics of the era dually subverted and upheld the hegemonic forces at the foundations of the scope of lie detection. The lie detector—through the guise of Wonder Woman and other pop folklore



Figure 4 - Wonder Woman's first appearance in *All Star Comics #8* (December 1941-January 1942) hearkened to a sense of the mystical in displaying a crystal ball on the front cover.

of the time—was created and constructed by stereotypes that served several distinct political and social purposes in war-era America.

Just as lie detection corresponded with the hypnotic and sensationalized wonders in Spiritualism, interested in performatively translating mind into matter, Wonder Woman

-explicitly created as an allegory for lie detection-also hearkened back to these displays of the marvelous. Wonder Woman pulled from the themes and motifs of a short lived strip in Spicy Mystery Stories called "The Astounding Adventures of Olga Mesmer, the Girl with the X-Ray Eyes,"⁶⁴ adding an overlay of lie detection to a pre-existing format explicitly hearkening to hypnotism (Olga and Anton Mesmer obviously bear the same family name) and the visualization of mental qualities (e.g. her "X-Ray Eyes"). If her name was not enough to parallel these mystical displays of wonder and marvels, Wonder Woman's first appearance in print made this link right from the start -the cover of All Star Comics #8 (figure 4) shows a pantheon of superheroes (Wonder Woman, perhaps to surprise the reader, is glaringly absent) peering into a crystal ball, looks of awe or fear on their brightly-colored faces. The crystal ball, of course, is closely tied to conceptions of mystics or clairvoyants in the popular imagination; moreover, like spirit photography or a lie-detector printout, a crystal ball is likewise fundamentally concerned with transmitting some ephemeral, invisible substance into visual form (as seen in the two figures appearing within the crystal ball in figure 4).

⁶⁴ Daniels, Wonder Woman, 18.

This trope of mysticism is actualized in Wonder Woman's nemesis Dr. Psycho, who first appeared in *Wonder Woman* #5 (June-July 1943). Framed for a robbery he didn't commit, and then humiliated after his fiancée Marva left him for the actual robber, Dr. Psycho turned to



Figure 5 - Dr. Psycho is given Svengali-like characteristics in this image from *Wonder Woman #*5 (June-July 1943). Compare his outstretched hands and piercing gaze with that of Svengali's in Figure 1.

dark powers and utilized hypnosis to force Marva to marry him. Once under his Svengali-like control, he used Marva as a conduit to produce ectoplasmic clones that served as his zombie-like minions against Wonder Woman. In one scene, after putting an unsuspecting patient in a trance, Dr. Psycho cackles, "Joan makes a splendid medium – splendid! When she's in a trance I can materialize whatever body I choose – even a body like my own – ho! Ha! Ho!" (*Wonder Woman #*5, June-July 1943). This tie to Spiritualistic performance almost needs no explication. Dr. Psycho functions as another Svengali, a malevolent character motif reflecting the more horrific side of the wonders of Spiritualism and illustrating the fears certain individuals doubtlessly felt about such mystical performances.

The writers' choice to utilize ectoplasm as Dr. Psycho's malevolent sidekick hints at the already complicated characteristics of ectoplasmic apparitions in their "traditional" application during Spiritualist séances. "Scientific" inquiries testing the validity of mediums' abilities to produce ectoplasm were often tinged with erotic flavor. These authority figures utilized "bonds, gags, and other obstacles"⁶⁵ to research the objective truth

⁶⁵ Warner, *Phantasmagoria*, 294.

of mediums' ethereal emissions. If this sexually risqué interest in bondage were not enough (yet another correlation with Wonder Woman's sadomasochistic allure), the ectoplasmic apparitions themselves manifested in ways also tied up in male desire. Spirit photography of plasmic materials emerging from mediums' mouths and noses indicate a fascination with bodily orifices bridging the divide between one's inner and outer form. Researchers' obsession with photographing and examining the discharge



Figure 6 - The medium Stanislawa P. exudes ectoplasm from her mouth. From Albert von Schrench-Notzing, *Materialisations Phaenomene*, 1923.

produced from mediums' bodies allowed for voyeurism in the name of scientific inquiry. The fact that ectoplasm was "exuded from all orifices—nose, breast, ears, navel, vagina"⁶⁶—shows the Bakhtinian interest of séance attendees in regarding the body's corporeal boundaries and openings. But whereas Bakhtin applied this interest in the "grotesque body" to the carnivalesque and its inherent acts of political critique,⁶⁷ ectoplasmic testing bordered on the pornographic in its research and

display of the orifices of prostrate and docile mediums. In appearing opposite the heroic and benevolent Wonder Woman, Dr. Psycho's problematic foundation in these erotically charged applications of ectoplasm and pseudoscientific research is distanced from the context of lie detection, which is thus asserted as safe and secure. Whereas, as discussed in Part Two, lie detection often exhibited a problematic link to this sense of

⁶⁶ Ibid., 300.

⁶⁷ Mikail Bakhtin, *Rabelais and His World*, trans. Hélène Iswolsky (Bloomington: Indiana University Press, 2009).

the malevolent—a lie detection interrogation corresponding closely to depictions of too-powerful hypnotists looming over their subjects, *à la* Svengali—Dr. Psycho's presence in *Wonder Woman* comics distanced the lie detector from this sense of the unsafe or scary. Although Wonder Woman and her powers of lie detection held an implicit link to these mystical displays of the marvelous in scenes where she compelled enemies to tell the truth through the powers of her magic lasso, by fighting the explicitly evil plans of Dr. Psycho and his rooting in the sexually charged world of spiritualist research, the lie detector is dissociated from this malevolent side of the wonder show. Marston's Wonder Woman still has magical powers, but unlike Dr. Psycho's hypnotic evil, they are portrayed as harmless imaginary traits for the benefit of the narrative. This distancing of lie detection from its Svengalian roots is explicitly stated in the introduction to Eloise Keeler's biography of her brother, Leonarde: [Leonarde Keeler] had a captivating personality. He was not

punitive. He could get people to talk and confess their innermost, darkest secrets without Svengalian techniques. Even people who confessed to him to having committed a heinous murder would thank him afterward."⁶⁸ If one reads Dr. Psycho's actions as a critical and fearful portrayal of the real-world actions of hypnotists and wonder shows, Wonder Woman's powers

---in tandem with this description of Leonarde's interrogative techinique----can

be seen as imaginary propagandist symbols for the greater safety and

⁶⁸ Leonard H. Harrelson, "Introduction," in *The Lie Detector Man: The Career and Cases of Leonarde Keeler,* by Eloise Keeler (Boston: TelShare Pub. Co., 1985), xxii.

validity of science as manifested in the lie detector.

In the male-dominated pantheon of comic book heroes, apart from serving as a roundabout proponent of lie detection's benefits, Wonder Woman's prevalence and popularity could also be read as a pre-feminist assertion of female empowerment—indeed, Gloria Steinem insisted that she grace the cover of the first issue of the publication *Ms.* Magazine, which identified her as one of the first assertions of feminism in modern America.⁶⁹ It is true that Wonder Woman's creator William Moulton Marston attempted to subvert traditional gender norms in order to assert a new, "better" norm for gender roles and responsibilities; however, this was anything but a simplistic proto-feminist ideology. Wonder Woman grew out of Marston's professional background as a

psychologist; namely, his positing of the "psychonic theory of consciousness." Responding to neurology's theory of the neuron as the unit at the locus of brain activity and consciousness, Marston the psychologist posited the existence of the "psychon," an ephemeral unit standing for the space between neurons, where most psychological activity occurred accounting for feelings of discord or agreement that were not easily reducible or explainable in terms of neurons. "By positing the notion of the psychon, Marston was therefore able to argue that consciousness was an intrinsically oppositional process."⁷⁰ Drawing from this theoretical foundation, ⁶⁹ Mitra C. Emad, "Reading Wonder Woman's Body: Mythologies of Gender and Nation," *The Journal of Popular Culture* 39.6 (2006): 967, accessed February 24, 2012, DOI: 10.1111/j.1540-5931.2006.00329.x.

⁷⁰ Geoffrey C. Bunn, "The Lie Detector, Wonder Woman, and Liberty: The Life and Work of William Moulton Marston," *History of the Human Sciences* 10.91 (1997): 100, accessed January 20, 2012, DOI: 10.1177/095269519701000105.

Marston went on to claim that there were four basic major emotions in the human psyche: "dominance, compliance, submission, and inducement."⁷¹ Applying these emotional principles to cultural and sexual stereotypes, Marston essentialized the "truth" of males' dominance and females' submissive qualities and made other generalizing statements on culture and temperament. (For example, since China was, for Marston, unquestionably identified with the color yellow, he argued that Chinese culture had been built upon an emotional foundation of "submission."⁷²)

The additional critical inquiry that needs to be done on Marston's work as a popular psychologist (and the implications of these reductionist sociological comparisons) is outside the scope of this text; however, this brief examination of his general psychological theories and philosophy provides a backdrop for his creation of Wonder Woman. Since these four basic emotions built around conflict and opposition were, for Marston, the basis for how society operated, after positing their definitive existence he was then able to question their ultimate worth—subverting these principles to create a liberating "psychology of freedom"⁷³ through the narrative depiction of Wonder Woman. Believing that "the principal for sexual, social, and political freedom was the binary category of 'dominance-submission,'"⁷⁴ he envisioned Wonder Woman as the pop cultural tool that would make society aware of this, urging people to submit "to loving authority"—the secret to society's future well-being. For Marston the comic-book author, it was only

⁷³ Ibid., 103.

⁷¹ Ibid., 102.

⁷² Ibid.

⁷⁴ Bunn, "The Lie Detector, Wonder Woman, and Liberty," 93.

through giving in to Wonder Woman's dominance that Nazi foes and stubborn enemies could finally achieve inner peace; for Marston the psychologist and couples' therapist, it was through a complex interplay of authority and docility that all relationships could prove successful (in a startling departure from patriarchal models of the nuclear family at the time, he often saw wives as more successful than husbands in playing the "authoritative" role in relationships).

On one level, Marston succeeded—female representation in such a male-dominated medium doubtless influenced generations of youths, as asserted by Gloria Steinem in including Wonder Woman's visage on the cover of the first issue of *Ms.* Magazine. He indeed seems to have wanted to dismiss the gender norms of 1940s American society and create a new set of sexual and gender mores to live by—"give them an alluring woman stronger than themselves to submit to," he said of the male-dominated audience of comic books, "and they will be proud to become her willing slaves!"⁷⁵ Marston explicitly wanted to respond to other misogynist comics like *Dick Tracy* and the "violent and sadistic" plots it employed while depicting women as ignorant and egotistical.⁷⁶ But although his eccentric philosophy on sex and gender may have been less chauvinistic than other male psychologists (and comic book authors) of the era, his vision was problematic in the "freedom" it promoted. It may have been altruistically noble in scope, but Wonder Woman still utilized gendered rhetoric that objectified women and

⁷⁵ William Moulton Marston, "Why 100,000,000 Americans Read Comics," *The American Scholar* 13.1 (1943-1944): 43.

⁷⁶ Alder, *The Lie Detectors*, 191.

reified how one's "male" qualities were key in operating the lie detector, thus correlating masculinity with truth and honesty and femininity with criminal deviance.

Although Wonder Woman's magic lasso seemingly gave her the discerning powers of a typical lie detector interrogator, her allegedly feminine powers only functioned through conforming to the desires of the male gaze. Marston may have had a pro-female agenda at the explicit foundation of Wonder Woman's creation, but one cannot deny her eroticized depictions and pseudo-sadomasochistic allure—a "truth whip" is clearly more a stylistic than functional motif. As a role model, Wonder Woman had more control than other female characters of the time—clearly, she could rescue herself rather than waiting for some other masked superhero to save herbut at the same time, her writers and illustrators were all too aware that sex sold. Making her problematic depiction all too clear, in 1943, a sergeant from the U.S. Infantry sent Marston a fan letter, discussing the "extreme erotic pleasure" he felt "from the mere thought of a beautiful girl chained or bound."⁷⁷ Although one could argue that the dually powerful yet docile nature of Wonder Woman was simply an illustration of his pseudo-psychological theorems praising the mental betterment that comes with emotional experiences of dominance and also submission, it is clear that the popular readership would see it more simply than that. Even Marston agreed that his depictions of Wonder Woman would excite his readership in various fashions—an unavoidable yet innocuous side effect, he

⁷⁷ Daniels, Wonder Woman, 68.

argued, since "harmless erotic fantasies are now generally recognized as good for people."⁷⁸

Whatever one's take on Marston's assertion of Wonder Woman's benign yet nontraditional sexuality, the virtues of "submission to a loving authority" that Marston was so keen on promoting is in itself a problematic concept in that it implies one can only achieve "freedom" or happiness in any capacity through a lessening of one's agency—an ironic assertion, when historically situating *Wonder Woman* as a pro-democracy text key in pop cultural propaganda that reified America in the face of the second World War and the foreign "other." Although her mythic contemporary, Rosie the Riveter, urged the female sphere to empower itself and support democracy and the war effort through labor, at the same time Wonder Woman illustrated how this liberation could only be achieved through compliant service to a greater jurisdiction. Wonder Woman fought Nazis and wore an American flag-themed bustier, but the psychological message at the back of Marston's mind comes off as more dictatorial than democratic in its promotion of docility in the face of authority.

Dually attempting to subvert sex and gender norms while also standardizing "vertical power relations,"⁷⁹ *Wonder Woman* thus fits with other detective novels and crime narratives of the early 20th century, in which women take a subservient role in the text to further the plot, and the dangers of unrestrained femininity are expounded upon and cautioned

⁷⁸ Ibid., 69.

⁷⁹ Molly Rhodes, "Wonder Woman and Her Disciplinary Powers," in *Doing Science and Culture*, ed. Roddey Reid and Sharon Traweek (New York: Routledge, 2000), 108.

against. Once such plot progression occurs in *Sensation Comics* #19 (July 1943), in which Wonder Woman takes off her power-restraining Amazon bracelets. "Freed from the lasso and without bracelets of submission, the unbound Amazon girl goes berserk," exclaims the comic's text, as Wonder Woman experiences "an orgy of unleashed power." After throwing people out of windows and tearing down cabins, Wonder Woman finally regains her bracelets, exclaiming, "It's wonderful to feel my strength bound again – power without self-control tears a girl to pieces!" But while this comic strip urges the benefits of feminine restraint, and the dangers if this submission is rejected, the awe and fear at a wild Wonder Woman is also portrayed as sexually titillating and seductive—it is an episode that is dangerous for Wonder Woman (who, we discover, is so reckless in demeanor that her femininity is questioned; one criminal refers to her as "he") but also thrilling for the reader.

Indeed, this representation of Wonder Woman mirrors the idea of the "ideal" woman in detective fiction of the era and the dangers inherent in this sort of characterization. In one of Arthur B. Reeve's stories of Craig Kennedy, the "scientific detective," Walter, the "Watson" to Craig's "Sherlock," discusses how theft suspect Helen Bond is "the ideal type of 'new' woman— tall and athletic, yet without any affectation of mannishness."⁸⁰ Helen would thus seem to be identical to Wonder Woman, apart from a lack of the deviant masculine traits Wonder Woman sometimes exhibits. But the eventual discovery of the truth—that Helen did, in fact, steal her uncle's will in order ⁸⁰ Arthur B. Reeve, *The Silent Bullet* (Project Gutenberg, 2009[1910]),

http://www.gutenberg.org/files/2454/2454-h/2454-h.htm.

to grant herself more money after his passing—and the conclusion, in which Craig allows Helen to keep the money if she donates it to her husband's financially-strapped university, brings a closer parallel between Wonder Woman and the "ideal woman" as manifested in Helen. Helen's deviance and "un-feminine" actions in stealing her uncle's will result in a mild scene of finger wagging in which Craig Kennedy and his male compatriots tell her of the immorality of her unlawfulness. Yet as Walter's physical attraction to Helen and Craig's lenience in punishing her indicate, the pseudo-criminal undertone to Helen's otherwise unmarred character is asserted as seductive, enthralling, and attractive—just as is Wonder Woman's pseudo-masochistic allure and forays into non-normative behavior.

The way in which Leonarde Keeler met his wife provides an interesting real-world example of this seductive component of lie detection's dualistic characteristics (truth/falsehood, masculinity/femininity, etc.). Katherine first met Leonarde on the receiving end of one of his lie detector prototypes; she was the first to beat the "card trick" he utilized. He was usually able to detect the subject's chosen card by showing each card in the deck to her and watching the polygraph's corresponding data of her physiological response. Katherine, however, had only pretended to look at her card, and thus elicited no physiological response to any particular card. Later, she and a friend sneaked into the laboratory and put a mannequin in the lie detector; after the school threatened the unknown perpetrators, she boastfully returned and dressed the mannequin in purple underwear. Like fellow lie detector "inventor" John Larson, Leonarde met his wife through hooking her up to a

polygraph. For both, this playful—albeit minor—hearkening to criminal deviance (which they were both trying to eradicate through engineering the lie detector) exhibited a seductive allure.

The seductive powers of the lie detector as manifested in *Wonder* Woman and the story of Katherine and Leonarde Keeler's courtship indicate the uncertainty that early 20th century America felt about feminine power and the authority of criminal science. Marston's "inclination to feminize nation" through Wonder Woman was kept in check through the implicit assurance that unrestrained womanhood should be repressed; that Wonder Woman functioned not solely as a purely feminist heroine but as an object of male desire as well.⁸¹ At the same time, lie detection's correlation to earlier non-scientific and subjective magic shows (a link which would have compromised its rise to unquestioned prominence) was glossed over by imbuing lie detection in the comics not only with an aura of harmlessness, but also with characteristics reminiscent of the performative wonders of Spiritualism yet different enough to set it apart. Wonder Woman was no séance-heading medium, yet she similarly was interested in presiding over the realm of the ephemeral. In forcefully whipping the truth from suspects' minds, she extracted criminal evidence from the depths of the brain, similarly translating thought into text and creating the possibility for therapeutic treatment of the lying deviant.

Racial Phrenology and Communist Criminality

A key component of wonder shows, as discussed earlier in this paper,

is their fundamental interest in translating the mental into the physical, the

⁸¹ see Emad, "Reading Wonder Woman's Body," 982.

immaterial into material. As a more implicit sort of wonder show, lie detection carries the same characteristics; psychology is conflated with physiology in an attempt to determine one's status as a liar based on the measurement of bodily characteristics.

In the previous section, the feminization of the criminal and the dual subversion and maintenance of gender roles was argued to be a key factor in both historical and fictional narratives surrounding the lie detector. In this section, I will examine the equally problematic ways in which certain races and sexualities were ascribed with "lying" characteristics through the application of the lie detector. Firstly, after correlating early anthropological pseudoscience with the emergence of the lie detector, I will discuss how representations of the lie detector narratively presented similar racial stereotypes as did phrenology and "skull doctoring," albeit more implicitly. Secondly, I will look at the lie detector as a political tool, examining how it asserted American democracy as the definitive paradigm of government and responded to fears of a communist "crowd" encroaching from abroad or at home. In operating under the principle of the body as a representation of one's inner self, the lie detector was able to promote democratic capitalism and whiteness as the enforced norms of mid-twentieth century America. By this era, modern anthropology had begun to distance itself from its

prior nineteenth-century interest in anthropometry for its foundations in racist doctrine used to justify slavery and ethnically based prejudice.⁸² However, pseudo-scientific assertions problematically linking temperament

⁸² Paul A. Erickson and Liam D. Murphy, *A History of Anthropological Theory* (Ontario: University of Toronto Press, 2008), 96.

and body type still existed in the early twentieth-century—even in the 1940s, for example, psychologist William Herbert Sheldon classified human body types into "somatotypes" that, according to other theorists of the era, corresponded to certain personality types. Such sweeping generalizations, despite being irrevocably tied up with visual stereotype, nevertheless still were accepted as "objective" assertions that could be ascribed to ostensibly scientific theories.

The lie detector—a machine that, at the core, deals with this linkage is no exception. Eloise Keeler's biography of her brother gives a rudimentary outline of the lie detector's function and principle that explicitly pays homage to this coupling.

The operation of the polygraph technique depends upon a

human phenomenon which was first discovered in the 1920s,

and that is the direct relation between a psychological

stimulation—some condition perceived by the mind—and a

physiological reaction, a condition manifested by the body.⁸³ What the specific "phenomenon" in the 1920s this passage refers to is unclear—the link between biology and psychology has origins in late nineteenth-century theory such as Lombroso's "born criminal" and Galton's interest in fingerprinting.⁸⁴ Regardless, the lie detector is positioned at the crux of physiology and psychology's intersection; moreover, its locus is explicitly described as a "phenomenon," a technology of marvel and awe. Phrenological theory was also riddled throughout the vernacular

⁸³ F. Lee Bailey, "Introductory Chapter," in *The Lie Detector Man: The Career and Cases of Leonarde Keeler*, by Eloise Keeler (Boston: TelShare Pub. Co., 1985), xiv.

⁸⁴ Geoffrey C. Bunn, *The Truth Machine* (Baltimore: Johns Hopkins University Press, 2012), 18, 35.

wonder shows of the early twentieth-century; for instance, hybrid performers dabbling in both magic and science performed alongside headlining academic lecturers on anthropometry and phrenology.⁸⁵ In a more scientific take on the therapeutic powers of faith healers, "phreno-mesmerists would stimulate different parts of the skull to encourage improvement in character traits found wanting."⁸⁶ These composite displays that juxtaposed anthropometry with magic—the scientific with the vernacular—exemplify two seemingly divergent practices that were knitted together by lie detection. As an "objective" tool of truth-telling, phreno-mesmerism and the lie detector itself show that this objectivity was nonetheless rooted in both problematic early social science and provocative displays of spectacle. Despite this parallel, it has been argued that the lie detector differs

from early criminology and anthropometry in that it was interested in rejecting, rather than upholding, "criminology's notion of the born criminal."⁸⁷ It is true that the essentializing ascription of criminal traits to certain social classes or races, so prevalent in early criminal anthropology, was indeed rejected by the majority of lie detection theorists. Marston and Larsen, of course, were fundamentally interested in the lie detector as a therapeutic tool to treat those with perceived social or psychological disorders (see Part One). For them, unlike their colleague Keeler, the use of the lie detector in criminal trials was only secondary. In spite of these certainly noble ambitions, applications of the lie detector both in folklore of

⁸⁵ Nadis, Wonder Shows, 38.

⁸⁶ Ibid.

⁸⁷ Bunn, The Truth Machine, 133.

the era and historical narrative reveal that stereotyped assumptions still

implicitly flowed beneath the surface of the polygraph's aims. One of Eloise Keeler's stories about her adventurous with her brother,

"Nard," shows these subjective undertones to the polygraph's otherwise

seemingly neutral nature.

After we had bantered awhile with the gypsies, a flirtatious gypsy girl persuaded Nard to have his fortune told...With *their reputation of stealing from non-gypsies and of being habitual liars*, Nard had often wondered how gypsies would react on the lie detector. He didn't have his instrument with him, but he did have two twenty-dollar gold pieces in his pocket. [After she tries to steal his money]: Nard's eye was quicker than her hand. He grabbed her wrist and flashed his police badge... 'It was just a

joke,' she assured him.88

According to this text, Eloise and her brother made a racialized assumption in their interaction with "gypsies;" they generalized an entire ethnic group as bearing increased criminal proclivities. While this is obviously a problematic action, I am not trying to necessarily lambast the Keelers; they were of course products of an era in which prejudice against the *Roma* and Eastern Europe was prevalent (and even institutionalized, as in American political critique of the emerging Soviet state). What this example shows is that, like its practitioner Leonarde Keeler, the lie detector is also a product of its era; as a machine constructed and utilized according to human subjectivity it, too, makes the assumptions its users are prone to take for granted.

Slang and folk speech regarding lying function along a similarly

⁸⁸ Eloise Keeler, *The Lie Detector Man*, 85 (my italics).

problematic trajectory. Materials at the UC Berkeley Folklore Archive show us that folk speech regarding lying also falls under the desire to make a conceptual, ephemeral quality objective and visually verifiable—and to prejudicially correlate physiology with psychology. Many rhyming or singsong statements involve the labeling of someone as a "liar" by calling out some physical abnormality or "proof" that shows that they exhibit the characteristics of a liar. Phrases like "liar, liar, pants on fire," "is your tongue black?" and "butter wouldn't melt in his mouth"⁸⁹ all imply that lying is an act so devious that it manifests itself in some manner visible to passersbywhether it be flaming pants, a blackened tongue, or a frigid mouth. Other folk speech goes beyond these phrases and takes a more inflammatory approach in name-calling liars. "He's playing Ralph the Russian," "there's a nigger in the woodpile," "I wouldn't give him a Chinaman's chance," and "he's got cotton-picking hands" (an obvious slavery-era allusion) all ascribe racial overtones upon the concept of lying.⁹⁰ These examples from the Folklore Archive may not date to the early 20th century—the archive was only created in the 1960s—but, as items of folklore, one can assume that these forms were circulating and being used prior to being collected and placed in the archive. Folklore is not temporally static; rather, it is modified and creatively interacted with and passed on in multiple ways. Thus, these examples of folkspeech can be read as being indicative of the general popular conceptions of lying, and the racial stereotypes associated with the

⁸⁹ Folk Speech VI, D4, Dundes Folklore Archive, UC Berkeley.

⁹⁰ Ibid.

actions of liars.

The lie detector's correlation to racial stereotype was often not as explicit as these bigoted examples of slang. During the Second World War, it was used as an aid in order to ensure the spread and "progress" of democratic capitalism in the face of perceived encroachment from foreign powers abroad. German prisoners of war undergoing "reeducation programs" in the US at the conclusion of the war had to face a lie detector at the culmination of the program; they had to deny Nazi affiliation and prove that their political sympathies had changed before returning to their native country and ostensibly fostering American-like democratic ideals in the collective psyche of the German people.⁹¹ Despite being a "school" set up to instill democratic values in its students, the lie detector's presence bred suspicion; it "fostered mutual trust [between a POW and his captors] by encouraging future cops to rat on their comrades," lest they be caught of withholding information from their American keepers.⁹²

Although as a technological "marvel" the lie detector's abilities to translate the body into text is a key function, how it is situated in the world depends less on the act of lie detection itself and more on the performative aspects in which it is directed at others (as we see manifested in its tactics of wondrous display). By being endowed with almost magical qualities, and claiming to be able to see through any form of deception, the lie detection act itself is effectively less important than the contextual build-up or aftermath. As in the case of the ex-POWs, it is situated not only as a machine

⁹¹ Alder, *The Lie Detectors*, 202.

⁹² Ibid., 204.

capable of extracting the truth from a single individual, but also as one that functions performatively in a manner capable of convincing a group to fear its powers of detection. That is, the lie detector may explicitly involve two individuals—one person interrogating the validity of another's statements but this situation implicitly provides the fodder for making one wonder at the panoptic strength of authority. Although the lie detector's truth-telling needle may only be physically attached to suspected criminals or deviants, the cult-like power located in its component parts of metal and wires is metaphorically addressed to all of society—reinforcing the dominance of the force using it and enforcing submission to the norms it upholds.

During the Cold War, a fear of foreign infiltrators in U.S. government spurred the accusatory campaign of Joseph McCarthy, who found in the lie detector the perfect tool for legitimizing and ostensibly "proving" his denunciatory statements. Although perhaps accurate in some cases, McCarthy's usage of the lie detector was hyperaware of what President Nixon had also realized some years earlier: "I don't know anything about polygraphs, and I don't know how accurate they are, but I know they'll scare the hell out of people."⁹³ What was important was the fear of potentially being put at the receiving end of a lie detector. By making an interrogation session seem anathema through the spreading of cautionary narratives about communist sympathizers losing their job and reputation, the lie detector aided McCarthyism's attempt to mold docile political subjects, fashioning the lie detector as the ultimate arbiter of truth and morality. At the same time as the "red scare," the "pink scare"—hunting for

⁹³ Cited in Alder, *The Lie Detectors*, 221.

homosexuals in addition to communists—was also underway. Although a political ideology (communism) and a sexual orientation would seemingly be incomparable identities to test for, fears of the government being politically but also sexually corrupted were quelled using similar tactics. Rooted in the assumption that the details of one's sexuality (like criminality) could be detected through the measurement of physiological characteristics like body language and speech, gays, communists, and individuals suspected of fitting into either category were treated to the same experiences in tests for deviance. Communism, already ascribed with negative connotations by democratic America, became further demonized and "othered" through being associated with homosexuality; and homosexuality, perceived as immoral sexual deviance in particular, became correlated with deviance in general by being associated not only with betraying oneself or one's family but with betraying the nation as well.

This exhibition of "deviants" in the political sphere of course indicates the lie detector's ability to grant power to its wielder—a power that, like the hypnotic wonder show, is wrapped up in the anthropological showcases of the turn of the century. Just as the public interrogation of supposed communists or homosexuals symptomatically gave their oppressors ostensible abilities to objectively detect, classify, control, and then correct their "deviance," public representations of the "savage" or "primitive" formulated these "subjects as objects of fascination and objects susceptible to mastery and classification."⁹⁴ The controlling powers that the hegemonic

⁹⁴ Crary, Suspensions of Perception, 236.

norms were able to gain through the systematization of these groups indicate that the aura of power and fear surrounding the lie detection event was more consequential than the interrogation itself.

By focusing on the awesome power of the lie detector in the build-up and aftermath of the interrogation, the lie detector implicitly reasserted democratic capitalism and heterosexuality as the enforced norms of mid-20th century America. In constructing itself as a legitimate technology of detecting deception (and, by extension, social or moral deviance), the lie detector had to commit itself to a narrative that fleshed out its technical components into symbolic parts held up by a mystique of fear and wonder.

In examining the performative allure of lie detection, I have attempted to provide an example of how "carnival and popular festival did not simply disappear in the nineteenth century but rather were dispersed"⁹⁵ into other cultural forms. As the "techno-marvel" of the lie detector indicates, the detection of deception rhetorically asserted itself in ways similar to Spiritualism and the wonder shows of the late 19th century—the wonder show never went extinct, but rather manifested itself in different contexts. Both drew from philosophies surrounding a mystical or divine "flow," the therapeutic possibilities of each technology, the translation of thought into text, and the performance of marvels. Yet, despite operating under the same tropes and traditions as its wondrous genealogical precursors, lie detection simultaneously tried to distance itself from its vernacular origins. It rejected the magic and supposed subjectivity of the wonder show and provided a scientific basis for the detective marvels it saw as objective truths. Instead of showcasing hidden, sacred, and entertaining mysteries, the lie detector produced "scientific" representations of criminality, deception, and deviance.

In examining Wonder Woman, crime novels, and the non-fiction texts of Spiritualist philosophy and lie detection technique, in this paper I strove to argue for the authenticating powers of story and narrative. In applying this concept to lie detection, it is not necessarily to say that the polygraph is without its merits or, when used "correctly," is beneficial (although its critics certainly would). Rather, it is to present a critical counterpart to the reified objectivity that was applied to the lie detector in its rise to prominence from the turn of the century onward. Since cultural narratives "are a version of reality whose acceptability is governed by convention and 'narrative necessity' rather than by empirical verification and logical requiredness,"⁹⁶ their discussion of the "objectivity" of lie detection should thus call the authenticity of these assertions into question.

This argument for the influence of narratives upon the "real world" is not a novel application within critical science studies,⁹⁷ but in focusing on lie detection as spectacle and on the narratives exemplifying its interest in marvels, I have argued for the existence of a close link between wonder

⁹⁶ Jerome Bruner, "The Narrative Construction of Reality," *Critical Inquiry* 18 (1991): 4.

⁹⁷ In particular, Melissa Littlefield looks at science fiction novels and lie detection and how both were influenced by each other in the brilliant *The Lying Brain* (Ann Arbor: University of Michigan Press, 2001). Ronald Thomas similarly compares crime fiction to law enforcement in *Detective Fiction and the Rise of Forensic Science* (Cambridge: Cambridge University Press, 1999).

shows and lie detection both in fictional and real-world applications of the polygraph. In doing so, I have tried to locate lie detection within a Foucauldian historical genealogy, and argued that the narratives of "invention" and "objectivity" in early- to mid-20th century lie detection were key in dehistoricizing it and upholding it as a legitimate and novel criminological tool—testament not only to the powers of American law enforcement, but also to scientific infallibility.

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