

**DIRTY LITTLE SECRETS:
PROSTITUTION AND THE UNITED STATES PUBLIC
HEALTH SERVICE'S SEXUALLY TRANSMITTED
DISEASE INOCULATION STUDY IN GUATEMALA**

A Thesis Submitted to the College of
Graduate Studies and Research
In Partial Fulfillment of the Requirements
For the Degree of Master of Arts
in the Department of History
University of Saskatchewan

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Summer 2016

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ABSTRACT

Between 1946 and 1948, Guatemalan prostitutes were hired by American medical researchers to engage in sexual intercourse with prisoners and soldiers. These women were among the non-consenting and often overlooked subject-groups of the United States Public Health Service's Sexually Transmitted Disease Inoculation Study, a human experiment that tested venereal disease prevention among vulnerable populations. The prostitutes were considered to be, although they were not always in actuality, vectors of disease.

Archival material exposed in 2010 by historian Susan Reverby triggered a report by the United States' Presidential Commission for the Study of Bioethical Issues. As the Commission acknowledged, the USPHS Study in Guatemala is of great contemporary relevance because current public health initiatives, especially in a globalized health economy, raise parallel ethical questions related to foreign drug trials, globalization, and the precarious balance between the advancement of medical knowledge and the protection of individual rights. Moreover, the study's reliance on prostitutes draws our attention to the gendered nature of medical experimentation and the unequal power dynamics within clinical settings that leaves certain populations more vulnerable than others.

The USPHS researchers justified their presence in Guatemala because of the country's legal prostitution system. Prostitutes themselves, however, were dismissed, neglected, and disrespected. The official records do not simply catalogue which experimental procedures were being used on which institutional populations; they also judge the social, racial, and gender positions of the subjects. Using critical discourse analysis, this thesis compares the researchers' actions and their language. I argue that the researchers were using prostitutes' bodies for supposed disease transmission because of preconceived notions about female sexuality, and infection rates.

ACKNOWLEDGMENTS

Writing, I am told, is never a solitary endeavour. I would like to begin by thanking the bartenders, cafe baristas, librarians, and very dear friends who kept me company through countless drafts. Your silent support was appreciated.

With gratitude, I acknowledge my supervisor, Dr. Erika Dyck, who took me under her wing and reminded me that there is a world outside the archives. She was always ready to read another draft, listen to my existential crises, and answer numerous emails. I couldn't have asked for a better mentor.

A special thanks must be extended to Dr. Susan Smith, my undergraduate supervisor at the University of Alberta, who witnessed the birth of this project when it was still an impossible dream. I will always feel grateful for her support and encouragement. She unselfishly took an interest in a budding scholar, and gave me the confidence to fly away from the nest when it was time.

I must also acknowledge my thesis committee, Drs. Jim Handy and Mirela David, for providing that critical second (and third) opinion that significantly strengthened the final product. Thanks also goes out to my external examiner, Dr. Pamela Downe, whose questions and observations invigorated my defense.

I would like to express my gratitude to those who have supported me financially as I pursue an unprofitable passion, especially the Social Sciences and Humanities Research Council (SSHRC), and the History Department at the University of Saskatchewan; and to those who have supported me emotionally as I pursue an exhausting obsession, especially my family and friends. I cannot name you all here, but you are appreciated. In particular, I must acknowledge my parents who raised me to be stubborn, and my partner, Ryan, who now has to deal with the result. I have been inordinately lucky to have found such a community of support.

DEDICATION

To the women, men, and children who experience(d) medicine as harm;
and to those who have yet to find justice.

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Introduction: Ana and Other "Female Donors"¹

In 1947, Ana was diagnosed with syphilis.² She had followed the course of action prescribed by Guatemalan public health officials. She registered as a prostitute; and she presented herself for regular medical examinations.³ Unfortunately, a suspicious sore had now appeared. If left untreated, in a couple decades she could develop cardiovascular problems. Or she might slowly develop general paresis which, in its final stages, results in insanity.

Faced with Ana's infection, the director of Guatemala's Venereal Disease Control Division, Dr. Juan Funes, had a choice to make. He could either treat her, as mandated by Guatemalan law, or he could contact an American colleague of his, Dr. John C. Cutler, who was doing research on venereal disease.⁴ Dr. Funes had agreed to direct some of his patients to Dr.

¹ Dr. R. C. Arnold, from the USPHS, described the prostitutes who were part of the experiments as "female donors." This type of dehumanizing vocabulary was common in the USPHS correspondence and will be further unpacked in this thesis. See, Dr. Arnold to Dr. Cutler, April 11, 1947, John C. Cutler's 1947 Correspondence, folder 11, Hollinger Box 1a, CDC Record Group 442, Records of Dr. John C. Cutler, National Archives and Records Administration at Atlanta.

² Ana is a pseudonym. Her story is based on the experiences of the prostitutes whose names have been redacted from Dr. Cutler's records. A 2011 report from the Comisión Presidencial para el Esclarecimiento de los Experimentos Practicados con Humanos en Guatemala names some of the prostitutes. However, because Dr. Cutler's records are redacted it is impossible to link a name to individual events described within these records.

³ Some scholarship on the USPHS study has used the term "commercial sex worker" or its acronym "CSW" instead of "prostitute." I have chosen to use the vocabulary of the time for two reasons: the historical actors' perspective of the female human subjects is best represented through the terminology they themselves employed, and acronyms such as CSW can make a topic seem more palatable, but distancing language does not do justice to the women's experiences nor does it encapsulate the amount of coercion involved in the experiments.

⁴ Dr. Funes and the head of the Ministry of Public Health, Dr. Luis Galich, both sent prostitutes, some known to be infected with venereal disease, to Dr. Cutler's research team. See Presidential Commission for the Study of Bioethical Issues, " 'Ethically Impossible' STD Research in Guatemala from 1946 to 1948," Washington, D.C., September 2011, 45; Dirección General de Sanidad Pública, "Reglamento de la Sección de Profilaxia Sexual y de Enfermedades Venereas: Leyes Conexas con el Mismo," *Publicación de Sanidad Pública* (1938): 8.

Cutler's research team. As a result, Dr. Funes sent Dr. Cutler a letter describing Ana's sexual health history and Ana was sent to work in the central penitentiary or among soldiers in an attempt to purposefully spread the infection as the first step in an American-led human experiment, the United States Public Health Service's (USPHS) Sexually Transmitted Disease Inoculation Study.⁵

The USPHS' Sexually Transmitted Disease Inoculation Study

The USPHS Study in Guatemala was a short-term deliberate exposure experiment that studied the prevention of venereal diseases among men.⁶ Between 1946 and 1948, Dr. Cutler led a group of American researchers in Guatemala, where they collaborated with local officials and doctors to infect vulnerable, and mainly indigenous, populations with syphilis, gonorrhea, and chancroid.⁷ Doctors connected to this project studied the efficacy of various preventative measures (prophylaxis), including an orvus-mapharsen mixture and penicillin.

⁵ See, for example, Dr. Funes to Dr. Cutler, March 18, 1947, Gonorrheal Experiment #2, folder 31, Records of Dr. John C. Cutler. Hereafter, the study will be called the USPHS Study in Guatemala or the USPHS Inoculation Study. Many scholars have taken to using the shorthand 'Guatemalan Syphilis Study,' 'Guatemala Inoculation Study,' or simply 'the Guatemala study.' However, this obfuscates the active American role in the study. For examples of the naming of the USPHS Inoculation Study, see Susan M. Reverby, "Ethical Failures and History Lessons: The U.S. Public Health Service Research Studies in Tuskegee and Guatemala," *Public Health Review* 34, no. 1 (2012): 8; Gregory E. Pence, *Medical Ethics: Accounts of Ground-Breaking Cases* (New York: McGraw-Hill Education, 2015), 202; Pushkar Aggarwal, "Commentary: Differential Human Life Value Perception, Guatemala Experiment and Bioethics," *Online Journal of Health Ethics* 8, no. 1 (2012): 1-8; Kara Rogers, "Guatemala Syphilis Experiment: American Medical Research Project," *Encyclopaedia Britannica*, www.britannica.com/EBchecked/topic/1805220/Guatemala-syphilis-experiment.

⁶ "Inoculation" refers specifically to the "introduction into the body, by puncture of the skin, or through the wound, of the virus or germs of an infectious disease," and is not necessarily synonymous to immunization. In Dr. Cutler's records, the word refers to the deliberate infection of subjects and not to vaccination against venereal diseases. See *Oxford English Dictionary*, s.v. "inoculation," www.oed.com.

⁷ Presidential Commission, " 'Ethically Impossible,' " 28.

Penicillin had been identified as a treatment for syphilis and gonorrhea in 1943.⁸ Three years later, researchers questioned penicillin's effectiveness, whether it could be used not only to treat infections but also to prevent them and whether, after treatment, there was the possibility of re-infection.⁹ Additionally, even after discovery of a treatment, it takes time for new medication to become applied and practical. By 1946, the demand for penicillin outstripped its availability, especially in non-Western countries.¹⁰

Orvus-mapharsen was a topical solution that Drs. John Mahoney and R.C. Arnold had previously tested on rabbits; there was interest in its use as a possible prophylaxis for humans.¹¹ The USPHS researchers in Guatemala also tested other prophylaxis, including the Army pro-kit. However, Dr. Cutler emphasized the primacy of penicillin and, especially, of orvus-mapharsen. "The original purpose of the program," declared Dr. Cutler in his final report, "was primarily to study the clinical effectiveness of the mapharsen-orvus prophylaxis."¹²

Initially, to approximate "natural" conditions, Dr. Cutler claimed they attempted to transmit the diseases sexually rather than by medical inoculation. The irony is that this supposedly natural transmission occurred in strictly man-made situations. To properly document the encounters and calculate a timeline of disease progression, the researchers needed a controlled environment. They assumed they had found such an environment in the Guatemalan

⁸ John Parascandola, "John Mahoney and the Introduction of Penicillin to Treat Syphilis," *Pharmacy in History* 43, no.1 (2001): 3-13. For the USPHS researchers' contemporary understanding of penicillin therapy, see R. C. Arnold, et al. "Penicillin Therapy in Early Syphilis. III," *Journal of Investigative Dermatology* 9, no. 5 (1947): 269-275.

⁹ Final Syphilis Report Part 7, folder 7, Records of Dr. John C. Cutler, p. 16.

¹⁰ For one example of this global inequality in access to health care, see John C. Cutler, "Survey of Venereal Diseases in Afghanistan," *Bulletin of the World Health Organization* 2, no. 4 (1950): 694.

¹¹ Kayte Spector-Bagdady and Paul A. Lombardo, " 'Something of an Adventure': Postwar NIH Research Ethos and the Guatemala STD Experiments," *Journal of Law, Medicine and Ethics* 41, no. 3 (2013): 702.

¹² Final Syphilis Report Part 5, folder 5, Records of Dr. John C. Cutler, 1.

Central Penitentiary. After the subjects, most of whom were male, were exposed to infection, researchers used them to test post-exposure prophylaxis.

Dr. Cutler and his team took advantage of the regulated legal prostitution system in Guatemala to monitor the transmission of venereal diseases through heterosexual contact. In fact, legalized prostitution was the basis of their justification for the foreign location of the study. Prostitution was illegal in the United States and a similar study would have been politically impossible at home. What they did not acknowledge was that the role of the prostitutes in the experiment was also illegal, although for different reasons, in Guatemala.

Prostitutes like Ana were supposed to be tested twice a week and they were only legally allowed to continue working if a medical professional declared them to be free from disease. The director of the Venereal Disease Hospital, Dr. Funes, saw this regular mechanism of testing as an ideal way to discover and hire infected subjects for a study on the sexual transmission of venereal disease. He suggested as much to his American colleagues while engaged in a research fellowship at the Staten Island Venereal Disease Hospital.¹³ The USPHS agreed it provided a unique opportunity.

Prostitutes were to be hired to work in the National Penitentiary. Some had contracted an infection from their work on the streets or in brothels; others, however, were uninfected before the experiments and often, like the other subjects, were medically inoculated.¹⁴ In one letter dated December 27, 1947, Dr. Cutler noted that "129 men were allowed contact with *uninfected* females. Within an hour after the contact, and prior to urination, all men were inoculated."¹⁵ The

¹³ Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 7.

¹⁴ Susan M. Reverby, "'Normal Exposure' and Inoculation Syphilis: A PHS 'Tuskegee Doctor' in Guatemala, 1946-1948," *Journal of Policy History* 23, no. 1 (2011): 12.

¹⁵ Dr. Cutler to Dr. Mahoney, December 27, 1947, John C. Cutler's 1947 Correspondence, folder 11, Records of Dr. John C. Cutler (emphasis mine). Dr. Cutler also wrote of the gonorrhea experiments among soldiers in a very similar manner. "To simulate more nearly the natural conditions, a large number

rationale for "[allowing] contact" between the uninfected soldiers and the uninfected women is unclear, although the application process described in this instance did not include scarification and so it is possible that researchers were hoping for a more "natural" method of abrasion.

However, the researchers considered the male prisoners to be the actual human subjects; the prostitutes were described as (even if they were not in actuality) vectors of disease or, as one scholar has put it "instruments of contagion."¹⁶ Although this initial approach was quickly abandoned, in part because rates of human-to-human contagion remained low, it introduced a unique set of gendered power dynamics to the USPHS Inoculation Study.¹⁷ In comparison, for example, in the Terre Haute prison experiments, a similar study that deliberately inoculated male prisoners with gonorrhea in 1943-1944, the experimental sample was exclusively male. Although an analysis of the male prisoners as gendered subjects would be fruitful, the homosocial environment of the American prison system would make this analysis fundamentally different from the conclusions of this thesis.¹⁸ In this thesis, I analyze the role of the prostitutes within this historical study as both subjects and objects of experimentation.

Bioethics Today

Understanding the history of the USPHS Inoculation Study, especially its gendered framework and its international dimensions, can shed light on current public health initiatives.

of the patients were *permitted sexual contact with uninfected prostitutes*," Report Entitled-Experimental Studies in Gonorrhea, folder 15, Records of Dr. John C. Cutler, 9 [mislabelled 8] (emphasis mine). See also "Experimento del Jueves 25 y Viernes 26 de Septiembre, 1947," in Gonorrheal Experiments - Military, folder 36, Records of Dr. John C. Cutler.

¹⁶ Carolina López, "Las mujeres, un instrumento para inocular. Las secuelas que trascienden fronteras," *Boletín Asociación para el Fomento de los Estudios Históricos en Centroamérica* 60 (2014): 2 (my translation - "instrumento de contagio").

¹⁷ Dr. Mahoney to Dr. Cutler, August 11, 1947, John C. Cutler's 1947 Correspondence, folder 11, Records of Dr. John C. Cutler.

¹⁸ For a comparison between the Terre Haute experiments and the USPHS Study in Guatemala, see Presidential Commission, " 'Ethically Impossible'," 13-23.

Although the 1940s experiment has been universally condemned as unethical, international drug trials on vulnerable populations in developing countries are still undertaken today.¹⁹ In fact, over 100,000 clinical trials, which is over half of those registered on the online registry of the U.S. National Institutes of Health, are conducted overseas, often in less developed countries.²⁰ In particular, recent examples in Latin America of unethical human experimentation on the part of U.S. pharmaceutical companies include the 1997-1998 Cariporide trials at Pedro Mallo Naval Hospital in Buenos Aires.²¹ Other current debates revolve around how governments should balance the advancement of medical knowledge with the protection of individual rights.²² Who is capable of informed consent and in what circumstances? How do we protect the health of the public? And, crucially, which racialized and sexed bodies that make up this public do we deem worthy of protection?²³

¹⁹ The Pfizer Trovan Study in Nigeria in 1996 is one example of a more recent infringement of research ethics. In this study, the pharmaceutical company Pfizer tested the antibiotic Trovan on approximately 200 Nigerian children without the approval of an institutional review board. See Cameron R. Nelson, "In Remembrance There is Prevention: A Brief Review of Four Historical Failures to Protect Human Subjects," *Journal of Research Administration* 43, no. 1 (2012): 105-107; Steven W. Postal, and Robyn Whipple Diaz, "After Guatemala and Nigeria: The Future of International Clinical Research Regulation," *Health Lawyer* 24, no. 1 (2011): 1, 7-20. For an analysis of the informed consent principle in human experimentation in developing countries, see Jacob Schuman, "Beyond Nuremberg: A Critique of Informed Consent in Third World Human Subject Research," *Journal of Law and Health* 25, no. 1 (2012): 123-153; Patricia A. Marshall, "Informed Consent in International Health Research," *Journal of Empirical Research on Human Research Ethics: An International Journal* 1, no. 1 (2006): 25-42.

²⁰ Additional difficulties occur because the United States Office for Human Research Protections (OHRP) is an underfunded and understaffed agency that does not necessarily have the capacity to oversee clinical trials in other countries. The OHRP conducted no more than 6 site visits, including both local and international sites, a year between 1990 and 2007. Eli Y. Adashi, "International Human Subject Research: Taking Stock in the Wake of the Guatemala Affair," *Contemporary Clinical Trials* 3 (2011): 606.

²¹ This pharmaceutical trial was approved by the FDA but did not received the participants' informed consent and forged signatures on consent forms. At least three subjects died due to drug complications. Julie M. Aultman, "Abuses and Apologies: Irresponsible Conduct of Human Subjects Research in Latin America," *Journal of Law, Medicine and Ethics* 41 (2013): 355.

²² This tension has long been central to public health efforts. For one example, see Judith Walzer Leavitt, *Typhoid Mary: Captive to the Public's Health* (Boston: Beacon Press, 1996), especially page 91.

²³ To paraphrase Alfred Lister, the British Acting Registrar-General in 1869: "We were not trying to save Guatemalans (or prostitutes) from syphilis." The original quote refers to nineteenth century British regulations in Hong Kong - "We were not trying to save the Chinese from syphilis." Quoted in Philip

The Presidential Commission for the Study of Bioethical Issues' report on current bioethical protections for subjects of human experimentation, for example, concluded that there have been many advances in bioethics since the USPHS study in Guatemala. "The current U.S. system," concludes the Presidential Commission, "provides substantial protections for the health, rights and welfare of research subjects." However, this claim is mitigated by the "currently limited ability of some governmental agencies to identify basic information about all of their human subjects research."²⁴ In other words, even today we face a lack of adequate record-keeping on human experimentation.

Lost in the Archives

Dr. Cutler's records, now available online from the National Archives in Atlanta, and initially housed at the University of Pittsburgh, begin to shed light on some of these issues when understood in the context of United States and Guatemalan medical cultures. Dr. Cutler donated his records of the experiment to the University of Pittsburgh's Archives in 1990.²⁵ Historian Susan Reverby came across the records while working on a project related to another human experiment, the Tuskegee Syphilis Study. Until she presented her findings in 2010 at the annual conference of the American Association for the History of Medicine, historians, the current public health administration and the general public were unaware of this historic study.

Even in the 1940s, few people knew about the experiments in Guatemala besides those directly involved. Although some members of the American medical community expressed interest in the Guatemalan project, there was a concerted effort to keep quiet on it. Dr. Arnold, for

Howell, "Race, Space and the Regulation of Prostitution in Colonial Hong Kong," *Urban History* 31, no. 2 (2004): 241.

²⁴ Presidential Commission for the Study of Bioethical Issues, "Moral Science: Protecting Participants in Human Subjects Research," Washington, D.C., 2011, 5.

²⁵ Reverby, " 'Normal Exposure'," 24n12.; Presidential Commission, " ' Ethically Impossible'," 4.

example, expressed concern with experimentation at the Asilo de Alienados (the national mental asylum) because the psychiatric patients were considered incapable of giving consent. He was worried that "if some goody organization got wind of the work, they would raise a lot of smoke."²⁶ The results of the experiment, which have since been deemed scientifically irrelevant, were never published.²⁷ Until Reverby's discovery, the USPHS Study in Guatemala had been lost to history.

Several publications mentioned aspects of the USPHS study obliquely but did not acknowledge the use of deliberate exposure techniques; some may have referenced the study without naming it. One 1953 publication by Dr. Funes, for example, described the serologic testing of schoolchildren and briefly mentioned serologic testing of patients in the Asilo de Alienados. However, this publication specifically neglected to disclose that the Asilo was also a site of deliberate exposure experiments.²⁸ Similarly, in 1949, Dr. Funes wrote an article on advances made in the management of venereal diseases. This article described the results of the serology experiments undertaken on schoolchildren, patients in the National Hospital, the Central Penitentiary, the Asilo, "etc."²⁹ According to Dr. Funes, "[u]nder the direction of Dr. J.C. Cutler, important research activities on venereal pathology are carried on." Additionally, he mentioned that as a result of the Venereal Disease Training and Research Center, "the cultivation of *Neisseria gonorrhoeae* was instituted, making it possible to investigate the characteristics of gonorrheal infection in the country and to arrive at interesting deductions regarding its

²⁶ Dr. Arnold to Dr. Cutler, April 19, 1948, Correspondence on Project, folder 13, Records of Dr. John C. Cutler.

²⁷ Spector-Bagdady and Lombardo, " 'Something of an Adventure'," 697.

²⁸ Juan M. Funes, et al. " Estudios Serológicos y Clínicos con Referencia a la Sífilis en Guatemala, Centro America," *Boletín de la Oficina Sanitaria Panamericana* 34, no. 1 (1953): 14-18.

²⁹ Juan M. Funes, "Avances Venereológicos en la Sección Correspondiente de la Dirección General de Sanidad Pública de Guatemala," *Boletín de la Oficina Sanitaria Panamericana* 28, no. 1 (1949): 50.

prevention."³⁰ However, he never openly admitted that these "interesting deductions" were the result of deliberate exposure experiments.

A later publication co-authored in part by Drs. Cutler and Arnold cited an "unpublished observation" made by Drs. Cutler and Funes that "the risk to the male in contact with an infected female is roughly one in 20 for a single contact."³¹ In this same article, published in 1973, the authors opined:

It is highly questionable whether it would be acceptable to deliberately expose volunteers to the risk of such infection. The required experimental circumstances, i.e. of deliberate sexual intercourse by volunteers with a person known to have active gonorrhea and/or infectious syphilis present problems of social, political, and ethical concern, which must be weighed against national attitudes and practices and the seriousness of the problem to be studied. It is to be noted that the Terre Haute and Sing Sing studies in penal institutions could be carried out with cooperation of volunteers because of the certainty of cure and consequent low risk to the patient, and because of the fact that the technique for infection was experimental inoculation.³²

This may indicate a larger evolution of ethical norms but it is a striking indictment against their own unacknowledged experimentation.

The USPHS deliberate exposure experiments in Guatemala would have remained unknown if it were not for Dr. Cutler's donation and the role of archives in collecting and documenting historical sources. The story of Reverby's discovery reaffirms the relationship between the archives and historical writing. How is the act of writing history influenced by the material collected by the archives, material that is by definition fragmentary, accidental and

³⁰ Funes, "Avances Venereológicos," 54 (translation in original).

³¹ John C. Cutler, et al. "Studies on Development of a Vaginal Preparation Providing Both Prophylaxis Against Venereal Disease, Other Genital Infections, and Contraception. I. Venereal Disease Prophylaxis, Past Experience, Present Status and Plans for Future Studies," *Military Medicine* 138, no. 2 (1973): 89, 91n6.

³² Cutler, "Studies on Development," 90.

perspectival?³³ And what does it say about Dr. Cutler's perspective that he did not destroy or hide his records but rather donated them to an archive so that future researchers might know of his work? On the flip side, as demonstrated by the fact that historians and the public did not know about the USPHS study for almost 60 years, what events, and whose stories, have been lost to scholarship?

Even with Dr. Cutler's extensive records, the USPHS Inoculation Study is incompletely documented. Approximately 12,000 pages are organized into 6 index card boxes, 2 legal archives boxes, and 4 journal size volumes; these boxes contain 61 folders including daily laboratory records, journals, final reports, photographs and correspondence.³⁴ However, they are the official, often redacted, story told mainly from Dr. Cutler's perspective. Additionally, the final reports which synthesize the results of the experiments were written retroactively; Dr. Cutler dated the syphilis report February 24, 1955, which was seven years after he left Guatemala. Issues of memory and self-representation were at play, and he was writing in a political context that had changed since he worked in Guatemala.

Subaltern Voices and Bio-power

Other perspectives, crucially the lived experiences of the human subjects, whether prostitutes, prisoners, soldiers, or psychiatric patients, and the experiences of Guatemalan officials involved in the study, are not clearly represented in these documents. In *I Ask for*

³³ The recent discovery and recovery of Guatemala's secret police archives is another case in point. Historian Kirsten Weld writes: "The papers. . . seemed endless, crude bundles by the millions spotted with vermin feces and cockroach carcasses, their hand-scrawled labels barely visible beneath years of dust, with puddles of cloudy water seeping up into the piles of paper and rotting them from within." Kirsten Weld, *Paper Cadavers: The Archives of Dictatorship in Guatemala* (Durham: Duke University Press, 2014), 29.

³⁴ National Archives, Press Release, March 28, 2011, <http://www.archives.gov/press/press-releases/2011/nr11-94.html>; National Archives, "Records of Dr. John C. Cutler, 1946-1955," Catalogue Entry, catalogue.archives.gov/id/5720548.

Justice: Maya Women, Dictators, and Crime in Guatemala, the Latin Americanist David Carey Jr. describes the process of mining subaltern voices out of legal documents. "There is always something incomplete and tentative . . ." he says, "about efforts to claim autonomy through institutions - a feeling that they are futile attempts to ignore the implicit coercion that weighs over the words of actors."³⁵ Similarly, in an attempt to recover Guatemalans' agency through the medical records of a United States public health researcher, I risk underestimating the heavy weight of power.

The scholar Michel Foucault has famously described power as "not an institution, and not a structure . . . it is the name that one attributes to a complex strategical situation in a particular society."³⁶ He goes on to describe how power manifests itself throughout and between social relations. Because power is inherently relational and "because it comes from everywhere," power is wielded even by those who are typically seen as powerless, such as poor Guatemalan prostitutes. This is not to say that power is egalitarian, however. Power relationships are not the result of two equals meeting but rather of unequal access to technologies and strategies of power. In the end, this is what gives rise to the struggle between a "multiplicity of force relations" and "a plurality of resistances."³⁷ The intertwining of resistance, agency and power is a central theme in this thesis.

In my analysis of the USPHS study in Guatemala, I also draw upon Foucault's description of bio-power as "a technology of power centered on life."³⁸ I define bio-power as a socio-political power over the administration of life, up to and including the power to neglect life to the point of

³⁵ Pablo Piccato, foreword to *I Ask for Justice: Maya Women, Dictators, and Crime in Guatemala, 1898-1944*, by David Carey Jr (Austin: University of Texas Press, 2013), xvii.

³⁶ Michel Foucault, *The History of Sexuality. Volume I: An Introduction*, trans. Robert Hurley (New York: Vintage Books, 1978), 93.

³⁷ Foucault, *History of Sexuality*, 92, 96.

³⁸ Foucault, *History of Sexuality*, 144.

death.³⁹ The inverse of the power to cultivate and channel life has also been described as the "negative protection of life."⁴⁰ In other words, an individual's, or even a group's, death might be an acceptable outcome for a state which claims the right to nurture life in its larger population.

The USPHS, for example, invested itself in understanding, preventing and treating disease so that it could foster the health and wellness of the American population. Additionally, the American military was particularly interested in the outcomes of public health research because increased health knowledge allowed them to better optimize the health and, importantly, the fighting power of their troops. In the process of this institutional management of life, the USPHS put other lives at risk, exposing them to disease, and sometimes neglecting to fully treat them. The USPHS' study in Guatemala was implicated in transnational power relationships between two countries that were trying to best optimize the health of their populations. The researchers' decisions of whom to treat and whose health to prioritise were mediated through larger socio-political perceptions of how individual bodies and, perhaps more importantly populations, should be organized, policed, defended from illness, and punished for their transgressions.

Limitations

Dr. Cutler did not concern himself with the human subjects' emotional trauma, confusion, or rational responses to the situations they were faced with. Instances of resistance, or their motivations for not resisting, were not highlighted. Read from an angular perspective, the records report on less than docile "Indians" who refused blood tests, fled rooms, or, conversely, lined up repeatedly for the same tests in the hopes of receiving a pack of cigarettes. One subject, for example, refused a blood test on the last day of treatment. The researchers decided that, in

³⁹ See Foucault, *History of Sexuality*, 138-139.

⁴⁰ Roberto Esposito, *Bíos: Biopolitics and Philosophy*, trans., Timothy Campbell (Minneapolis: University of Minnesota Press, 2008), 9.

response to his non cooperativeness, "no more studies [would] be done on him."⁴¹ The rationality of the human subjects was embedded between racist discussions of their lower mental capacities. Dr. Cutler argued that "[the Indians] are only confused by explanations and knowing what is happening," at the same time that he complained when they reacted with fear or confusion to the medical experiments.⁴²

Additionally, the records are limited by the archive's legal obligations. Individual names and faces have been redacted within the archival records because of privacy concerns, especially because some subjects whose names would otherwise be exposed are still alive. Journalists, for example, have interviewed some of the survivors and a class action lawsuit was launched in 2011 against the American government.⁴³ While legitimate, the redaction of the records poses an ethical dilemma for historians. The historical record of the USPHS Inoculation Study is known by one man's name, Dr. Cutler; the individual identities of the experimental survivors have been erased. Their names and faces have been blacked out and their stories are insufficiently documented. Some historians have argued in other cases that "imposing a double standard of identification, based on late-twentieth century determinations of confidentiality. . . borders on

⁴¹ Index Cards, Clinical Photos of Prison Patients Chancroid Patients, July 25, 1947, Records of Dr. John C. Cutler.

⁴² Dr. Cutler to Dr. Arnold, August 21, 1946, Correspondence on Project, folder 13, Records of Dr. John C. Cutler.

⁴³ See "Guatemalans sue U.S. over medical experiments," *CNN*, March 16, 2011; Rory Carroll, "Guatemala victims of US syphilis study still haunted by the 'devil's experiment'," *Guardian*, June 8, 2011; Matthew Walter, "First, Do Harm," *Nature* 482, no. 9 (2012): 148-152; "Frightening Legacy of US Syphilis Experiments in Guatemala," *Journeyman Pictures*, July 11, 2011, <https://www.youtube.com/watch?v=nha9MsSSKvE>. Additionally, in 2011, the Guatemalan President Álvaro Colom announced that members of the Guatemalan investigative team would meet with the U.S. Presidential Commission to discuss appropriate compensation. See Acan Efe, "Colom ofrece compensación a guatemaltecos infectados por EE. UU.," *Prensa Libre*, December 7, 2011. A more recent lawsuit against Johns Hopkins University and the Rockefeller Foundation was announced in 2015. See Ralph Ellis, "Guatemalans Deliberately Infected with STDs Sue Johns Hopkins," *CNN*, April 14, 2015; Johns Hopkins Media Statement, April 1, 2015, www.hopkinsmedicine.org/guatemala_study/.

hubris."⁴⁴ After all, stripping the subjects of their names and faces, while identifying the researchers, perpetuates the dehumanizing hierarchy that benefitted Dr. Cutler.⁴⁵

In an attempt to re-humanize the anonymous data contained in Dr. Cutler's records, I have created a composite sketch of individual women's experiences, using the pseudonym "Ana." By implementing this method, I hope to draw the reader's attention to the lived experiences of the subjects of this experiment. Their stories, although not as well archived, are central to a critical and balanced historical analysis of the USPHS Study in Guatemala.

The history of the study, however, goes beyond the archives. The existence of the records in Hollinger boxes did not make this event "history." It is only after Reverby analyzed and presented her findings to the academic community that the study became infamous; and it is due to her activism that the history published in a specialized journal became a matter of political interest.

Early Historiography

Reverby's first article on the topic was published in 2011 in the *Journal of Policy History*. Her initial interpretations of the material have been foundational in the nascent historiography on the subject. Although meant to expose the historic event, Reverby's article begins with a discussion of the Tuskegee Syphilis Study, and the mistaken belief that men were deliberately infected with syphilis in the Tuskegee Study. The Tuskegee Syphilis Study, officially known as the "Study of Syphilis in the Untreated Negro Male," was a USPHS study between 1932 and

⁴⁴ Jacalyn Duffin, *Langstaff: A Nineteenth-Century Medical Life* (Toronto: University of Toronto Press, 1993), 258; see also, Barbara Bates, *Bargaining for Life: A Social History of Tuberculosis, 1876-1939* (Philadelphia: University of Pennsylvania Press, 1992), 5.

⁴⁵ For more on how redacted medical records distance readers from the individuality of human subjects, see Susan M. Reverby, "More Than Fact and Fiction: Cultural Memory and the Tuskegee Syphilis Study," *Hastings Center Report* 31, no. 5 (2001): 25.

1972 in Macon County, Alabama. Over the forty year period, public health researchers observed the progression of untreated syphilis in African American men, up to and including autopsies in the case of premature deaths.⁴⁶ It is only on the fourth page of Reverby's article that she shifts to the USPHS Study in Guatemala by stating that "the mistake of the myth [of deliberate infection] is to set that story in Alabama, when it took place further south, in Guatemala."⁴⁷

The comparison to the Tuskegee Syphilis Study has had a lasting impact on the scholarship on the study in Guatemala. In fact, it is rare for an article on the study in Guatemala not to mention the Tuskegee Study. There are several reasons for this, not least because there are noticeable similarities between the two. Dr. Cutler himself was cognisant of the links between the two studies; he referenced the study in Tuskegee in his final report on the study in Guatemala.⁴⁸ Both studies involved key public health researchers, including Dr. Cutler and his supervisors. In both cases, non-consenting vulnerable populations were experimented on. Whether in Macon County, Alabama or Guatemala City's Central Penitentiary, the human subjects lived in isolated and underserved areas of the Global South.⁴⁹ Both studies also drew on racialized understandings of sexuality and medicine.

However, there were key differences between the studies that must not be overlooked. Reverby points to some of them by highlighting the fact that in the USPHS Study in Guatemala "government doctors *did infect* people with syphilis (and gonorrhea and chancroid) and then *did*

⁴⁶ Susan M. Reverby, *Examining Tuskegee: the Infamous Syphilis Study and its Legacy* (Chapel Hill: University of North Carolina Press, 2009).

⁴⁷ Reverby, "Normal Exposure," 9.

⁴⁸ Final Syphilis Report Part 7 and Bibliography, folder 7, Records of Dr. John C. Cutler, 38.

⁴⁹ For more on the Tuskegee Syphilis Study, see James H. Jones, *Bad Blood: the Tuskegee Syphilis Experiment* (New York: The Free Press, 1993); Susan L. Smith, "Good Intentions and Bad Blood in Alabama: From the Tuskegee Movable School to the Tuskegee Syphilis Experiment," in *Sick and Tired of Being Sick and Tired: Black Women's Health Activism in America, 1890-1950* (Philadelphia: University of Pennsylvania Press, 1995), 85-117; Vanessa Northington Gamble, "Under the Shadow of Tuskegee: African Americans and Health Care," *American Journal of Public Health* 87, no. 11 (1997): 1773-1778; Susan M. Reverby, "Invoking 'Tuskegee': Problems in Health Disparities, Genetic Assumptions, and History," *Journal of Health Care for the Poor and Underserved* 21, no. 3 (2010): 26-34.

treat them with penicillin."⁵⁰ It is true that, in contrast to the Tuskegee Syphilis Study, the inoculation study in Guatemala called for exposure (which did not always lead to infection) and treatment (which was not pursued in all cases, leaving many subjects untreated after the study ended). However, there were other key areas of divergence.

The location of the studies cannot be overlooked. As poor as Macon County was, it was still an American county. The historical and geopolitical context of the study in Guatemala was very different. The USPHS Inoculation Study occurred two years after a revolution that overthrew the dictatorship of Jorge Ubico. This period was in the midst of a reformist government headed by the first democratically elected president, Juan José Arévalo. Why, at this moment in history, would Guatemalan officials have invited American public health researchers into their institutions? Was this simply another case of American imperialism? Or, was the situation more complex, with Guatemalan elites viewing human experimentation as a sign of progress, and a benefit to themselves and possibly their country? Instead of an anomaly during a period of reform, perhaps Guatemalan officials perceived the USPHS Study as part of a project of modernization. The foreign location of the study and the local Guatemalan context are key elements that set it apart from the Tuskegee Syphilis Study.

A second critical piece in the story concerns the institutional settings of the USPHS study in Guatemala. In the initial design, female prostitutes were brought into the all-male penitentiary to transmit the infection, which was studied in presumed isolation; the spread of disease among male prisoners was not considered a serious possibility. Dr. Cutler raised the issue of male-to-male transmission in his reports but quickly dismissed it as improbable. In the mental asylum, Dr. Cutler noted that experimental subjects were chosen according to a list of criterion and consideration was given to "their treatability and cooperativeness, and their homosexual status,"

⁵⁰ Reverby, "Normal Exposure," 9 (emphasis in original).

although "known homosexuals" were included in the control group.⁵¹ Additionally, "although supervision of the patients within the institutions was minimal and although it was known by the staff that homosexual practices were very common (several epidemics of homosexual gonorrhea were treated) no clinical evidence of spread of syphilis by this route was observed."⁵²

Dr. Cutler disregarded the possibility of homosexual transmissions, but it did occur, contaminating the scientific results and increasing the rates of infections and subsequent health problems among the non-subject population. In the Asilo de Alienados, for example, Patient #147 was part of experiment 5 in which they attempted to transmit syphilis by ingestion. Although he initially showed clinical signs of and tested positive for gonorrhea, this was followed by a period where his tests came back negative despite his insistence that he did not seek treatment. After being discharged on April 14, 1948 and returning to the institution on September 23, 1948, he showed signs of secondary syphilis. It was concluded that his infection was not the result of the experiment but, rather, a result of his "homosexual tendencies." Despite the fact that "[he] was a known, highly promiscuous and active homosexual in the asilo," he was still used as an experimental subject. Like the heterosexual male and female subjects experimented on in heterosexual environments, he was not warned that he could potentially be infected and could transmit that infection to his sexual partners.⁵³ In another case, and in contrast to the previous example, Patient #318 at the Asilo was treated for an experimentally induced case of gonorrhea because it

⁵¹ Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 31. See also Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 28-29. The Guatemalan report indicates that the possibility of contamination between the control group and the experimental group is a methodological problem of the study. Comisión Técnica, Comisión Presidencial para el Esclarecimiento de los Experimentos en Humanos en Guatemala 1946-48, "Experimentos en Seres Humanos: El Caso Guatemala 1946-48," Guatemala, April 2011, 34. See also, Comisión Presidencial, "Experimentos en Seres Humanos," 37; Centers for Disease Control and Prevention, "CDC Report on Findings from the U.S. Public Health Service Sexually Transmitted Disease Inoculation Study of 1946-1948, Based on Review of Archived Papers of John Cutler, MD, at the University of Pittsburgh," September 29, 2010, 10.

⁵² Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 27. See also Report Entitled-Experimental Studies in Gonorrhea, folder 15, Records of Dr. John C. Cutler, 4.

⁵³ Patient #147, Index Cards, Insane Asylum Female Patients Con't, Records of Dr. John C. Cutler.

was discovered that he was "an active homosexual" and the researchers had "no desire to spread" the infection.⁵⁴

Despite evidence to the contrary, the experimental subjects were presumed to be isolated (in the case of the prisoners and the mental patients) or were otherwise marginalized from centres of power. The vast majority of soldiers were conscripted, and, legally, a woman could be involuntarily registered as a prostitute by the state.⁵⁵ There is little doubt that these populations were not volunteers in any sense of the word. In the Guatemalan case, these were populations who were not well-integrated into the community, unlike the black sharecroppers of Macon County who were the objects of experimentation in the Tuskegee Syphilis Study. Like the black sharecroppers, they were populations with little access to power and few legal or economic options.

Despite heavy institutional constraints, Guatemalan subjects were never simply victims of American imperialism. They were rational actors; and yet intersecting power hierarchies influenced how and when they resisted or complied. Retrieving their voices from the official records of the study is a political act that continues the work begun by Reverby's own activism.

Reverby contacted the Centers for Disease Control (CDC) and drew political and media attention to her discovery.⁵⁶ After Reverby's first publication on the topic, President Barack

⁵⁴ Patient #318, Exp. 14, Asilo de Alienados, Index Cards, Clinical Photos of Prison Patients Chancroid Patients, Records of Dr. John C. Cutler.

⁵⁵ Charlene Galarneau, " 'Ever Vigilant' in 'Ethically Impossible': Structural Injustice and Responsibility in PHS Research in Guatemala," *Hastings Center Report* 43, no. 3 (2013): 38. The Guatemalan legal code makes a distinction between voluntarily registered prostitutes and women registered as prostitutes by court order. See Direccion General, "Reglamento de la Seccion de Profilaxia," 5.

⁵⁶ The list of media accounts and blog posts that have discussed the USPHS study since 2010 is extensive. Some examples include Donald G. McNeil, Jr., "U.S. Apologizes for Syphilis Tests in Guatemala," *New York Times*, October 1, 2010, www.nytimes.com/2010/10/02/health/research/02infect.html?_r=0; Robert Bazell, "U.S. Apologizes for Guatemala STD Experiments," *NBC News*, October 1, 2010, www.nbcnews.com/id/39456324/ns/health-sexual_health#Vp_G-kt-IZg; Chris McGreal, "US Says Sorry for 'Outrageous and Abhorrent' Guatemalan Syphilis Tests," *Guardian*, October 1, 2010, www.theguardian.com/world/2010/oct/01/us-apology-guatemala-syphilis-tests; Robert Herriman,

Obama, then Secretary of State Hillary Clinton, and then Secretary of Health and Human Services Kathleen Sebelius officially apologized to the Guatemalan government and people.⁵⁷ The Presidential Commission for the Study of Bioethical Issues was also mandated to investigate the experiment in Guatemala. The Commission concluded that the USPHS Study in Guatemala "involved gross violations of ethics as judged against both the standards of today and the researchers' own understanding of applicable contemporaneous practices."⁵⁸

The Guatemalan *Comisión Presidencial para el Esclarecimiento de los Experimentos en Humanos en Guatemala* released a similar report in 2011. The Guatemalan report is heavily based on secondary material, especially Reverby's initial article. More directly than the American report, the Guatemalan Commission concludes that "practices like these constitute grave violations of the most fundamental human rights."⁵⁹ Interestingly, a human rights' discourse was invoked in the Guatemalan report more often than it was in the American one. The Guatemalan report goes so far as to state that the experimentation was a "crime against humanity."⁶⁰ In the American report, "human rights" as a phrase appears only once in reference to the experiments in

"Guatemalan Syphilis Experiment: In the Name of Public Health?" *Examiner*, October 2, 2010, www.examiner.com/article/guatemalan-syphilis-experiment-the-name-of-public-health; "Guatemala Syphilis Experiment, Human Subjects Research Abuses, and CAM," *Respectful Insolence*, October 4, 2010, scienceblogs.com/insolence/2010/10/04/the-guatemala-syphilis-experiment-human/; "US Scientists 'Knew Guatemala Syphilis Tests Unethical'," *BBC*, August 30, 2011, www.bbc.com/news/world-latin-america-14712089; Seema Yasmin, "Guatemala Syphilis Study: One of Many Unethical Medical Experiments," *Dallas Morning News*, April 7, 2015, healthblog.dallasnews.com/2015/04/guatemala-syphilis-study-one-of-many-unethical-medical-experiments.html/.

⁵⁷ Office of the Spokesman, "Joint Statement by Secretaries Clinton and Sebelius on a 1946-1948 Study," U.S. Department of State, Washington, D.C., October 1, 2010, www.state.gov/secretary/20092013clinton/rm/2010/10/148464.htm; Presidential Commission, " 'Ethically Impossible'," 2. See also Susan M. Reverby, "Reflections on Apologies and the Studies in Tuskegee and Guatemala," *Ethics and Behavior* 22, no. 6 (2012): 493-495.

⁵⁸ Presidential Commission, " 'Ethically Impossible'," v.

⁵⁹ Comisión Presidencial, "Experimentos en Seres Humanos," 8 (my translation - "prácticas como éstas constituyeron gravísimas violaciones a los más fundamentales derechos humanos").

⁶⁰ Comisión Presidencial, "Experimentos en Seres Humanos," 92 (my translation - "crimen de lesa humanidad").

Guatemala.⁶¹ In a similar manner, although *racismo* (racism) is discussed in the Guatemalan report, the American report only discusses "issues of race" without invoking the term "racism."⁶²

Although few historians have analyzed the Guatemalan report, scholars in both history and bioethics have been quick to engage with the American Commission's report, most often directly responding to its ethical indictment of the experiment. Bioethicist and research analyst for the Presidential Commission, Holly Fernandez Lynch, for example, wrote two articles addressing the report's conclusions.⁶³ For Lynch, it is crucial that scholars reach the right ethical interpretations of the historical record; that the right lessons be learned. Lesson number one is that intentional exposure, one of the most sensationalized aspects of the experiment, is not in itself unethical.⁶⁴ Medical researchers still engage in intentional exposure research today. It is considered a valid method of experimentation and can, with safeguards, be undertaken in an ethical manner.

Lesson number two is that experimentation in foreign locales is not inherently unethical. Here Lynch is responding directly to the plaintiffs in the 2011 class action lawsuit who claimed

⁶¹ Presidential Commission, " 'Ethically Impossible'," vii, 93, 99. The first two instances of the use of the phrase "human rights" do not refer to the USPHS Inoculation Study.

⁶² See, for example, Comisión Presidencial, "Experimentos en Seres Humanos," 25. 'Racism' is used once in the American report, in footnote 5, when quoting from a 2010 news article. See Presidential Commission, " 'Ethically Impossible'," 160.

⁶³ Lynch has a J.D. and a Master's in Bioethics. She is currently the executive director of the Petrie-Flom Center for Health Law Policy, Biotechnology and Bioethics at Harvard Law School. She is "interested in clarifying the concepts of undue influence and coercion, improving informed consent beyond nibbling around the edges, and calling attention to the problem of research exceptionalism, i.e., acting as though research is always something special even when it shares many characteristics in common with other activities that may be riskier but are substantially less regulated." See "New SACHRP Member Brings Legal and Bioethical Perspective to Board," *AHC Media*, February 2015.

⁶⁴ Holly Fernandez Lynch, "The Rights and Wrongs of Intentional Exposure Research: Contextualizing the Guatemala STD Inoculation Study," *Journal of Medical Ethics* 38, no. 8 (2012): 514. This aspect of the study is easily sensationalized. In one extreme example, the USPHS Study in Guatemala was invoked as representative of the long history of American involvement with deliberate inoculation studies; a history that was then used as proof that the US was responsible for the West African Ebola outbreak. Timothy Alexander Guzman, "U.S. is Responsible for the Ebola Outbreak in West Africa: Liberian Scientist," *Global Research*, October 17, 2014.

that American researchers went to Guatemala "for the explicit purpose of pushing the boundaries of medical ethics beyond what they could do in the United States."⁶⁵ In contrast, Lynch argues that American researchers did not initially go to a foreign location to take advantage of lax bioethical standards. If anything, they were evading prostitution laws in the United States. As one later publication, co-authored in part by Dr. Cutler, explained: "in a community where prostitution is officially illegal, there are inherent difficulties in their [prostitutes] employment as an experimental group."⁶⁶ However, Lynch explicitly avoids engaging with the "normative issues raised by commercial sex work."⁶⁷ According to this argument, it is only upon arrival that researchers cut corners and engaged in unethical research. Other scholars, such as historian Susan Lederer, have challenged Lynch on this assessment. Lederer questions why, if they intended to behave ethically, researchers would have abandoned their morals so readily once they arrived in Guatemala.⁶⁸

Neither scholar, however, questions the ethical position of American researchers using government funding to hire prostitutes infected with venereal disease, in contravention of both American and Guatemalan laws. As Lynch notes, the "ethical evasion" may not have been medical research standards but rather American prostitution laws.⁶⁹ However, this experiment was also technically illegal on Guatemalan soil because, according to Guatemalan law, the women should have been treated at the Venereal Disease Hospital before being allowed to

⁶⁵ Quoted in Holly Fernandez Lynch, "Ethical Evasion or Happenstance and Hubris? The U.S. Public Health Service STD Inoculation Study," *Hastings Center Report* 42, no. 2 (2012): 31 (emphasis in original). For the Judge's memorandum opinion in this case, see *Garcia v. Sebelius*, Civil Action No. 11-527 (U.S. District Court for the District of Columbia, June 13, 2012); *Garcia v. Sebelius*, Civil Action No. 11-527 (U.S. District Court for the District of Columbia, January 29, 2013).

⁶⁶ Cutler, "Studies on Development," 90.

⁶⁷ Lynch, "Ethical Evasion," 31.

⁶⁸ Susan Lederer, "Shining Light on a Shady Study," *Hastings Center Report* 42, no. 2 (2012): 3.

⁶⁹ See, for example, Presidential Commission for the Study of Bioethical Issues, "A Study Guide to 'Ethically Impossible' STD Research in Guatemala from 1946 to 1948," Washington, D.C., November 2012, 13.

engage in sex work again. This points to two currently neglected areas in scholarship on the subject. Research on the study has been heavily slanted from an American perspective, in part because of the limitations of the official records. A better understanding of the particularities of the Guatemalan context, from its legal and administrative framework, to the changes wrought by the 1944 October Revolution, helps explain why this experiment happened where it did, and when it did.

The Elephant in the Room

Additionally, few scholars have chosen to analyze the experiences of the female subjects or to question the ethics of this "normative issue." In some cases, the female prostitutes are not even listed as human subjects alongside the prisoners, mental patients and soldiers, a continuation of the problematic classification initially imposed by Dr. Cutler's team.⁷⁰ Most egregiously, the American Presidential report, in its tally of "exposure days," does not count times when only prostitutes were exposed to venereal disease because "Dr. Cutler did not consider these instances 'experiments' or the sex workers as 'subjects'."⁷¹ In another example, a recently published book states that the "subjects of the study had sex with infected prostitutes or had abrasions on their bodies rubbed with infectious materials," as if the "infected prostitutes" are no more than another means of transmitting the "infectious materials."⁷²

⁷⁰ See, for example, Lydia Crafts, "Sanitizing Interventions: PHS VD Research in Guatemala and the Rise of International Health" (M.A. Thesis, University of Texas at Austin, 2012), iv; Ilana Löwy, "The Best Possible Intentions: Testing Prophylactic Approaches on Humans in Developing Countries," *American Journal of Public Health* 103, no. 2 (2013): 226; Barry Lyons, "History, Ethics and the Presidential Commission on Research in Guatemala," *Public Health Ethics* 7, no. 3 (2014): 211, 213; Presidential Commission, "A Study Guide," 1; Reverby, "Normal Exposure," 12. For an example of when they are included and to demonstrate their inconsistent inclusion, see Presidential Commission, "Study Guide," 15.

⁷¹ Presidential Commission, "Ethically Impossible," 154.

⁷² Margaret D. LeCompte and Jean J. Schensul, *Ethics in Ethnography: A Mixed Methods Approach*, (Lanham, Maryland: AltaMira Press, 2015): 40.

More generally, however, scholars have shown ambivalence and inconsistency in their analysis of prostitution. Some scholars acknowledge that uninfected prostitutes were also intentionally infected with syphilis and gonorrhea, but American coercion is still often disregarded. Using distancing language, scholars note that prostitutes were "*allowed* to expose inmates," or "*were allowed* to offer their services to prison inmates."⁷³ Stating that the prostitutes "*were allowed*" to have sexual intercourse with prisoners emphasises their agency as individuals but neglects the coercive context in which these encounters took place. It also mirrors Dr. Cutler's language when he said that the "men were allowed contact with uninfected prostitutes." To be allowed to do something implies that they were given permission; it does not fully grasp the ways in which prostitutes and other human subjects were actively encouraged to participate and it does not adequately capture the ambiguous boundaries between individual agency and institutional pressure.⁷⁴ Dr. Cutler also described the initial method of transmission as "volunteers exposing themselves to prostitutes," implying that the subjects voluntarily and wilfully exposed themselves.⁷⁵ This vocabulary and style of writing masks the role of the researcher in exposing subjects.

One writer who has broached the topic of prostitution in the context of this study is the gender studies' scholar Charlene Galarneau. By pointing to structural injustices that framed the USPHS Inoculation Study, including "social structures related to gender, race, and sexuality in Guatemala and the complex of political, economic, and social relations between Guatemala and

⁷³ Centers for Disease Control and Prevention, "Joint Meeting of the Ethics Subcommittee of the Advisory Committee to the Director, CDC and the CDC Public Health Ethics Committee," Atlanta, Georgia, October 7-8, 2010, 2; Reverby, " 'Normal Exposure'," 12 (emphasis mine in both quotations).

⁷⁴ According to the Oxford English Dictionary, "allow" is a verb meaning "to permit, enable," and adds that the term "covers a range of meaning from actively giving permission to passively not preventing something." See *Oxford English Dictionary*, 3rd ed., s.v. "allow," www.oed.com.

⁷⁵ Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 25.

the United States," Galarneau responds to another ethical debate within the historiography. This debate asks the legally and politically relevant question: Who is to blame?

Some scholars, following the indictments of the Presidential Commission, assign individual responsibility to key figures in the study, especially the now infamous Dr. Cutler.⁷⁶ In this view, "failure to exercise moral leadership cannot be excused . . . They [Dr. Cutler and his team] thought they were above the rules."⁷⁷ Others question the implications of assigning responsibility to individuals. Dr. Cutler and his superiors were not without moral responsibility. However, assigning responsibility to a now deceased individual effectively segregates the moral failings to the past and does not address institutional injustices that persist today. For some scholars, blaming Dr. Cutler misses the point; the USPHS Study occurred because of - not despite - the institutional setting in which it was approved, funded, conducted, and eventually terminated. Kayte Spector-Bagdady and Paul A. Lombardo capture this argument when they state that the "events in Guatemala did not just happen because a rogue scientist exploited a loophole in an underdeveloped administrative scheme."⁷⁸

Interestingly, the Guatemalan official report on the study specifically names the researchers *and* institutions it deems responsible. Direct responsibility is attributed to the USPHS, the Pan American Sanitary Bureau (PASB), and American researchers. In contrast, Guatemalan involvement is more ambiguous; Dr. Cutler's records are not clear on whether Guatemalan officials were fully informed, or of the extent of involvement. The Guatemalan report also acknowledges the role of the larger sociopolitical context, including Guatemala's dependent

⁷⁶ For a recent revision of Dr. Cutler's image, see Susan M. Reverby, "Enemy of the People/Enemy of the State: Two Great(ly Infamous) Doctors, Passions, and the Judgment of History," *Bulletin of the History of Medicine* 88, no. 3 (2014): 403-430.

⁷⁷ Presidential Commission, " 'Ethically Impossible'," 107.

⁷⁸ Spector-Bagdady and Lombardo, " 'Something of an Adventure'," 697.

status and its fragmented health system that made oversight difficult.⁷⁹ Larger social structures, from the USPHS' grant review process, to the geopolitical relationship between the United States and Guatemala, to the government regulated system of prostitution, shaped the research design and informed the outcomes.

Starting from a political desire to unpack the larger processes in play, I question the gendered interactions within the study itself. Why did Dr. Cutler distinguish between "authentic" (usually male) research subjects and the women who were hired to transmit the infections under study? And why have subsequent scholars uncritically accepted this distinction? How did the system of regulated prostitution provide the necessary health structures to support the experiment? Finally, why were uninfected prostitutes hired to participate in the study? In essence, how do the histories of prostitution, sexual health, and foreign intervention converge in this historic moment?

To answer these questions, I draw on feminist scholarship, gender history, and a Foucauldian understanding of bio-power. I argue that, although neglected by Dr. Cutler's team, female prostitutes were essential experimental subjects. Understanding the ethical implications of the USPHS Inoculation Study necessitates investigating the gendered experiences of all the research subjects, including the prostitutes. Moreover, destabilizing the dominant narrative by focusing on the women as central to our understanding of the experiment draws attention to the wider historical context and gendered assumptions about medical experiments and human subjects.

Using critical discourse analysis, I compare the researchers' actions and their language. What were they doing and how did they describe what they were doing? The official records do

⁷⁹ Comisión Presidencial, "Experimentos en Seres Humanos," 92-94. For more on United States influence in the region, see Anita Frankel, "Political Development in Guatemala, 1944-1954: The Impact of Foreign, Military, and Religious Elites," (PhD diss., University of Connecticut, 1969), 3-8, 30-50.

not simply catalogue which experimental procedures were being used on which institutional populations; they also judge the social, racial, and gender positions of the subjects. What does it mean to call a woman who engages in prostitution a "female donor"? In a similar manner, the Guatemalan legal code was not an accurate reflection of reality. Instead, its legalistic language is self-referential: by forcibly categorizing female sexuality as either regulated prostitution or marital duty, and then by imposing this artificial structure on human behavior, it created the reality its elite authors wished to see. Additionally, in the immediate aftermath of the October Revolution, it is doubtful that the on-the-ground reality aligned with the ideals of Guatemalan law. The complicated interactions between perception, language, reality, and historical memory, can begin to be teased out through this comparative and contextualized close reading. Practice and rhetoric do not always align, and so analyzing what is being said, what is not being said and how it is being said can reveal inner tensions and expose some of what the female subjects experienced.

Additionally, this approach reinforces the idea that history is entangled with relationships of power. Edward Said has described it as the "power to narrate."⁸⁰ Although I read medical summaries and experimental notes, instead of novels, I too am invested in political questions about whose stories are being told and who has the power to narrate those stories.

My argument rests on the assertion that individuals act rationally within the opportunities available to them. Although the prostitutes and other human subjects had fewer options than the American researchers or even the Guatemalan doctors, examples of their agency are scattered throughout Dr. Cutler's records. They were not simply victims. Following from this foundational belief, my thesis is organized into three chapters that underscore the various actors in this human drama.

⁸⁰ Edward Said, *Culture and Imperialism* (New York: Vintage Books, 1993), xiii.

Chapter Outline

In the first, I focus on Guatemalan involvement in the study, especially through the key figure of Dr. Funes, and I examine the theoretical issue of collaboration. I explore the Guatemalan context, considering the geopolitical realities of 1946 Guatemala. Importantly, this was during a brief revolutionary period before an American-led coup reinstated a dictatorial political regime. I question why elite Guatemalans, especially within this particular political environment, would have invited Americans into their country to engage in human experimentation. In the end, it may not be as contradictory as it first appears because Guatemala was struggling to modernize its public health structure and its international image. Involvement in medical experimentation, which was seen as the height of scientific progressivism, was a boon for a nascent democracy.

My second chapter focuses on the oft-analysed Dr. Cutler. I foreground the Guatemalan perspective in the first chapter but the USPHS Inoculation Study cannot be discussed without the American perspective as well. Dr. Cutler and his team obviously played vital roles in the study; their cultural baggage, especially as it relates to their perception of prostitution, controlled the experimental design.

Finally, my third chapter focuses on the experiences of Ana, and the other women like her who were considered to be vectors of disease. I discuss the role of the prostitutes in the experiment, and am especially concerned with how they were perceived as racialized, classed and gendered subjects. Dr. Cutler, for example, described the class of prostitutes who paid regular visits to the penitentiary as the "lowest in the social scale of legal prostitutes and most frequently infected with syphilis and gonorrhoea."⁸¹ Statements such as this need to be unpacked to illuminate how the prostitutes were perceived by the researchers and how, in turn, these

⁸¹ Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 8.

perceptions influenced the experiences of the female subjects. In this chapter, I question why the American researchers were hiring women to have sex under experimental conditions. In the process, I demonstrate how perceptions of sexuality and disease shaped the study. Taken together, these chapters present three different perspectives of the USPHS Study in Guatemala, allowing for a more contextualized picture of the study that underscores the gendered and transnational nature of 1940s globalizing medicine.

In the end, I argue that the image of diseased female bodies was central to the USPHS study. The women were treated like experimental subjects but were talked about as experimental objects because their infection status was always already assumed. Focusing on the most marginalized subjects forces us to question the very foundations of the USPHS research protocol. In the process, I uncovered a morass of unstable assumptions about sex, infection, and bodies that refused to be classified by index cards or blood samples.

Chapter One

The Collaborator?: Guatemalan Officials in a National Context

"I have the privilege to inform you that the prostitute [redacted] signed in to the Venereal Section on September 13th, 1946," Dr. Funes wrote to Dr. Cutler on March 18, 1947.⁸² The letter contained a description of Ana's sexual health history. She was treated for secondary syphilis for 20 days in 1946, and had more recently tested positive for gonorrhea. She was being "referred" to Dr. Cutler for the USPHS Venereal Disease Study.⁸³ In this one letter we encounter three key players of the USPHS Study in Guatemala: the Subject, in this case a prostitute named Ana; the Doctor-Researcher, Dr. Cutler; and his Colleague, Dr. Funes.

Dr. Funes was central to the development and orchestration of the 1940s experiment. Born in Guatemala City on May 29, 1907, he graduated from the Universidad de San Carlos in 1938. After receiving his MD, he worked as a military surgeon, and was director of the El Norte Hospital. By 1945, at the age of 38, he was working as a fellow at the Venereal Disease Research Laboratory on Staten Island.⁸⁴ According to Dr. Cutler's records, it is during this time that Dr. Funes suggested a prophylaxis experiment in Guatemala. Aware of the failings of the Terre Haute prison experiment, which had been abandoned in 1944 because transmission rates were insufficient, Dr. Funes proposed utilizing a sexual, rather than medical, transmission method. It so happened that he was in a position to offer the USPHS the perfect location. Back in Guatemala City, Dr. Funes was the Director of the main venereal disease hospital.⁸⁵ This meant that he

⁸² Dr. Funes to Dr. Cutler, March 18, 1947, Gonorrheal Experiment #2, folder 31, Records of Dr. John C. Cutler (my translation - "Tengo a honor informar a Ud., que la Meretriz; [redacted] ingresó a ésta Sección de Venereología, el 13 de Septiembre del año 46").

⁸³ Presidential Commission, " 'Ethically Impossible'," 46.

⁸⁴ Juan M. Funes Personnel Files, Special Consultant Appointment Recommendation, December 10, 1948, Presidential Commission for the Study of Bioethical Issues Human Subjects Protections I Archives (PCSBI HSPI), NPRC_0000807, bioethics.gov/sites/default/files/NPRC_0000807.PDF; Presidential Commission, " 'Ethically Impossible'," 28.

⁸⁵ Presidential Commission, " 'Ethically Impossible'," 37.

oversaw the legally mandated testing of registered prostitutes and, at least theoretically, their treatment.

Prostitution was legal and regulated in Guatemala. Legally, prostitutes were tested for venereal disease twice a week. Dr. Funes was in charge of the main hospital that did this testing. Prostitutes were also allowed to work in the prison system.⁸⁶ It was the perfect recipe for an experiment that required sexual contact between an infected subject and an uninfected subject in a controlled environment. And it came about, in part, because of Dr. Funes' proposal and his willingness to facilitate the study. The legal and medical framework that allowed the USPHS experiment to occur was, however, more complicated than this simple mechanism

The Collaborator?

Despite the title, this chapter is not about American doctors and their Guatemalan collaborators. It is about Guatemalan doctors and government officials who, for various reasons, were involved with the USPHS study in Guatemala. Perhaps, like their American counterparts, they rationalized the experiment as a necessary means of obtaining crucial public health information. Alternatively, they saw it as an opportunity to request supplies for their woefully underfunded institutions and training for their overworked staff. Perhaps they saw it as an ideal way of advancing their own careers, as in fact happened in some cases. Or, perhaps, like most human behavior and complicated moral judgments, it was neither that simple nor that clean-cut. No doubt many of the Guatemalan officials became involved in the experiment for multiple overlapping reasons.

Medical professionals' collaboration in human rights' abuses are more widespread than is often acknowledged. For many people, the most egregious example remains Nazi human

⁸⁶ Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 7-8.

experimentation. However, other, lesser known instances occur more regularly. Turkish forensic physicians, for example, were implicated in atrocities against Kurdish people, not because they directly tortured or killed anyone but because they did not question how people were dying.⁸⁷ They divorced the physical examination of the dead body from the social circumstances that led to the death.

Physicians become collaborators in human rights' abuses because medicine is not isolated from the social circumstances in which it is practiced.⁸⁸ Physicians cannot and should not concentrate myopically on the physicality of the body, to the point that they fail to see the social consequences of their role as healers. They are the gatekeepers to much more than just medical care; they help decide whether criminals are fit to stand trial, they help evaluate evidence of violent crimes, and they oversee human experiments that could enormously benefit individuals' health outcomes or fatally endanger others. Ethical dilemmas can arise when their larger social role is in conflict with their medical training. Should the health, well-being or security of a community override an individuals' rights? In a context where venereal diseases were endemic, this was the ethical choice that was confronted by not only Dr. Funes and the other Guatemalan doctors but also by Dr. Cutler's American research team.

Dr. Funes was not a bit player in this drama. He was central to the study's development. Without him, American researchers might not have considered Guatemala City as a possible location for this type of study. During the first half of the twentieth-century, the USPHS was invested in the burgeoning field of tropical medicine. U.S. health organizations had an extensive sphere of influence in the southern hemisphere, and the study in Guatemala was not the first human experiment that American researchers performed on the bodies of their southern

⁸⁷ M. Gregg Bloche, "Physicians as Caretakers and Collaborators," *The Lancet* 351, no. 9107 (1998): 982.

⁸⁸ Bloche, "Physicians as Caretakers," 982.

neighbours.⁸⁹ However, they would not have had ready access to the Guatemalan prostitutes or to the medical and legal infrastructure already in place if it were not for Dr. Funes and his colleagues. This went far beyond simple collaboration.

Beyond the fact that Guatemalan doctors were essential rather than peripheral to the development of the study, the term "collaboration" is itself problematic in this case. Following studies of collaboration within occupied territories during the Second World War, collaboration has taken on a negative connotation. For some, it has come to imply a "betrayal of the nation."⁹⁰ As historian Timothy Brook explains, collaboration is now "the word by which we denigrate political cooperation with an occupying force."⁹¹ Additionally, the moral strength of the word condemns the collaborator without asking more critical questions. How did they become a collaborator? Why were they collaborating with people, it is implied, who should have been their natural enemies? It takes nationality as the foundation of their identity.

Calling the Guatemalan doctors "collaborators" implies that they were less involved than their American "superiors," and that they should have felt a national obligation towards their fellow Guatemalans. Their involvement in the USPHS study can be scrutinized for many reasons. Like the American researchers, as doctors, their professional duty was to heal or, at least, to alleviate the pain of the populations under their care. However, the Guatemalan professionals did

⁸⁹ For example, see Alexandra Minna Stern, "The Public Health Service in the Panama Canal: A Forgotten Chapter of U.S. Public Health," *Public Health Reports* 120, no. 6 (2005): 675-679.

⁹⁰ James Mace Ward, *Priest, Politician, Collaborator: Jozef Tiso and the Making of Fascist Slovakia* (Ithaca: Cornell University Press, 2013), 8. Tiso was tried after the war for treason and collaboration. See Ward, *Priest, Politician*, 9. For a recent discussion on European revisionism of wartime collaboration, see Gareth Pritchard, and Desislava Gancheva, "Collaborator (No Longer a Dirty Word?)," *History Today* 64, no. 12 (2014): 31-36. See also Timothy Brook, "Hesitating Before the Judgment of History," *Journal of Asian Studies* 71, no. 1 (2012): 103-114.

⁹¹ Timothy Brook, *Collaboration: Japanese Agents and Local Elites in Wartime China* (Cambridge: Harvard University Press, 2005), 1.

not necessarily have additional nationalist, moral obligations to resist American research in their territory.

Dr. Funes, who had just spent a year in the United States, working in close proximity to the same American researchers who later directed the USPHS experiment, may have felt a closer kinship to the American researchers than to the human subjects whose health they were putting at risk. Dr. Funes and Dr. Cutler had much in common: professional interests in public health and venereal disease prevention, ambitious careers that were quickly developing even at their young age, an educated background, relatively high-status jobs, and an international perspective.

In contrast, Dr. Funes and the clients who passed through the Guatemala City Venereal Disease Hospital had comparatively little in common. They were of a different class, gender, education level and, sometimes, race. They had a very different relationship to the state power structure. If the women had newly migrated to the city, they might even have spoken different languages. Certainly they would have had little common ground on which to stand and converse. Dr. Funes' worldview (transnational/metropolitan, university educated physician) would have been incomprehensible to a poorly educated, perhaps even illiterate woman whose understanding of venereal disease, if she had any at all, would not have come from scientific textbooks and under microscopes but from bodily discharges, physical ailments, and the gossip of her fellow prostitutes. She would have felt what he saw.

In fact, it is not too much of an exaggeration to suggest that the only thing Dr. Funes and many of the female prostitutes would have had in common was their nationality, a category that is itself historically created. As scholars Laura Briggs, Gladys McCormick and J.T. Way write: "the nation is only one among several forms of power, meaning, and containment, and not always

the dominant one at that."⁹² Neither Dr. Funes, with his transnational experiences, nor the prostitutes, with their localized knowledge, would have necessarily or naturally taken the nation-state as the foundation of their identity.⁹³ Or rather, it is perhaps more accurate to say that they would have imagined different nations in their portrayal of national identity. It is possible that Dr. Funes juggled an international perspective with national pride and a sense of belonging. After all, despite his foreign training, itself a common practice at the time in Latin America, he returned to work in Guatemala. His ideal of the Nation, however, does not seem to have bridged the social distance between himself and the Guatemalan subjects. Indeed, it might have been completely natural for Dr. Funes to "collaborate" with his American colleagues. It is possible that he did not see it as collaborating *against* his fellow Guatemalans at all. More likely, he saw it simply as part of his job; certainly as part of his career development.

Dr. Funes' career benefitted from his involvement in the USPHS study. He benefitted financially and received a monthly salary of \$125.00 in 1948.⁹⁴ Even after Dr. Cutler had left the country, frustrated by changes in organizational leadership and decreased funding, Dr. Funes and his colleague, Dr. Carlos Salvado, the Director of the Asilo de Alienados, continued to observe the subjects, submit blood samples, and receive paycheques. By the time Dr. Funes' services as "Special Consultant" were finally terminated on August 14, 1956, he was being paid \$35.00 for each day of irregular work.⁹⁵ He was initially hired on December 10, 1948 for the "efficient

⁹² Laura Briggs, Gladys McCormick and J.T. Way, "Transnationalism: A Category of Analysis," *American Quarterly* 60, no. 3 (2008): 644.

⁹³ For more on the nation-state as socially constructed, see Andreas Wimmer and Nina Glick Schiller, "Methodological Nationalism and Beyond: Nation-State Building, Migration and the Social Sciences," *Global Networks* 2, no. 4 (2002): 301-334.

⁹⁴ Comisión Presidencial Para el Esclarecimiento de los Experimentos Practicados con Humanos en Guatemala, *Consentir al Daño: Experimentos Médicos de Estados Unidos en Guatemala, 1946-1948*, Guatemala, October 2011, 14n.

⁹⁵ Juan M. Funes Personnel Files, Notification of Personnel Action, August 14, 1956, PCSBI HSPI Archives, NPRC_0000799, bioethics.gov/sites/default/files/NPRC_0000799.PDF.

posttreatment [sic] follow-up observation of... patient groups in the National Orphanage in Guatemala City; certain school groups in San Jose and other cities in Guatemala; patient groups in the National Penitentiary in Guatemala City, and among various Indian tribes in the vicinity of Guatemala, and certain patients who have been released from the insane institution at Guatemala City."⁹⁶ Index cards that tracked patients from the prison and the Insane Asylum noted in detail the continued serologic testing. Some patients were still being tested in 1953, while others died prematurely.⁹⁷ There was no proposal for observation or "re-treatment as may be required" for the female prostitutes.⁹⁸

Among the female patients in the Insane Asylum, for example, Patient #101 was exposed to infectious material during Experiment #5, contracted an infection, and was subsequently treated with penicillin. She was later exposed during two other experiments, and the doctors periodically withdrew blood until 1953.⁹⁹ These final blood tests were negative, but other subjects were not so fortunate. Some index cards end abruptly with a final notation - "Died."

Deaths were common enough that Dr. Cutler described a "steady loss of patients by death," which amounted to 83 subjects throughout the experiments.¹⁰⁰ Sometimes the patient's death occurred during experimentation, while other times their death is inscribed in Dr. Cutler's records as having occurred years after the experimentation, indicating continued observation and, in the case of autopsies, continued medical intervention on the part of the Venereal Disease Study team. Patient #103, for example, was treated with penicillin after being involved in the

⁹⁶ Juan M. Funes Personnel Files, Special Consultant Appointment Recommendation, bioethics.gov/sites/default/files/NPRC_0000807.PDF.

⁹⁷ See Index Cards, Insane Asylum Female Patients, Records of Dr. John C. Cutler and Index Cards, Insane Asylum Female Patients Con't, Records of Dr. John C. Cutler.

⁹⁸ Juan M. Funes Personnel Files, Special Consultant Appointment Recommendation, PCSBI HSPI Archives, bioethics.gov/sites/default/files/NPRC_0000807.PDF.

⁹⁹ Patient #101, Index Cards, Insane Asylum Female Patients, Records of Dr. John C. Cutler.

¹⁰⁰ Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 40; Presidential Commission, "Ethically Impossible," 42.

experiments, and there was "[n]o clinical evidence of syphilis" by 1949; she did not pass away until 1951, when she was about 23 years of age.¹⁰¹ Causation is not noted and whether the human experiment was indirectly involved in her premature death is unclear with the records at hand. With more detail, it was noted that Patient #127 "died early this morning [October 2, 1948] following thyroedictomy [sic] performed yesterday afternoon. Surgeon not anxious for autopsy. In view of unsettled conditions there it was not done."¹⁰² In one final example, Patient #140 died in 1951 of "barbituate intoxication, autopsy specimen now out at NIH for study."¹⁰³ At times, American medical interventions followed the subjects even after death, despite the fact that according to Guatemalan law, burials must be performed within 24 hours of death.¹⁰⁴

Guatemalan Officials

Based in part on the possibilities afforded to him because of this experimentation, Dr. Funes' career blossomed after 1948. He became Vice-Chairman of the World Health Organization's Syphilis Study Commission; in this capacity, he was one of the members who wrote a 1950 report on venereal disease control in the United States, overturning the traditional hierarchy of observation between the Global North and the Global South.¹⁰⁵ He also accepted the position of Chief of the National Anti-Venereal Campaign of Guatemala in 1954.¹⁰⁶

Most directly linked to his role in the 1946 study, however, was a 1948 experiment into the effectiveness of orvus-mapharsen that was neither funded nor managed by the USPHS. Dr.

¹⁰¹ Patient #103, Index Cards, Insane Asylum Female Patients, Records of Dr. John C. Cutler.

¹⁰² Experiment 6, Patient #127, Index Cards, Insane Asylum Female Patients, Records of Dr. John C. Cutler.

¹⁰³ Experiment 11, Patient #140, Index Cards, Insane Asylum Female Patients, Records of Dr. John C. Cutler.

¹⁰⁴ Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 40.

¹⁰⁵ WHO Syphilis Study Commission, *Venereal-Disease Control in the USA: with Special Reference to Penicillin in Early, Prenatal, and Infantile Syphilis* (Geneva: World Health Organization, 1950).

¹⁰⁶ Presidential Commission, " 'Ethically Impossible'," 88.

Funes and the Chief of the Ministry of Public Health, Casta Luz Aguilar, used a methodology that was obviously inspired by the earlier American-led experiment. Testing one of the same prophylactics, orvus-mapharsen, they asked Guatemalan prostitutes working in a brothel to use it as a post-coital douche. Their published article remarked that the six women were known to and "had previously been followed" by Dr. Funes. The American Presidential Commission suggests that these women may have previously participated in the USPHS study but this is impossible to prove with the evidence at hand.¹⁰⁷ It is doubtful that this remarkably similar experiment and the subsequent publication in Dr. Funes' name would have been possible without his involvement in the earlier USPHS study.

Other Guatemalan physicians, including Dr. Salvado, benefitted directly from their involvement, and these gains sometimes extended to their immediate families.¹⁰⁸ Dr. Salvado was not only hired as a Special Consultant after 1948 but he also worked as a fellow in the United States, affording him professional training, prestige and networking opportunities.¹⁰⁹ Following Dr. Salvado's leave of absence to study in the United States, he "requested that his brother, Julio Salvado, be appointed to aid [the American researchers] in the Asylum during his absence."¹¹⁰ Similarly, the Chief of the Guatemalan Army Medical Department, Dr. Carlos E. Tejada received medication for his wife from the USPHS and was engaged in observational studies for them until 1953.¹¹¹ Dr. Tejada was also directly involved in some of the earlier experiments. On November

¹⁰⁷ Presidential Commission, " 'Ethically Impossible'," 185n412.

¹⁰⁸ For a list of the proposed salaries of Guatemalan employees, see Dr. Cutler to Dr. Mahoney, August 26, 1948, John C. Cutler's 1948 Correspondence, folder 12, Records of Dr. John C. Cutler.

¹⁰⁹ Presidential Commission, " 'Ethically Impossible'," 35.

¹¹⁰ Dr. Cutler to Dr. Soper, August 27, 1948, John C. Cutler's 1948 Correspondence, folder 12, Records of Dr. John C. Cutler.

¹¹¹ Dr. Cutler to Dr. Mahoney, November 30, 1946, Correspondence on Project, folder 13, Records of Dr. John C. Cutler; see also, Presidential Commission, " 'Ethically Impossible'," 115.

18 and 19, 1947, for example, he helped Dr. Sacha Levitan apply prophylaxis after the subjects were deliberately infected.¹¹²

The Director of the Guatemalan Ministry of Public Health, Dr. Luis Galich was also involved, along with Dr. Funes, in sending prostitutes to Dr. Cutler's research team and arranged for the USPHS venereal disease laboratory, built specifically for this study, to be transferred to the Guatemalan government. In another instance, on September 25, 1947, Dr. Cutler wrote to Dr. Mahoney regarding a captain in the Guatemalan Army Medical Corp who had "worked very closely with [the USPHS research team] and who [had] rendered very real assistance." He recommended Dr. Raul Maza for further training in the United States, asking whether it would "be possible to make an arrangement for him similar to that made for Dr. Galvez Molina in which he lives in receiving room and board but no pay?"¹¹³ Finally, a physician for the Guatemalan Public Health Service, Dr. Abel Paredes Luna, received a fellowship to study with Dr. Mahoney.¹¹⁴

Dr. Cutler's records do not clearly state how many members of the Guatemalan government were aware of the study, whether their Guatemalan colleagues were completely informed or whether they were misled about the particulars of the study, and how high up the chain of command this knowledge went. However, since the Director of the Guatemalan Ministry of Public Health was "[i]nvolved in the referral of sex workers. . . to Dr. Cutler," it is clear that at least some segments of the Guatemalan government had some knowledge of and were involved in the USPHS study.¹¹⁵ As Reverby stated in 2016 at the *International Colloquium on Knowledge*

¹¹² "Experimento del [redacted] y [redacted] - Noviembre 18 y 19, 1947," Studies with the Military GC, Records of Dr. John C. Cutler.

¹¹³ Dr. Cutler to Dr. Mahoney, September 25, 1947, John C. Cutler's 1947 Correspondence, folder 11, Records of Dr. John C. Cutler.

¹¹⁴ Presidential Commission, " 'Ethically Impossible'," 113.

¹¹⁵ Presidential Commission, " 'Ethically Impossible'," 113.

Networks and Health Innovation in the (North and South) Americas: "imperial power like this doesn't work without the cooperation of somebody on the ground in a country where there are no resources and so people have to make horrendous decisions about whether they're going to cooperate or not."¹¹⁶

Other Guatemalan professionals received training or supplies they would not otherwise have had access to, as a result of their involvement in the study. In his final report, Dr. Cutler noted that early in their stay in Guatemala, "the unit began to assist actively in operating the national VD control program, both in training of laboratory personnel for local laboratory assistants and in serologic testing required by operation of the existing program, which heretofore had been impossible because suitable laboratory facilities were lacking."¹¹⁷ Serologists working for the Guatemalan Public Health agency informally followed the American research team and were trained in standard serology tests. In an attempt to foster good will towards the project, Dr. Cutler spent valuable time and resources on requests made by his Guatemalan colleagues. After testing a sample of Kahn antigen, one common serological test, given to him by the chief of the Guatemalan Public Health laboratory,

Mr. Portnoy found that their antigen was less sensitive than ours. The serologist then made the request that Mr. Portnoy spend several hours a week with them to correct the errors in their technique. That could be done easily, and we are very happy to do it for them, however, both Mr. Portnoy and I feel that it would be to our advantage for them to start using our own Kahn antigen.¹¹⁸

¹¹⁶ Susan M. Reverby, "Interview by Steven Palmer and Erin Gallagher-Cohon" (interview, International Colloquium on Knowledge Networks and Health Innovation in the (North and South) Americas, University of Windsor, ON, Canada/ University of Michigan, Ann Arbor, MI, USA, April 14, 2016).

¹¹⁷ Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 11.

¹¹⁸ Dr. Cutler to Dr. Mahoney, January 10, 1947, John C. Cutler's 1947 Correspondence, folder 11, Records of Dr. John C. Cutler. See also, Dr. Cutler to Dr. Mahoney, October 16, 1947, John C. Cutler's 1947 Correspondence, folder 11, Records of Dr. John C. Cutler.

Although they were willing to spend the time to train Guatemalan serologists, the American doctors suggested instead giving the Guatemalan doctors their own antigens, perhaps because of a desire for increased standardization.

Dr. Cutler admitted that the serologic tests that proved to be most accurate in the United States and Northern Europe were producing inaccurate results in the Guatemalan environment which resulted in a high level of false positives.¹¹⁹ He did not suggest, however, that specific contexts might warrant particular tests or techniques but rather that American medical knowledge should be standardized across Latin America. In this way, American influence spread, and Guatemalan public health officials were provided with training and resources to combat troublesome public health threats.¹²⁰ And yet, this elite class of Guatemalans directly benefitted from a human experiment that exploited more vulnerable Guatemalans, resulting, for some, in life-long health difficulties or death.

Other benefits accrued because of these transnational medical relationships and demonstrate this sticky middle ground between personal gains and the advancement of underfunded government agencies, agencies that were ideally meant to address health care needs among the most marginalized populations. The case study of the mental asylum is an excellent example of the complexity of individuals' motives. The Asilo de Alienados was run by Dr. Salvado who proposed that the American research team use the hospital as a site of

¹¹⁹ Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 14, 17, 20-21.

¹²⁰ For more on the flow of knowledge and resources between the United States and Latin America and on medicine on the periphery, see Steven Palmer, "Beginnings of Cuban Bacteriology: Juan Santos Fernández, Medical Research, and the Search for Scientific Sovereignty, 1880-1920," *Hispanic American Historical Review* 91, no. 3 (2011): 445-468; Ann-Emanuelle Birn, and Raúl Necochea López, "Footprints on the Future: Looking Forward to the History of Health and Medicine in Latin America in the Twenty-First Century," *Hispanic American Historical Review* 91, no. 3 (2011): 503-527, especially 517-522; Marília Coutinho, "Tropical Medicine in Brazil: The Case of Chagas' Disease," in *Disease in the History of Modern Latin America: From Malaria to AIDS*, ed. Diego Armus (Durham: Duke University Press, 2003), 76-100.

experimentation, although it is unclear whether he knew that the experimentation in question entailed more than serologic testing.¹²¹ Dr. Salvado personally benefitted from his association with Dr. Cutler; he was motivated, at least in part, however, by less mercenary objectives. In the final report on the syphilis experiments, for example, it is stated that Dr. Salvado "was anxious to institute serologic screening of the inmates and of all new admissions and of treatment when needed."¹²²

Dr. Cutler described the mental asylum as "desperately and pathetically poor."¹²³ It lacked water, soap, antibiotics, sulfonamides, anti-epileptic drugs, a pharmaceutical refrigerator, even enough tableware for their patient population. The institution cared for a large number of epileptics and yet had very little medication, reduced to bromides and barbiturates, standard but out-dated medications.¹²⁴ They were severely underfunded and understaffed.

Dr. Cutler noted that they served 3.5 million people and their daily census was usually between 800 and 1,000 patients. The majority of these patients were sponsored by the state; many of them were so poor that they did not have any spending money or own socks or shoes. One psychiatrist-director and six to nine physicians, all of whom worked for approximately four hours a day, and a full time staff of two senior medical students, who also lived at the hospital, treated all of these patients. The director had a monthly salary of \$100.00 and the physicians were paid

¹²¹ According Dr. Cutler, "When [the Director of the Insane Asylum] understood the potential problem in false positivity he invited the group to work with him and his patients." Later, Dr. Cutler wrote that "the suggestion was made by one of the authors. . . it should be possible to set up experiments with his patients which could give conclusive answers to a number of questions. Not only could prophylaxis of syphilis be studied, but a clear-cut answer could be given regarding the significance of the puzzling serologic findings which were being investigated actively in other institutions and locations." Although this last quote is suggestive, it is not conclusive. Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 17, 21.

¹²² Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 17.

¹²³ Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 19.

¹²⁴ Zeid Yasiry and Simon D. Shorvon, "How Phenobarbital Revolutionized Epilepsy Therapy: The Story of Phenobarbital Therapy in Epilepsy in the Last 100 Years," *Epilepsia* 53, no. 8 (2012): 29. For a larger history of antiepileptics, see James O'Leary and Sidney Goldring, "Antiepileptic Drugs," in *Science and Epilepsy: Neuroscience Gains in Epilepsy Research* (New York: Raven Press, 1976), 215-225.

no more than \$50.00 a month. Even in 1940s Guatemala City, \$50.00 was an insubstantial wage; the staff supported themselves in private practice outside the asylum. Religious orders supervised nursing and custodial staff and capable patients undertook some of the work.¹²⁵ In essence, there was a critical shortage of qualified medical personnel to care for the high numbers of indigent mental patients of the country. This pressure on the staff was very clear to Dr. Cutler who commented that "the demands on physician time were so heavy that careful clinical workup of the intimate and painstaking observation and attention on the part of the physician were obviously impossible."¹²⁶ And, yet, the staff was "dedicated" and the level of care, however imperfect, was still "superior to that of the normal members of the families from which [the patients] came," perhaps explaining why the hospital was still so heavily utilized.¹²⁷ Many families had no other options for care and perhaps did not have the finances, time, or training to care for their ill relatives.

Similarly, the prison, which "was old, but well cared for and clean," had 1,500 inmates. Despite the poverty of the institution, Dr. Cutler highlighted the ways in which it provided proper nutrition, cleanliness, medical care, and even work and educational opportunities that may not have been available to these men prior to their convictions. The food "was probably more abundant and better than what most individuals received at home." There was a physician who served the prison population on a daily basis. Inmates were given smallpox and typhoid vaccinations upon arrival. The hospital staff, supervised by the physician, also provided first aid when necessary and "rough physical inspection of each new arrival to assure freedom from venereal disease, [acute?]-parasitic infestations, and gross physical deformity or disability." Once again, demonstrating his perceptions of rural or lower-class society and his understanding of the

¹²⁵ Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 18.

¹²⁶ Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 19.

¹²⁷ Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 19.

limits of formal medical care in Guatemala, Dr. Cutler asserted that the "medical care received in the institution was better than that available to most of the inmates when they were free."¹²⁸

American doctors with access to the resources, prestige, and knowledge of the USPHS were invited into these drastically poor environments by Guatemalan professionals, but the possibility of coercion remained.

Although Dr. Salvado invited the researchers into the Asilo, the institution itself also benefitted in some ways. They received anti-epileptic drugs, a refrigerator, a motion picture projector, and tableware. Dr. Cutler wrote in his final report that:

the project provided much-needed anticonvulsant drugs, particularly Dilantin, for the large part of the patient population which was epileptic and for which funds previously had been insufficient to provide drugs. There were purchased a large refrigerator to maintain perishable biologicals in the drugroom; a motion picture projector that supplied the sole recreation for the inmates; and metal cups, plates, and forks to supplement the completely inadequate supply available.¹²⁹

The transnational institutional relationship between the USPHS and the asylum was not as altruistic as this quote suggests. Dr. Cutler offered the impression that these supplies were "provided" to the asylum free of charge, either out of the USPHS' own goodwill after seeing the desperate need, as a reward to the institution for its involvement, or to cultivate continued goodwill from staff and patients. In a letter dated October 26, 1948, Dr. Cutler remembered that these supplies "were ordered as a gift to the Insane Asylum in Guatemala in return for the cooperation of the patients," and suggested that the expense be "written off as professional

¹²⁸ Final Syphilis Report Part 1, folder 1, Records of Dr. John C., 12-13. Dr. Cutler's description discounts the benefits of traditional medical knowledge. For a more balanced view, see John P. Hawkins and Walter Randolph Adams, preface to *Health Care in Maya Guatemala: Confronting Medical Pluralism in a Developing Country* (Norman: University of Oklahoma Press, 2007). For more on the state of formal medical care at the time, see Leo Arthur Suslow, "Social Security in Guatemala: A Case Study in Bureaucracy and Social Welfare Planning," (PhD diss., University of Connecticut, 1954), 32-39.

¹²⁹ Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 25

services."¹³⁰ As a result, it seems that the American researchers initially intended and eventually preferred to represent their actions as benevolent. This was not in the end how it actually occurred, however. A letter written by Dr. Cutler to the Director of the PASB, Dr. Fred Soper, on November 15, 1948, gave a different impression of this gesture; the refrigerator, projector and plastic (not metal) plates were sold to the asylum after the experiment no longer had a use for them.¹³¹

Individual patients also received cigarettes and individual attention from medical experts as a result of their participation in specific experimental processes. Dr. Cutler scoffed that an "important reason for the pathetic anxiety to participate seemed to be the fact that. . . the inmates were starved for attention and recognition as individuals."¹³² In an institution as understaffed as the Guatemalan mental asylum, individual attention would have been a scarce commodity indeed. Large institutions of this scale were often depersonalizing. In fact, some patients were not even known by their birth names, but rather by sobriquets such as "The Mate of St. Marcos."¹³³ Any attention from an authority figure was rare, leaving some patients psychologically vulnerable to exploitation in this manner.

In the case of the prison experiments, individuals also sometimes received minimal compensation for their involvement. For the prison inmates, this included the services of a prostitute paid for by the USPHS. Some prostitutes received \$25 for certain experiments. More often than not, however, payment was not recorded in Dr. Cutler's notes. It is unclear whether the women were not always paid for their services, or whether Dr. Cutler's disinterest in this

¹³⁰ Dr. Cutler to The Director, October 26, 1948, John C. Cutler's 1948 Correspondence, folder 12, Records of Dr. John C. Cutler. See also, Dr. Cutler to Dr. Mahoney, May 19, 1948, John C. Cutler's 1948 Correspondence, folder 12, Records of Dr. John C. Cutler.

¹³¹ Dr. Cutler to Dr. Soper, November 15, 1948, John C. Cutler's 1948 Correspondence, folder 12, Records of Dr. John C. Cutler.

¹³² Final Syphilis Report Part 1, Records of Dr. John C. Cutler, folder 1, 33.

¹³³ Final Syphilis Report Part 1, Records of Dr. John C. Cutler, folder 1, 32.

particular subject population translated to incomplete and inaccurate record-keeping.¹³⁴ Although the women would have expected to be paid, they might conceivably have felt that they were not in a position vis-a-vis these higher status Americans to protest if payment was not forthcoming. At the same time, this silence in Dr. Cutler's records aligns with the general lack of detailed record-keeping, especially although not uniquely as related to the prostitutes. For example, although Dr. Cutler's records were detailed enough for the CDC to conclude that 86% of subjects considered infected by the syphilis experiments were adequately treated, there was only one reference to the treatment of prostitutes.¹³⁵ Two women who had been inoculated with gonorrhea "were eventually treated."¹³⁶ Although it is likely that many of the female subjects were not treated, as some of the male subjects were not either, Dr. Cutler also offered limited details when describing the treatment of the prostitutes.

In an equally coercive manner, some of the human subjects were given drugs, including alcohol and, for the men, Arginol, meant to encourage erections, to facilitate the sexual encounters.¹³⁷ Not all of the resources that the American researchers brought with them were meant to benefit, directly or indirectly, the subjects themselves. The American researchers

¹³⁴ Presidential Commission, " 'Ethically Impossible'," 46.

¹³⁵ U.S. Department of Health and Human Services, "Findings from a CDC Report on the 1946-1948 U.S. Public Health Service Sexually Transmitted Disease (STD) Inoculation Study," Washington, D.C., 2010, www.hhs.gov/1946inoculationstudy/findings.html. The U.S. Department of Health and Human Services factsheet on the study states that "There are inadequate records to determine if the commercial sex workers were treated." See, "Fact Sheet on the 1946-1948 U.S. Public Health Service Sexually Transmitted Diseases (STD) Inoculation Study," Washington, D.C., www.hhs.gov/1946inoculationstudy/factsheet.html.

¹³⁶ Presidential Commission, " 'Ethically Impossible'," 46. Although neither woman is specifically termed a prostitute and their names are redacted, making it difficult to trace their histories, the handwritten note at the bottom of the clinical history page states that they were sent to "the penitentiary as part of the study to determine normal rate of infection." See Mayo 10, 1947, Guatemala Journal Studies with the Military GC, Records of Dr. John C. Cutler, 137.

¹³⁷ Report Entitled-Experimental Studies in Gonorrhea, folder 15, Records of Dr. John C. Cutler, 9; Dr. Cutler to Dr. Mahoney, May 17, 1947, John C. Cutler's 1947 Correspondence, folder 11, Records of Dr. John C. Cutler; Presidential Commission, " 'Ethically Impossible'," 44-45.

deliberately utilized their financial resources to minimize resistance, cultivate advantageous relationships with Guatemalan officials, and directly benefit their research goals.

The anti-epileptic drugs given to the Insane Asylum, for example, were not conceptualized as a donation to an institution that was obviously in need, or even as compensation for their involvement, but rather as a necessary step to protect the American doctors' research. In a letter to Dr. Mahoney, Dr. Cutler wrote that they were "having to order large quantity of dilantin in order to protect ourselves. . . Out of self interest we agreed to furnish dilantin to treat all of the patients in whom we are interested."¹³⁸ The American researchers were only providing medication to patients involved in the experiments, patients who at best were having blood withdrawn and at worst were being deliberately infected. They were also only providing this medication in the first place because an anti-epileptic drug introduced into the asylum's drug therapy program, magnesium sulfate, made blood withdrawals difficult.

The anti-epileptic drug therapy program offered by the asylum was, in truth, almost a decade behind the times. Bromide and barbiturates were the two primary anti-epileptics that were available at the institution. Before 1938, bromide and phenobarbital, a commonly prescribed barbiturate, were some of the few, and certainly among the best available anticonvulsants. After its introduction in 1938, phenytoin, otherwise known by its American trade name Dilantin, was considered by many to be the most up-to-date treatment option, and bromide fell out of favor. Although phenobarbital continued to be used, it was often in combination with Dilantin.¹³⁹ USPHS and Guatemalan doctors could have arguably expected some benefits to the patients in

¹³⁸ Dr. Cutler to Dr. Mahoney, February 6, 1948, John C. Cutler's 1948 Correspondence, folder 12, Records of Dr. John C. Cutler.

¹³⁹ Dixon M. Woodbury, et al, eds. *Antiepileptic Drugs* (New York: Raven Press, 1982), 4, 177, 297, 791. See also, Yasiry and Shorvon, "How Phenobarbital Revolutionized," 26-39; O'Leary and Goldring, "Antiepileptic Drugs," 215-225; Rebecca J. Anderson, "The Little Compound That Could: How Phenytoin Changed Drug Discovery and Development," *Molecular Interventions* 9, no. 5 (2009): 208-214.

switching to the newer drug therapy. These possible benefits, however, were not the stated purpose in Dr. Cutler's report. He was prescribing the medication to ease serologic testing. For a period of time then, some patients received more effective medication, but only because medical doctors were at the same time endangering their health in other ways.

Acknowledging the small ways in which both the institutions and individual subjects found advantages in this unequal power relationship does not negate the ethical responsibility of the American researchers within the context of medical experimentation. From a financial and social perspective, they were in a position of authority and they were aware of the relationships they were building with a certain class of Guatemalans. Dr. Mahoney wrote in support of Dr. Funes: "we have always felt that it would be expedient to do everything possible to push Funes to the fore as the leading Central American syphilologist."¹⁴⁰ This was more than a positive recommendation.

The USPHS study in Guatemala became implicated in the expansion of American influence in Latin America, a process that had been underway for years and that involved other public health organizations as well.¹⁴¹ In the early 1940s, for example, the PASB's second field office was set up in Guatemala City; by 1946, they had vaccinated a million people for typhus. Knowledge and expertise were transmitted through joint public health efforts, through international journals and conferences, and through the circulation of people. The Office of Inter-American Affairs sponsored about 600 scholarships, and the W.K. Kellogg Foundation awarded fellowships to 242 Latin American doctors between 1947 and 1957.¹⁴²

¹⁴⁰ Dr. Mahoney to Dr. Cutler, July 26, 1948, John C. Cutler's 1948 Correspondence, folder 12, Records of Dr. John C. Cutler.

¹⁴¹ For more on the USPHS study as part of a globalizing health economy, see Crafts, "Sanitizing Interventions."

¹⁴² Marcos Cueto, *The Value of Health: A History of the Pan American Health Organization* (Washington, DC: Pan American Health Organization, 2006), 63-65.

Cultivating contacts in the medical field and in the military was one step in a process that had already begun long before Dr. Funes was a fellow at the Staten Island Venereal Disease Hospital. However, Dr. Funes embodied and benefitted from an increasingly globalized medical bureaucracy. For example, the Office of Inter-American Affairs, an American organization founded in 1941 to encourage transnational economic relations between the United States and its southern neighbors, oversaw Dr. Funes' fellowship.¹⁴³ The USPHS Study in Guatemala, and the desire demonstrated by Dr. Cutler and his superiors to standardize Latin American health care and knowledge to more closely align with methods accepted in the United States, were a continuation of this growing relationship.¹⁴⁴

It was a relationship based inherently on a hierarchy of power in which the United States assumed their medical knowledge was superior and, because of wealth differentials, was often able to apply this assumption as if it were fact. Their appreciation for Guatemalan colleagues, such as Dr. Funes, was based in part on the individual Guatemalan's ability to apply a Western medical model. Dr. Cutler wrote to his supervisor regarding his first impressions of Guatemala City: "We saw the Hospital of Dr. Funes which is now full capacity and which now contains about [sic] 20 native males which are being studied by the onchocerciasis group. I was really much impressed by it, for he is trying hard to run it as he learned in the States."¹⁴⁵ Although the context of Guatemala City was different than the Staten Island Venereal Disease Hospital, Dr. Funes was praised, not for adapting knowledge to a different population and culture, but for closely approximating American techniques and medical philosophies.

¹⁴³ Presidential Commission, " 'Ethically Impossible'," 171n189.

¹⁴⁴ Transnational exchanges of medical knowledge, biological products, and medical personnel were not unidirectional. See Mariola Espinosa, "Globalizing the History of Disease, Medicine, and Public Health in Latin America," *ISIS: Journal of the History of Science in Society* 104, no. 4 (2013): 798-806.

¹⁴⁵ Dr. Cutler to Dr. Arnold, August 21, 1946, Correspondence on Project, folder 13, Records of Dr. John C. Cutler.

The American researchers were aware of differences between their laboratories in the United States and the ad hoc rooms they were using in the Guatemalan prison. They commented on the poverty of the institutions in which they worked, and the ignorance of the subjects whom they encountered.¹⁴⁶ In elitist and racist language, Dr. Cutler demonstrated his understanding of the gap between his world and the world of the Guatemalan subjects.

At the same time, Dr. Cutler did not dwell on why this gap existed. Because of his assumption that American medical techniques were universal, he did not feel the need to analyse the local context of political upheaval and interethnic violence that immediately preceded the 1946 study. Dr. Cutler does not mention the October Revolution, for example, and, yet, it had a profound effect on the political and social context in which he worked. It is because of this particular context that the USPHS study occurred when, where, and how it did.

In a National Context

In 1944, President Jorge Ubico resigned from office after fourteen years of ruthless dictatorship. Under Ubico, the Guatemalan Communist Party had been dismantled, freedom of the press curtailed, and the labor movement repressed. Officially, debt peonage ended in 1934 but new vagrancy laws had the same practical result: indigenous Guatemalans, composing two-thirds of the population, who did not own a certain amount of land were forced to hire out to larger *fincas*.¹⁴⁷

¹⁴⁶ Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 19; Dr. Cutler to Dr. Arnold, September 16, 1947, Correspondence on Project, folder 13, Records of Dr. John C. Cutler; Dr. Cutler to Dr. Arnold, August 21, 1946, Correspondence on Project, folder 13, Records of Dr. John C. Cutler.

¹⁴⁷ For more on labor and vagrancy laws, see Carey Jr., *I Ask for Justice*, 95-96; Gleijeses, *Shattered Hope*, 13; Stephen M. Streeter, "Overthrowing the Revolution: U.S.-Guatemalan Relations to 1954," in *Managing the Counterrevolution: The United States and Guatemala, 1954-1961* (Athens, OH: Ohio University Center for International Studies, 2000), 11; Richard N. Adams, "Ethnic Images and Strategies in 1944," in *Guatemalan Indians and the State: 1540 to 1988*, ed. Carol A. Smith (Austin: University of

Rural class conflict was exacerbated by racial tensions that continue to plague Guatemala to this day. Culturally, the two, class and race, are often conflated. Historian David Carey Jr. explains this close association between socioeconomic status and ethnicity: "Kaqchikel [a Mayan language group] knew that Ladinos' control of institutions gave them power. As a result, they understood conflicts to be based on ethnicity not class. . . A few exceptions notwithstanding, Maya are poor; Ladinos are rich."¹⁴⁸ Ladinos are an elite Guatemalan minority, a racial and cultural group that maintains an "ambiguous intermediary status" between Euro-Guatemalan culture and mixed-race descent; alternatively it is a catch-all phrase meant to depict a "non-Indian."¹⁴⁹ Others went so far as to describe Ladinos as "any persons not culturally Indians, regardless of race."¹⁵⁰ The tangled interconnections between class, race, and cultural markers meant that race in Guatemala signified something different than race in the United States. Concerns over skin colour and blood heritage were often masked through attempts to "ladinoize" indigenous Guatemalans, and environmental rather than hereditary understandings of race were often emphasized.¹⁵¹

In some ways, it would have made sense for the USPHS to engage in human experimentation on indigenous Guatemalans under the Ubico government, especially since Ubico

Texas Press, 1990), 141-142; Michael D. Kirkpatrick, "Optics and the Culture of Modernity in Guatemala City Since the Liberal Reforms," (PhD diss., University of Saskatchewan, 2013), 310-312.

¹⁴⁸ David Carey Jr., *Engendering Mayan History: Kaqchikel Women as Agents and Conduits of the Past, 1875-1970* (New York: Routledge, 2006), 131.

¹⁴⁹ Charles R. Hale, *Más Que Un Indio: Racial Ambivalence and Neoliberal Multiculturalism in Guatemala* (Santa Fe, New Mexico: School of American Research Press, 2006), 17; Carol A. Smith, introduction to *Guatemalan Indians and the State: 1540 to 1988* (Austin: University of Texas Press, 1990), 2.

¹⁵⁰ Suslow, "Social Security in Guatemala," 11.

¹⁵¹ Greg Grandin, "Can the Subaltern be Seen? Photography and the Affects of Nationalism," *Hispanic American Historical Review* 84, no. 1 (2004): 90. The Ladino/Maya dichotomy obfuscates other Guatemalan identities. However, historically, Ladinos have been privileged economically and socially, and form a unique social group in Guatemala as a result. See, Hale, *Más Que Un Indio*, 3-4.

pursued a close relationship with the United States.¹⁵² However, it was not until two years after the 1944 October Revolution that the experiments began.

The October Revolution was a pivotal moment in modern Guatemalan history. Between 1944 and 1954, democratically elected and self-proclaimed revolutionary governments were in power. The transition from Ubico to the first revolutionary President, Juan José Arévalo, was punctured by unrest. Ubico resigned following widespread protests initiated by student activists. After he was overthrown, a military triumvirate took over and promised elections. One member of the triumvirate, General Federico Ponce Vaides, however, quickly consolidated his own power. Faced with the possibility of another dictatorship, young military officers and cadets from the Escuela Politécnica, alongside students and middle-class professionals took to the streets on October 20.

In the meantime, however, Ponce had promised land to indigenous peasants in an attempt to gain support. Following the violent protests against him and the installation of a new triumvirate, this promise never came to fruition. Land pressure was intense in some parts of the country, with *latifundias*, large plantations, dominating the local landscape. Indigenous peasants, as a result, often lacked enough land for subsistence. Occasionally, agrarian conflict boiled over; as it did on October 22, 1944 in Patzicía.

Patzicía was a small, mainly indigenous community dominated by a Ladino elite that owned most of the land. Some indigenous community members, spurred on by promises of land and following a long history of racial tension, killed fourteen Ladinos. Around nine hundred indigenous community members were murdered in retaliation.¹⁵³ The media reports described

¹⁵² Heather Vrana, "Do Not Tempt Us!!": The Guatemalan University in Protest, Memory, and Political Change, 1944-Present," (PhD diss., Indiana University, 2013), 8.

¹⁵³ Patricia Harms, "Imagining a Place for Themselves: The Social and Political Roles of Guatemalan Women, 1871-1954," (PhD diss., Arizona State University, 2007), 233.

scenes of Indians brutally massacring innocent Ladino families in the middle of the night.¹⁵⁴

Patzicía became an important symbol in Guatemalan mass consciousness that embodied (and was used to justify) fear of the racial menace of the Indian.¹⁵⁵

Following this violent transition period, Arévalo became the democratically elected president of Guatemala on March 15, 1945. Arévalo, an untested politician, stepped into the presidency of a country that was economically and socially frail. They had a 70 percent illiteracy rate, a poor transportation system, an outdated agricultural model that led to low productivity, little modern industry, and a cheap but inefficient and unhealthy workforce.¹⁵⁶

Some historians have argued that the revolutionary decade "restructured Guatemalan social, economic, and political life."¹⁵⁷ The period between 1944 and 1954, known as the Ten Years of Spring, was a "historical miracle in a country with a centuries-long history of the vast majority's subjugation."¹⁵⁸ The 1945 constitution, for example, criminalized discrimination, reorganized the military and expanded suffrage to include illiterate men and literate women.¹⁵⁹ Labor was one of the areas that saw significant shifts. Ubico's dreaded vagrancy law was abolished.¹⁶⁰ The 1947 Labor Code protected workers from arbitrary dismissals and established a forty-eight-hour work week.¹⁶¹ In practice, however, it was incompletely implemented and rural workers, especially, remained vulnerable to the vagaries of the landed elite. The Labor Code, for

¹⁵⁴ Jim Handy, *Revolution in the Countryside: Rural Conflict and Agrarian Reform in Guatemala, 1944-1954* (Chapel Hill: University of North Carolina Press, 1994), 54-55.

¹⁵⁵ For more on Patzicía in Guatemalan historical consciousness, see Hale, *Más Que Un Indio*, 52-53. See also Carey Jr., *Engendering Mayan*, 134; Adams, "Ethnic Images," 145-146; Gleijeses, *Shattered Hope*, 31.

¹⁵⁶ Gleijeses, *Shattered Hope*, 37.

¹⁵⁷ Paul J. Dosal, "The Political Economy of Industrialization in Revolutionary Guatemala, 1944-1954," *Canadian Journal of Latin American and Caribbean Studies* 15, no. 29 (1990): 23.

¹⁵⁸ Deborah T. Levenson, *Adiós Niño: The Gangs of Guatemala City and The Politics of Death* (Durham: Duke University Press, 2013), 27.

¹⁵⁹ Raymond N. Ruggiero, "The Origins of a Democratic National Constitution: The 1945 Guatemalan Constitution and Human Rights," (D.Hum., Florida State University, 2013), 97, 105.

¹⁶⁰ Smith, *Guatemalan Indians*, 23; Handy, 167.

¹⁶¹ Gleijeses, *Shattered Hope*, 42.

example, extended the right to unionize to large-scale agricultural operations; workers on smaller *fincas* were not considered politically sophisticated enough for this right. This meant that most agricultural workers were excluded. Some nationally operated *fincas*, two privately owned *fincas*, and large farms operated by the U.S. company, the United Fruit Company (UFCO), were forced to comply with this law.¹⁶² Displeased by behavior they argued was discriminatory, the UFCO called on the U.S. government to intervene, which they proceeded to do.¹⁶³

The Arévalo government did not, however, radically change the socioeconomic landscape of Guatemala. Despite revolutionary policies, overall the Arévalo bureaucracy did little to dismantle gender, class, and race hierarchies that had long been in place. "Irrespective of the community's ethnic composition," explains anthropologist Robert Wasserstrom, "agricultural lands tended in each case to remain highly concentrated in a few hands both before and during the revolutionary period."¹⁶⁴ A land reform program that could have benefitted the country economically was not attempted until the early 1950s, under President Jacobo Arbenz Guzmán.¹⁶⁵

Similarly, revolutionary reforms did not consistently benefit poor, rural, or indigenous women.¹⁶⁶ After the change in government, literate women received the vote and urban *ladinas* especially became more involved in national politics. Even non-elite women participated in protests and unions. Women participated in revolutionary politics from the beginning. One of the

¹⁶² Handy, *Revolution in the Countryside*, 66.

¹⁶³ Streeter, "Overthrowing the Revolution," 15.

¹⁶⁴ Robert Wasserstrom, "Revolution in Guatemala: Peasants and Politics under the Arbenz Government," *Comparative Studies in Society and History* 17, no. 4 (1975): 470.

¹⁶⁵ For more on the land reform and the subsequent 1954 coup, see Jennifer G. Schirmer, "A Brief History of the Guatemalan Military's Rise to Power," in *The Guatemalan Military Project: A Violence Called Democracy* (Philadelphia: University of Pennsylvania Press, 1998), 13-14; Streeter, "Overthrowing the Revolution," 14; Jim Handy, "The Corporate Community, Campesino Organizations, and Agrarian Reform: 1950-1954," in *Guatemalan Indians and the State: 1540 to 1988*, ed. Carol A. Smith (Austin: University of Texas Press, 1990), 169-170.

¹⁶⁶ Harms, "Imagining a Place," 179-181, 227.

first heroines of the October Revolution, for example, María Chinchilla Recinos, was a teacher killed by soldiers who opened fire on a peaceful demonstration.¹⁶⁷ However, the vast majority of women were still barred from formal democratic processes. In this (less-than-) revolutionary context, it is perhaps unsurprising that Guatemalan bureaucrats supported public health research that targeted vulnerable populations. At the same time, international tensions mounted as the U.S. State Department protested Guatemalan labour reforms.¹⁶⁸

In the midst of this incomplete, patchwork, and often modest social revolution, as one branch of the U.S. government began to have doubts about Arévalo's friendship, the United States Public Health Service was invited into federal institutions to engage in human experimentation. At the most basic level, this apparent irony can be explained by the nature of government bureaucracy. Although both events are part of a larger, shared historic context, the players were not, as might be assumed, the U.S. government and the Guatemalan government. Rather, they were, in one case, the Arévalo bureaucracy and the U.S. State Department, on behalf of the UFCO; in the other, it was Guatemalan physicians, heading the country's public health agencies, and the U.S. Public Health Service. It is doubtful that Dr. Cutler or his supervisors were concerned with UFCO properties; and many Guatemalan politicians were more concerned with economic reform than public health. The Guatemalan Public Health Service was not at the centre of revolutionary politics, and, as was also the case for many other government branches, many of its employees were not radical revolutionaries but civil servants whose careers straddled several major political shifts in the mid-twentieth century.¹⁶⁹ It is not unusual for the same governmental administration to have internal contradictions in their approach to the same country, depending

¹⁶⁷ Harms, "Imagining a Place," 173.

¹⁶⁸ Jim Handy, *Gift of the Devil: A History of Guatemala* (Toronto: Between the Lines, 1984), 137-138. These tensions reached a climax with Arbenz' agrarian reform. See Frankel, "Political Development in Guatemala," 13-14.

¹⁶⁹ López, "Las mujeres," 3.

on what best serves their particular interest in individual cases.¹⁷⁰ Even if their economic interests diverged, both Guatemala and the United States were concerned with the sexual health of their populations and the best means of preventing infectious diseases. When Dr. Funes offered the bodies and health structure that would make such an experiment possible, it was consistent with USPHS interests to accept. On this point at least the two governments agreed.

Besides the vagaries of modern bureaucracies, there is another reason that these two countries were able to transnationally collaborate in the domain of public health. However unsuccessful, this was a period of both legal and on-the-ground changes for Guatemalans. The government experimented with new policies and democratic processes, and workers began to demand their rights. This was not a completely radical break with the earlier period of dictatorship but that does not mean that the government did not bring about real change. Many of these changes demonstrated a deep desire for modernization.¹⁷¹ As historian Deborah T. Levenson theorizes, the exploitation of marginalized human beings is not the anti-thesis of modernity or capitalism, but is rather the "violent 'underside'" of Latin American modernity.¹⁷² Human experimentation, far from being seen as barbaric, was the pinnacle of modern science. The USPHS study was perceived, at least at the time, as cutting-edge medical research. The

¹⁷⁰ In the Ecuadorian context, anthropologist Steve Striffler has written: "the roles it [the state] played were ambiguous, contradictory, and divided because the state itself was so fragmented. 'It' rarely shaped legislation and conflicts in coherent, single-minded, or planned ways. This lack of cohesion . . . was due not so much to the weakness of the Ecuadorian state during this period, but to the extent and manner in which it was permeated by a wide array of competing interests." See Steve Striffler, *In the Shadows of State and Capital: The United Fruit Company, Popular Struggle, and Agrarian Restructuring in Ecuador, 1900-1995* (Durham: Duke University Press, 2002), 30.

¹⁷¹ For more on the link between the USPHS study and the Arévalo government's modernizing agenda, see Crafts, "Sanitizing Interventions." For a different example of how public health can become implicated in a rhetoric of modernization, see Martha Few, "Medical Humanitarianism and Smallpox Inoculation in Eighteenth-Century Guatemala," *Historical Social Research* 37, no. 3(2012): 303-317; Martha Few, *For All of Humanity: Mesoamerican and Colonial Medicine in Enlightenment Guatemala* (Tucson: University of Arizona Press, 2015), 10-12.

¹⁷² Levenson, *Adiós Niño*, 12.

involvement of an international leader like the United States simply served to legitimize the practice.

Vulnerable populations were sacrificed in the name of medical progress as a result. The power differential between the American researchers, their Guatemalan colleagues, and the human subjects was significant and limited the subjects' opportunities for resistance. In the case of the prostitutes, they were vulnerable because of their profession, gender, age, race, class, and nationality. However, the transnational context of the experiments also contributed to the power dynamics being imposed, and contested between American and Guatemalan researchers, and the female subjects. In the midst of these power relationships, Dr. Funes and other Guatemalan officials maintained an ambiguous, inconsistent and intermediary status between victims of international pressures and economic dependency, and aggressive collaborators motivated by personal gain.

Chapter Two

The Doctor: American Public Health in an International Setting

The Doctor

Born in 1915 to a working-class family in Cleveland, Ohio, John Cutler may never have expected to become a medical researcher or the acting dean of the University of Pittsburgh's School of Public Health. His father, after all, was a carpenter. Perhaps ambition ran in the family; his sister, his only sibling to survive the war, studied law.

By 1941, when Cutler graduated with his M.D. from the Western Reserve University, he was positioned for success. Within two years, he was a medical officer at the Staten Island Venereal Disease Research Laboratories, enabling him to pursue his passion - the promotion of sexual health. It is during his time at Staten Island that he met the equally young and ambitious Dr. Funes. Within four years, at the age of 31, he became the Director of the euphemistically named "VD Research Program" in Guatemala.¹⁷³

In his 2003 obituary in the Pittsburgh *Post-Gazette*, he was remembered as a pioneer in public health, and as a respected professor. As a founder of the Family Health Council of Western Pennsylvania, he even "worked tirelessly to find better ways to provide affordable reproductive health-care services to women who need them." Although in the 1970s he was concerned with the health of Western Pennsylvanian women, his records of the 1946 USPHS Study demonstrate a marked lack of concern for Guatemalan female subjects. Of this work, his

¹⁷³ John C. Cutler, Curriculum Vitae, PCSBI HSPI Archives, (February 1990): 2.

obituary, written before the records were divulged, says simply that he was appointed "to head a venereal disease research program for the Pan American Sanitary Bureau in Guatemala in 1948."¹⁷⁴

Despite these promising beginnings, in the end history did not treat him kindly. Today, Dr. John C. Cutler is perhaps best remembered as the American researcher who hired prostitutes to infect Guatemalan prisoners and soldiers. His inhumane behavior was especially noticeable in his treatment of Berta, a Guatemalan psychiatric patient who died in agony after gonorrhoeal pus was placed in her eyes, urethra and rectum. "I see him as an evil man," denounces Terry Collingsworth, the human rights lawyer that represented the Guatemalan class-action lawsuit against the American government.¹⁷⁵

The vocabulary of "monstrous" and "evil" men is common in popular literature on the subject. One Catholic blog-post described the USPHS experiments as "astonishingly evil," and called Dr. Cutler a "monster who died after a long and successful life in government and academia, with scholarships and lectures created in his memory."¹⁷⁶ Although the blogger's motivation for condemning Dr. Cutler, and for rhetorically connecting the "evil" Cutler experiments to medical research on embryos, is suspect, he finishes with an insightful comment about the ethical issue at stake in this case. "The deepest problem of Dr. Cutler," the author David Mills writes, "was not his refusing to ask his victims if he could experiment on them, but his belief that they were the sort of creatures he didn't need to ask. His offense wasn't just deceiving people but treating them as people who could justifiably be deceived. His sin wasn't just using

¹⁷⁴ Jan Ackerman, Pittsburgh Post-Gazette, February 12, 2003, quoted in Kirk Hartley, "History, Science and Medicine - The History of John Charles Cutler," August 30, 2011, www.globaltort.com/2011/08/history-science-and-medicine-the-history-of-john-charles-cutler/.

¹⁷⁵ "The Frightening Legacy of US Syphilis Experiments in Guatemala," Journeyman Pictures, 2011.

¹⁷⁶ David Mills, "The Monstrous Dr. Cutler and His Willing Researchers: The Profitable Logic of Utilitarianism," *Aleteia*, May 13, 2015, www.aleteia.org/en/society/article/the-monstrous-dr-cutler-and-his-willing-researchers-5793455519301632.

them as means but seeing them as means."¹⁷⁷ What Dr. Cutler *saw* when he was looking at the men and women he was experimenting on is fundamental to why he acted as he did. Did he see humans who were subjects of experimentation or did he see experimental subjects? As much of the online commentary on the USPHS study does, however, this blog post condemns Dr. Cutler alone without engaging with the larger historical and institutional context. Monstrous or not, Dr. Cutler was not acting alone. Why are all the actions and ethical failures of an experiment that engaged two governments, multiple agencies and dozens of medical researchers personified in the name of Dr. Cutler?

Dr. Cutler is also remembered as the white-haired gentleman who defended the Tuskegee Syphilis Study in a 1993 documentary. His sound bite, spoken in a soft, controlled voice, is jarring for its lack of remorse for the long-term observational study of syphilis in African American men. The Tuskegee Study, Dr. Cutler argued, "has been grossly misunderstood" and was humanistic, not racist as is often charged.¹⁷⁸ Researchers were, after all, trying to improve medical knowledge and the provision of health care. This documentary has crystallized him in the minds of the general American public, or at least in the media, as a modern Dr. Frankenstein, unaware and unconcerned with the negative outcomes of his scientific pursuits.

A list of Dr. Cutler's research projects is justification enough for the development of bioethical protections for human subjects: the Terre Haute Prison Experiment, the USPHS Inoculation Study in Guatemala, the Tuskegee Syphilis Study, and the Sing Sing Prison Experiment. In all of these cases, Cutler demonstrated a lack of care for his human subjects in his pursuit of a very noble goal - the eradication of venereal diseases. Perhaps, like Dr. Frankenstein, his ethical failure was less a cold-blooded disregard and more an unchecked passion. The ends

¹⁷⁷ Mills, "The Monstrous Dr. Cutler."

¹⁷⁸ "The Deadly Deception," NOVA, 1993.

cannot justify the means, but it would be equally naive to ignore what Dr. Cutler, the man, hoped to achieve in the name of science and in his misguided pursuit of public health.

A different list of Dr. Cutler's research projects might tell a different story, one of the development of international public health and the provision of sexual health care to underserved populations. Following the USPHS Study in Guatemala, between 1948 and 1950, Dr. Cutler headed the World Health Organization's Venereal Disease Demonstration Team to South East Asia.¹⁷⁹ In this capacity, he lived and worked in the Ghund district of India where his team ran a survey and began a treatment program with penicillin. In 1949, he also worked for the Afghan government by helping with a venereal disease survey.¹⁸⁰

It was during those years in international public health that Dr. Cutler came to better appreciate the social barriers preventing the eradication of venereal disease. He noted "that the social and economic conditions of the people affect both the long-term benefits of such a programme and objective clinical judgement of its results."¹⁸¹ In the isolated district in India where he worked, for example, medical care was largely absent. Once a month, a medical officer visited the region. There was a dispensary but it "[contained] only a few mixtures and tablets of limited medicinal value."¹⁸²

Unlike in Guatemala, in India, Dr. Cutler was running a treatment program, and was doing so, presumably, with the knowledge and cooperation of the population of Ghund. 1,556 people out of a total population of 1,906 were involved in the initial survey of the region. The public health team, in their published report, maintained that the population was "not exactly

¹⁷⁹ Dr. John Charles Cutler, Curriculum Vitae, PCSBI HSPI Archives, February, 1990.

¹⁸⁰ Reverby, "Enemy of the People/ Enemy of the State," 411; Cutler, "Survey of Venereal Diseases," 689-703.

¹⁸¹ Johs. Kvittingen, et alt. "Serological Aspects of a Syphilis-Control Programme in the Ghund Area, Himachal Pradesh, India," *Bulletin of the World Health Organization* 7 (1952): 101.

¹⁸² Kvittingen, "Serological Aspects," 84.

enthusiastic about giving blood, [but] they wanted treatment."¹⁸³ Upon the follow-up survey six months later, however, and mirroring what occurred in the Guatemalan case, their Indian patients resisted the numerous blood tests, making the researcher's jobs more difficult. Only 29.1% of the people initially tested agreed to follow-up tests.¹⁸⁴

Despite the acknowledgement of the cultural differences at work and of the importance of education in the prevention and treatment of venereal disease, the published report, of which Dr. Cutler was one of the authors, disparaged such cultural differences as "superstitious." The Western-educated medical professionals could not understand the perspectives of isolated Indian peasants and, as a result, could not bridge the cultural gap between themselves and their patients to explain the medical benefits of the program. And, yet, in another example of the ways in which power is not a unilateral, hierarchical imposition, the doctors had to accommodate their patient-subjects beliefs and they "[compromised] with the donors on the amount of blood drawn."¹⁸⁵ By the third round of blood tests, "the people's attitude toward the team's activities was one of reluctance bordering on hostility."¹⁸⁶ In particular, team members were not permitted, because of a religious prohibition, to visit infants and were thus not able to obtain blood samples from babies born of mothers who had previously tested positive for syphilis. Similarly, during the experiments carried out in the Guatemalan penitentiary, Dr. Cutler's team "began to encounter difficulties, for [they] soon found a very widespread prejudice against frequent withdrawals of blood. The inmates were, for the most part, uneducated, and superstitious."¹⁸⁷ This statement underscores the importance of working with the community to provide the best medical care possible while respecting different cultural or religious views. Simply dismissing such beliefs as

¹⁸³ Kvittingen, "Serological Aspects," 84.

¹⁸⁴ Kvittingen, "Serological Aspects," 85.

¹⁸⁵ Kvittingen, "Serological Aspects," 85.

¹⁸⁶ Kvittingen, "Serological Aspects," 85.

¹⁸⁷ Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 16.

superstition, revealed not only his disrespect but it hindered positive community relations which, in turn, minimized the quality of medical care.

Much of Dr. Cutler's work demonstrated an acute tension between the progressive desires of a public health doctor and the hubris of a detached medical researcher. In 1989, for example, Dr. Cutler wrote an article relating his past experiences in the prevention and control of venereal diseases to the contemporary AIDS epidemic. In this article, Dr. Cutler emphasized "the health care sector's strong commitment to the handling of the infected person and contacts with dignity and a nonjudgmental approach."¹⁸⁸ On the other hand, despite the fact that he did not name nor describe the USPHS study in Guatemala, he drew on knowledge that was attained through experimentation. For example, he emphasized the role of intact skin and mucous membrane in preventing the spread of venereal disease. Before the 1940s experiment, he believed that syphilis was transmitted through an intact mucous membrane, a fact that was disproven by the study. Dr. Cutler credited this information to several experiments, including a 1952 prostitution study by Drs. Funes and Aguilar, and "studies on local gonorrheal prophylaxis using human inoculation."¹⁸⁹ In other words, Dr. Cutler did not see the generation of knowledge through arguably unethical human experiments as contrary to his valuation of the humane treatment of venereal disease patients. Dr. Cutler either did not see these experiments as unethical or found them to be a legitimate harm in light of the possible benefits.

Although in positions of power, Dr. Cutler was a cog in a much larger system. Unwittingly, he was part of a system of medical colonialism. His early career demonstrated an expanding sphere of American medical influence that could be interpreted as either a

¹⁸⁸ John C. Cutler, "Drawing on Past Experience with VD Control: Stemming the AIDS Epidemic," *Consultant* 29, no. 6 (1989): 59. See also, John C. Cutler, and R.C. Arnold, "Venereal Disease Control by Health Departments in the Past: Lessons for the Present," *American Journal of Public Health* 78, no. 4 (1988): 372-376.

¹⁸⁹ Cutler, "Drawing on Past Experience," 58.

humanitarian desire to improve global health, or a neo-colonial appropriation of vulnerable foreign populations for medical knowledge and career advancement. The results of many of his experiments and, sometimes, treatment programs included: support of underfunded and understaffed local health infrastructures struggling to deal with large-scale venereal disease outbreaks; personal career advancement, increased output of publications and international renown; immediate treatment of some members of the local population; and increased health risks incurred by marginalized populations with little or no follow-up care. Despite the initial influx of American capital and medical attention in these various vulnerable communities, long-term care still fell on overstrained local health structures.

American Public Health

Dr. Cutler was the lead medical researcher who oversaw the experiments on-the-ground in Guatemala but he was not working in isolation; far from it. He was connected to the USPHS structure back in the United States, including his supervisors and lab technicians that he sent samples to and received infected rabbits from. He was also connected locally, to a local medical and political power structure that notably included Drs. Funes, Salvado, and Chinchilla. His team in Guatemala consisted of: the senior surgeon and assistant director of the project Dr. Sacha Levitan, the assistant surgeon Dr. Elliot Harlow, the serologist and chief of the laboratory in Guatemala City, Joseph Portnoy, the bacteriologist Virginia Lee Harding, the bacteriologist Alice Walker, and the serologist and director of the Venereal Disease Laboratory and Training Center following the end of the intentional exposure experiments, Genevieve Stout. Initially, they were also aided by Dr. Joseph Spoto who, in 1946, was the Chief of the Pan American Sanitary Bureau's Guatemala Office, and who would later work for the USPHS. Spoto was critical for easing their transition into Guatemalan society and introducing them to Guatemalan officials who

would prove to be their key allies.¹⁹⁰ Rather than the actions of an isolated madman, the USPHS study was a large-scale institutional failure that spanned multiple government agencies in two countries and was overseen and funded by a modern bureaucracy.

The Associate Director of the Presidential Commission for the Study of Bioethical Issues, Kayte Spector-Bagdady, and a senior advisor of the Presidential Commission, Paul A. Lombardo, co-wrote an article in 2013 that emphasizes the institutional failure of the USPHS study. They start from the premise that "[public] health research. . . is rarely an individual activity."¹⁹¹ While it is impossible to ignore Dr. Cutler's role in the study, and it would be rash to completely dismiss his individual responsibility, it is also critical to realize that he did not act alone and that his actions were mediated through a particular institutional culture. In the end, he would not have been able to carry out the experiments in Guatemala if it were not for the support of other individuals, both Guatemalan and American, and of particular institutions of power.

Spector-Bagdady and Lombardo widen the scope of responsibility to include a postwar National Institutes of Health grant system that ignored serious conflicts of interest.¹⁹² In particular, the scientific panel, the Syphilis Study Section, that reviewed grant RG-65, the grant application for the USPHS inoculation study in Guatemala, included experts such as Dr. John Mahoney. Dr. Mahoney, the Director of the Venereal Disease Research Laboratory, was Dr. Cutler's supervisor. Although general practice would have barred him from reviewing an application from his own institution, there is no evidence to indicate whether he abstained or not. Dr. Mahoney stood to gain from experimentation related to penicillin and to orvus-mapharsen, two of the main prophylaxis tested during the USPHS study in Guatemala. In 1943, he was one

¹⁹⁰ See, Presidential Commission, " 'Ethically Impossible'," 112-115.

¹⁹¹ Spector-Bagdady and Lombardo, " 'Something of an Adventure'," 697.

¹⁹² Spector-Bagdady and Lombardo, " 'Something of an Adventure'," 697-698.

of the investigators who discovered that penicillin treated syphilis.¹⁹³ He and Dr. Arnold also examined the orvus-mapharsen prophylaxis as a possible alternative.¹⁹⁴ In the end, Dr. Mahoney was heavily invested in the approval of the USPHS study in Guatemala.

Other members of the Syphilis Study Section were also invested to varying degrees. The Chair of the Study Section, Dr. Joseph Moore, had previously approved the Terre Haute prison experiments, one of Dr. Cutler's recent experiences with venereal disease research; the Executive Secretary, Dr. Cassius Van Slyke had recently trained under Dr. Mahoney; Dr. John Heller was another of Dr. Mahoney's close colleagues, and, during a site visit in Guatemala City, asked Dr. Cutler for photographs of the experiments that he could use as educational tools; Dr. Harry Eagle, later requested and was denied permission to continue his own research into penicillin and syphilis on the Guatemalan subjects. Spector-Bagdady and Lombardo conclude that "of the twelve members of the Syphilis Study Section, five members and the Executive Secretary either visited the experiments in Guatemala and/or tried to join in on the work."¹⁹⁵ These were the same men who suggested that the grant application be accepted and funded. Although experts in their field of inquiry, they were in no position to objectively analyze the ethical merit of the study. To exacerbate the issue, the study section required only brief annual reports and Dr. Cutler obscured the more abhorrent experiments from the funding agency, although he sent monthly reports to Dr. Mahoney.¹⁹⁶

The grant system and the more general research ethos of the time emphasized researcher discretion and attempted to minimize bureaucratic red-tape that stalled the advancement of medical knowledge. The federal government, through these grant agencies, assumed that

¹⁹³ Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 5.

¹⁹⁴ Report Entitled-Experimental Studies in Gonorrhea, folder 15, Records of Dr. John C. Cutler, 2.

¹⁹⁵ Spector-Bagdady and Lombardo, " 'Something of an Adventure'," 703.

¹⁹⁶ Dr. Cutler to Dr. Mahoney, June 22, 1947, Correspondence on Project, folder 13, Records of Dr. John C. Cutler; Spector-Bagdady and Lombardo, " 'Something of an Adventure'," 698.

individual researchers were morally capable individuals who would make the right choices and who did not need to be micro-managed. Unfortunately, as many human experiments in the post-war era demonstrated, without comprehensive ethics' education, individual researchers did not abide by the ethical norms of the time, nor did they put their subjects' well-being over their own research goals.¹⁹⁷ This is the institutional setting that framed Dr. Cutler's day-to-day decisions.

The Doctor's Wife

Dr. Cutler was supported in his daily research activities by one other, often overlooked, person - his wife, Mrs. Eliese Cutler, born Strahl. Before their marriage in 1942, Eliese Strahl graduated from Wellesley College and was formally trained as a photographer at the Clarence White School. After their marriage, Mrs. Cutler followed her husband to Guatemala, India, and Afghanistan, and provided much of the unpaid labor that made his work possible. This has been, traditionally, the role of many physicians' wives, especially in colonial contexts. Mrs. Cutler's unpaid labor, however, went beyond cooking and cleaning; and they had no children for her to care for. Her obituary, quoting her late husband, described her as "an un-paid, full-time (and over-time) volunteer, able to provide the skills which are all-too-often either non-existent in local areas or unpurchasable [sic] because of the budgetary limitations of public service." In the Guatemalan context, this included, notably, her work as their "clinical photographer."¹⁹⁸ Dr. Cutler, in a postscript to his 1955 final report, noted that "most of these [photographs] were taken

¹⁹⁷ See, for example, Jonathan D. Moreno, "Stumbling Towards Bioethics: Human Experiments Policy and the Early Cold War," in *Dark Medicine: Rationalizing Unethical Medical Research*, ed. William R. Lafleur, Gernot Böhme, and Susumu Shimazono (Bloomington: Indiana University Press, 2007), 138-146.

¹⁹⁸ Obituary, "Eliese Cutler," *Pittsburgh Post-Gazette*, November 11-16, 2012.

by my wife, Eliese S. Cutler, who assisted as a volunteer in the project and used her own cameras, as the project itself had none."¹⁹⁹

A 1960 newspaper article described Mrs. Cutler as a humanitarian and an adventurer. "In the three years Dr. and Mrs. Cutler lived in Guatemala City (they refer to it as a 'little heaven on earth')," wrote the interviewer, "Mrs Cutler 'did what all wives do . . . work.' She bounced from mountain to mountain in their jeep, talked with patients, took histories, packed and unpacked medical equipment." Mrs. Cutler depicted her foreign health work as exciting, personally rewarding, and of huge benefit to local populations. She highlighted the importance of training locals to carry out public health programs and of not "[forcing] people to accept strange practices."²⁰⁰ Mrs. Cutler did not remember her and her husband's work in Guatemala or elsewhere as morally suspect.

Despite her close involvement in some parts of the USPHS study, in 2011 when the Presidential Commission requested an interview with her, she responded in a letter that she had "no recollection of any such medical testing other than that conducted in the mental institution. Furthermore, I believe all such individuals who were infected with Syphilis as part of John's research were treated with Penicillin and cured."²⁰¹ At the time she wrote the letter, she was 94 years old and seems to have remembered her husband's work, and her involvement in that work, differently than what has since been portrayed in news articles.

Other researchers' wives also provided ad hoc labor as clerical workers. Dr. Cutler wrote to Dr. Mahoney that Mrs. Portnoy and Mrs. Dalmat, wives of PASB employees in Guatemala,

¹⁹⁹ Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, "Photographs to Accompany [sic] the Final Report of the Guatemalan Study."

²⁰⁰ Ann Zubosky, "Foreign Health Work Rewarding," *Press*, November 16, 1960, Cutler, John C. (Mrs.), Personal Files, University of Pittsburgh Archives.

²⁰¹ Eliese S. Cutler to Valerie Bonham, June 25, 2011, PCSBI HSPI Archives, http://bioethics.gov/sites/default/files/MISC_0000523.PDF.

"had much experience in clerical work, can type, and, most important, have the intelligence to do the type of careful and confidential work that [they needed] done." Additionally, they were "well aware of the importance" of the work, suggesting that they may not have been the only family members that were aware of the nature of the work being done.²⁰² Such temporary and, sometimes, unpaid labor was essential, not only for the advancement of Dr. Cutler's career, but for the development of the USPHS Inoculation study in Guatemala. Although their names were not published beside their husbands', the work they undertook in their husbands' shadows provided a critical support system. The small, routine, daily tasks, and the minutia of paperwork they performed with very little acknowledgement allowed the experiments to continue.

A Continuation of Military Medicine

Neither Mrs. nor Dr. Cutler left a memoir describing their motivations for being involved in the USPHS study. Their later work testified to a genuine concern for the prevention of venereal diseases and the protection of sexual health. This seems to contradict the disrespect shown towards the Guatemalan subjects throughout the experiments; but, in the postwar period, American public health researchers were still working in a utilitarian medical culture that demanded rapid results to complex social problems. In other words, in a war environment, sacrifices were expected to be made for the greater good, and a year later the same mentality prevailed. In 1946, the world had not yet recovered from, indeed had barely begun to process, a war that implicated medical professionals in horrific human rights' abuses.

During the Second World War, military and medical professionals were rightfully concerned about VD rates, especially among otherwise healthy young men. In the early 1930s,

²⁰² Dr. Cutler to Dr. Mahoney, August 26, 1947, John C. Cutler's 1947 Correspondence, folder 11, Records of Dr. John C. Cutler.

according to contemporary statistics, one tenth of the American population was infected with a venereal disease, and there were almost 700,000 new infections of gonorrhea every year.²⁰³ For the military this meant that many new recruits were not fit to serve or would require lengthy treatment; others would become infected while waiting to be shipped overseas or as the result of a foreign dalliance. Medical journals such as the *American Journal of Nursing* reported that Selected Service exams showed high rates of venereal disease among young men and, it was presumed, the wider civilian population. It was estimated, based on 700,000 cases of syphilis uncovered among recruits, that 3 million Americans might be infected with syphilis.²⁰⁴ The bottom line for the military was a loss of manpower days because of a preventable illness.

Before penicillin, venereal diseases were treated with sulfa drugs, especially Salvarsan. After 1942, this might occur in a Rapid Treatment Center where patients were medically supervised because of the high concentration of drugs being given to them through intravenous drip. Treatment still might take twelve weeks with these newer methods.²⁰⁵

Medical treatment, however, was only a small part of the social response to venereal disease infections, and often an undesirable last resort. Before the Second World War, the prominent social hygiene movement, through organizations such as the American Social Hygiene Association (ASHA), focused on the prevention and control of venereal disease outbreaks. They produced educational materials, contravening in this way traditional mores that insisted sex was not a decent topic of public conversation. At the same time, social hygienists followed the edicts

²⁰³ Allan M. Brandt, *No Magic Bullet: A Social History of Venereal Disease in the United States Since 1880* (New York: Oxford University Press, 1985), 129.

²⁰⁴ J.R. Heller, "Venereal Disease Epidemiology in Wartime," *American Journal of Public Health* 35, no. 11 (November 1945), 1210. See also Theodore Rosenthal, "Venereal Disease in Wartime," *American Journal of Nursing* 44, no. 2 (February 1944), 104-106; R.A Vonderlehr and Lida J. Usilton, "Syphilis Among Selectees and Volunteers," *Journal of American Medical Association* 117, no. 16 (October 1941), 1350.

²⁰⁵ George Sarka, "The Role of United States Public Health Service in the Control of Syphilis during the Early 20th Century," (DPH diss., University of California, 2013), 83.

of Victorian sexual morality, valued sexual moderation and condemned sex outside of the marriage bed.²⁰⁶ By 1940, the ASHA had lost some of its influence and appeal; their stance against birth control became unpopular, and the government increasingly funded medical responses to venereal disease, although moral education remained a key component of prevention efforts.²⁰⁷

During the war, anti-VD propaganda posters warned young men away from "pick-ups" and casual sexual encounters, and explicitly compared sex to treason. Sexually active women were "Juke Joint Snipers," and "Destroyers."²⁰⁸ Medical and military experts debated the merits of either regulating or eradicating prostitution. In 1941, for example, the May Act imbued the Federal Government with increased powers in the suppression of prostitution around military camps.²⁰⁹ Women, especially professional prostitutes, were seen as the source of infection.²¹⁰ As a result, civilian women suspected of prostitution could be forcibly treated in Rapid Treatment Centers.²¹¹ They were treated, however, in an effort to protect men, and not out of concern for the women's sexual health.

High rates of venereal disease infections would be concerning for public health officials even outside the military context. Without treatment, syphilis and gonorrhea cause serious, life-threatening and debilitating illnesses. However, wartime health propaganda demonstrated that it was not the individual infection that was feared, but rather the social problems it represented.

²⁰⁶ Christina Simmons, "African Americans and Sexual Victorianism in the Social Hygiene Movement," *Journal of the History of Sexuality* 4, no. 1 (1993): 55.

²⁰⁷ Simmons, "African Americans and Sexual Victorianism," 53.

²⁰⁸ "Juke Joint Sniper," United States, 194-?, Images from the History of Medicine, National Library of Medicine; "They're Both Destroyers," Images from the History of Medicine, National Library of Medicine.

²⁰⁹ Sarka, "The Role of United States," 69.

²¹⁰ See, for example, "Army Nurses Tackle Health Problems in the ETO," *American Journal of Nursing* 44, no. 9 (1944), 834.

²¹¹ John Parascandola, "Quarantining Women: Venereal Disease Rapid Treatment Centers in World War II America," *Bulletin of the History of Medicine* 83, no. 3 (2009): 431-459.

Venereal disease was undermining the fighting force of the American military and, as a result, undermining a socially approved assertion of masculinity. These were also infections that were rhetorically linked to marginalized populations, including racial minorities and sexually suspect women. Neither syphilis nor gonorrhea, however, remained isolated to these population groups.

It was thought that syphilis passed from the lower classes to the middle class through the body of the prostitute. Because a man might inadvertently bring an infection to the marriage bed, syphilis and gonorrhea were capable of silently infiltrating the middle class family. A shameful disease linked to sexual immorality might, in the end, infect innocent wives and children. Long a concern of social hygienists, the fear of "innocent infections" did not abate even after the war as soldiers were coming back to their wives and sweethearts.²¹² In the immediate post-war period, although military concerns over manpower were no longer the immediate driving force behind the race for new prophylactics, concerns over the social and economic costs of sexual behavior continued to motivate public health officials. The medical profession carried forward ideas and beliefs that had germinated in a military context. The cessation of warfare did not mean the cessation of military medicine.

In an International Setting

The USPHS study also occurred in a context of increased international attention to medical ethics. At the same time as Dr. Cutler and his colleagues were performing state-sanctioned experiments on non-consenting subjects, the Nazi Doctors' Trial was underway. The 1947 Nuremberg Code that developed out of this trial recognized the principle of consent.

²¹² For more on the social hygiene movement's concern for the health of the family, see Katie N. Johnson, "Damaged Goods: Sex Hysteria and the Prostitute Fatale," *Theatre Survey* 44, no. 1 (2003): 50-52, 58-59.

Although not legally binding, it was an international document that purported to encode internationally recognized and accepted ethical principles.

The Nazi Doctors' Trial has been described as "the least bad starting place" for a history of the development of bioethics. However, the issues of subject autonomy and consent were raised in professional and governmental circles even earlier.²¹³ Albert Neisser, the venereologist who discovered the gonococcus, for example, was fined in 1898 by the Prussian Royal Disciplinary Court for engaging in non-therapeutic experimentation without the patients' consent.²¹⁴ Neisser had attempted to vaccinate patients, most of whom were prostitutes and who were not infected with syphilis, with serum drawn from patients who were infected. Not surprisingly, some of the patients who were exposed to syphilis in this manner became infected. Neisser argued, however, that the women were infected as a result of their prostitution and not as a result of a respected medical professional directly injecting them with the syphilis spirochete.²¹⁵

It was only after the Doctors' Trial, however, that an international code of medical ethics was developed. The American judges who sat on the Nuremberg Tribunal wrote in the Code:

The protagonists of the practice of human experimentation justify their views on the basis that such experiments yield results for the good of society that are unprocurable by other methods or means of study. All agree, however, that certain basic principles must be observed in order to satisfy moral, ethical and legal concepts.

²¹³ Henry T. Greely, "From Nuremberg to the Human Genome: The Rights of Human Research Participants," in *Medicine After the Holocaust: From the Master Race to the Human Genome and Beyond*, ed. Sheldon Rubinfeld (New York: Palgrave Macmillan, 2010), 186.

²¹⁴ It should be noted that the issue of consent was raised prior to the Nuremberg Trial but "consent" and "informed consent" (a particular phrase that only emerged in 1957) are not necessarily synonymous. For a definition of informed consent, see Erika Dyck, "Informed Consent," *Eugenics Archives*, <http://eugenicsarchive.ca/discover/encyclopedia/535eec817095aa0000000235>.

²¹⁵ Jochen Vollmann and Rolf Winau, "Informed Consent in Human Experimentation Before the Nuremberg Code," *British Medical Journal* 313, no. 7070 (1996): 1445.

Following this, the first principle begins: "The voluntary consent of the human subject is absolutely essential."²¹⁶ If these "basic principles" that everyone agreed upon were so well known and accepted, how was the USPHS study allowed to continue?²¹⁷ The USPHS study contravened not only the principle of voluntary consent, but also the demand "to avoid all unnecessary physical and mental suffering and injury;" the subjects were not all protected from "even remote possibilities of injury, disability or death;" they were not given the ability to terminate the experiment at any time; and finally, Dr. Cutler had "probable cause to believe. . . that a continuation of the experiment [was] likely to result in injury, disability, or death to the experimental subject."²¹⁸ He was still unwilling to end the experiment, despite the fact that his correspondence demonstrated an awareness of the controversial nature of the study. In response to the foreseeable discontinuation of the experiments, Dr. Cutler wrote to Dr. Mahoney that: "I feel tonight as I felt when the news came of the decision to discontinue the Terre Haute project, although the blow is harder now than then."²¹⁹

Dr. Cutler regretted the termination of the experiment, but was unable to continue because funding dried up.²²⁰ Additionally, Dr. Leonard Scheele was becoming Surgeon General, replacing Dr. Thomas Parran. There is some indication that Dr. Parran had been supportive of the project,

²¹⁶ Quoted in "The Nuremberg Code (1947)," *British Medical Journal* 313, no. 7070 (1996): 1448. <http://www.cirp.org/library/ethics/nuremberg/>.

²¹⁷ At the same time, although purported to be a codification of already agreed upon research ethics, the Nuremberg Code itself was not widely publicised in the immediate aftermath of the trials. Jonathan M. Zenilman, "Ethics Gone Awry: The US Public Health Service Studies in Guatemala, 1946-1948," *Sexually Transmitted Infections* 89, no 4 (2013): 298.

²¹⁸ "Nuremberg Code," 1448.

²¹⁹ Dr. Cutler to Dr. Mahoney, September 20, 1947, Correspondence on Project, folder 13, Records of Dr. John C. Cutler.

²²⁰ Dr. Mahoney to Dr. Cutler, June 21, 1948, John C. Cutler's 1948 Correspondence, folder 12, Records of Dr. John C. Cutler; Dr. Mahoney to Dr. Cutler, September 3, 1948, John C. Cutler's 1948 Correspondence, folder 12, Records of Dr. John C. Cutler; Dr. Cutler to Dr. Mahoney, August 26, 1948, John C. Cutler's 1948 Correspondence, folder 12, Records of Dr. John C. Cutler; J.S. Piazza to Dr. Mahoney, October 8, 1948, John C. Cutler's 1948 Correspondence, folder 12, Records of Dr. John C. Cutler.

but Dr. Scheele was an unknown element.²²¹ Dr. Cutler's supervisors stated that it would "be advisable to get our ducks in line. In this regard we feel that the Guatemala project should be brought to the innocuous stage as rapidly as possible."²²² The incoming Surgeon General might not have been as sympathetic to their research and they did not want any negative attention, in part because they knew what they were doing could attract censure. The experiment did not end because of the changing international climate that was, for the first time, vocalizing general bioethical principles. Nor was it ended because the researchers were convinced of the importance of ethical protections and, through increased experience or any sudden change of heart, realized the potential and actual harm of their actions. It was ended because of logistical challenges that forced its discontinuation.

Why, within this climate of increased international attention to the ethics of human experimentation, would the USPHS have funded and implemented a study that ran contrary to so many of the principles in the Nuremberg Code? First, the immediate impact of the Nuremberg Code on the practice of research internationally was minimal, in part because it was not legally binding. Secondly, although written by American judges, the Nuremberg Code was seen by many American researchers as unnecessary in the context of a democratic and civilized nation such as the United States. Historian of bioethics Jonathan D. Moreno describes the moment of encoding as "inspired by shock at the monstrous cruelties of an evil state." The Nazi state was considered to be so barbaric that any comparison seemed inconceivable. In the immediate post-war context of American moral superiority, "How could it [the code] apply to those who had staked everything to crush the devil's dictators, or to those many caring doctors who were the very

²²¹ Presidential Commission, " 'Ethically Impossible'," 68.

²²² Dr. Mahoney to Dr. Cutler, February 19, 1948, Correspondence on Project, folder 13, Records of Dr. John C. Cutler.

embodiment of human decency?"²²³ In other words, within American social consciousness, Nazis were the embodiment of an incomprehensible evil and an alien inhumanity. Despite the fact that the Nuremberg Code was framed in universal language, it was thought to only apply to similar nation-states; the United States, a nation that seemed to exemplify moral and humane intentions on the international stage (at least according to their own self-perception), had absolutely no need for such draconian oversight.²²⁴ Bioethical regulations, according to this view, are unnecessary for the "good doctor," the one whose internal moral code would prevent him (or her, although the profession was largely masculinised at the time) from engaging in unethical research. Unfortunately, as has been demonstrated on numerous occasions throughout history, relying on individual morality does not insure ethical conduct.

At the same time as American judges were condemning Nazi experimentation, information about other experiments conducted during the war was buried. Most notably, Japanese experimentation into biological warfare on mainly Chinese human subjects was never prosecuted because American researchers wanted access to the experimental data. In Unit 731 subjects were given experimental vaccines, were vivisected, and were infected with serious diseases, including plague, smallpox and anthrax. Civilians were also exposed through field tests that included contaminating water supplies, and dropping bombs filled with infected fleas. At the

²²³ Jonathan D. Moreno, *Undue Risk: Secret State Experiments on Humans* (New York: Routledge, 2001), 80. See also Ruth R. Faden, Susan E. Lederer, and Jonathan D. Moreno, "US Medical Researchers, the Nuremberg Doctors Trial, and the Nuremberg Code: A Review of Findings of the Advisory Committee on Human Radiation Experiments," *Journal of the American Medical Association* 276, no. 20 (1996): 1667-1671.

²²⁴ Another historian describes it as a sense that the Nuremberg Code was "a good code for barbarians but an unnecessary code for ordinary physician-scientists." See Jay Katz, "The Consent Principle of the Nuremberg Code: Its Significance Then and Now," in *The Nazi Doctors and the Nuremberg Code: Human Rights in Human Experimentation*, ed. George J. Annas and Michael A. Grodin (Oxford: Oxford University Press, 1992), 228. See also Paul Weindling, "The Origins of Informed Consent: The International Scientific Commission on Medical War Crimes, and the Nuremberg Code," *Bulletin of the History of Medicine* 75, no. 1 (2001): 46-58. For the British case, see Jenny Hazelgrove, "The Old Faith and the New Science," *Social History of Medicine* 15, no. 1 (2002): 109-135.

end of the war, the U.S. promised immunity to key researchers, including the mastermind behind the project Shiro Ishii, in exchange for information. Many researchers went on to prominent careers in post-war Japan, and a formal apology has never been issued.²²⁵ The Nuremberg Trial, now upheld as the birthplace of modern bioethics, was far from the only possible American response to unethical experimentation. On the other end of the spectrum, U.S. researchers were complicit in covering up Japan's medical experiments; an indication perhaps that the U.S. government considered ethics secondary to practical results, and that the medical profession had not internalized the bioethical prescriptions espoused in the Nuremberg Code.

American researchers were able to disregard the Nuremberg Code in part because of the distance that was rhetorically erected between the savagery of Nazi experimentation and the good American doctor. In short, it was dismissed as not applicable to them because they were not Nazis. Unable to conceive of the similarities between their own experimentation and the concentration camp experiments, which were now deemed to be crimes against humanity, they were free to continue without imposed external constraints on their behavior.

Today, demonizing Dr. Cutler and the USPHS experiment could similarly affect our ability to evaluate and, if necessary, indict current research. Acknowledging the similarities between the 1946 experiment and research today might underline areas that are still in need of improvement, increased oversight, and a larger overhaul of the current paradigm of medical ethics. News outlets and scholars are quick to condemn the 1946 USPHS study as "completely unethical," but the leap from an event that occurred 60 years ago to how marginalized populations still today bear the weight of medical advances and how our medical culture still prioritizes the health of a particular class, racial and gendered ideal is a more difficult rhetorical

²²⁵ Katrien Devolder, "U.S. Complicity and Japan's Wartime Medical Atrocities: Time for a Response," *American Journal of Bioethics* 15, no. 6 (2015): 40-42.

step to take.²²⁶ And for good reason - criticizing the current political climate is riskier than criticizing dead individuals.

²²⁶ Arthur Caplan, "Horrible Medical Tests of Past Raise Concerns for Today: As more research moves outside U.S., are we still exploiting the poor?" *NBC News*, October 1, 2010, http://www.nbcnews.com/id/39463624/ns/health-health_care/t/horrific-medical-tests-past-raise-concerns-today/#.VbQnHv15OSo.

Chapter Three

The Donor: Gender, Prostitution, and Infection

"La meretriz." "La mujer." "The infected prostitute." "The girl." "La muchacha." "The source of infection." "The female visitor." "The infected female." "The female donor." "La puta." These were some of the ways that the female prostitutes were labelled in Dr. Cutler's records. They were prostitutes, girls or donors rather than human subjects. They were discussed by Dr. Cutler and his colleagues as methods of infection or as vectors of disease. And, yet, counter intuitively, they were often hired when their blood tests were negative, and they sometimes had sex with male subjects when they did not have any infections. In other words, although they were *talked about* as diseased, and they were hired ostensibly as a mechanism of transmitting infections through "normal contact," in reality some of them were not transmitting syphilis or gonorrhea at all.

Clearly then, the goal of hiring prostitutes to have sex with male prisoners and soldiers was not simply nor solely about transmitting infections. In some experiments no infections could possibly have been transmitted; in others the researchers combined sexual contact and medical inoculation to guarantee the transmission. Dr. Cutler's justifications for hiring uninfected women to have sex with human subjects ranged from a need to reassure those who might be suspicious of the experiments, to the fact that it was difficult to find enough women to hire under the circumstances.²²⁷

²²⁷ Dr. Cutler to Dr. Mahoney, January 7, 1947, John C. Cutler's 1947 Correspondence, folder 11, Records of Dr. John C. Cutler; see also Report Entitled - Experimental studies in Gonorrhea, folder 15, Records of Dr. John C. Cutler, 2-3.

The Donor as "Volunteer"

On January 7, 1947, for example, Dr. Cutler wrote to his supervisor, Dr. John Mahoney, that they would "bring in the source of infection as indicated along with some not infected so as to allay fears and suspicion," and "to avoid political repercussions."²²⁸ In relation to the gonorrhea experiments with the soldiers, Dr. Cutler justified the practice of medically inoculating women who had negative or unknown statuses:

Contrary to what might be expected, it proved extremely difficult to obtain prostitutes willing to serve under experimental conditions. Once several were obtained (a total of 12 prostitutes were used throughout the duration of this experiment but at different times) who were willing to accept employment, studies were begun. It was impossible to wait for chance infection with gonorrhea in the prostitute employed, so each was inoculated with gonorrhea from 5 to 14 days prior to use of her services.²²⁹

By stating that the women hired were "willing to serve," Dr. Cutler implied that they were informed and consenting volunteers. In reality, despite the vocabulary of volunteerism, there is no proof that any of the human subjects were fully informed and consented to this experimentation.²³⁰ To the contrary, the researchers made a concerted effort to conceal details of the experiment from the subjects and also from the wider scientific community.²³¹ The researchers were looking for women willing to work in the prison system without considering it necessary to gain their informed and freely given consent to be part of an experiment- especially since the women were not considered by the researchers to be human subjects themselves.

²²⁸ Dr. Cutler to Dr. Mahoney, January 7, 1947, John C. Cutler's 1947 Correspondence, folder 11, Records of Dr. John C. Cutler.

²²⁹ Report Entitled - Experimental studies in Gonorrhea, folder 15, Records of Dr. John C. Cutler, 2-3.

²³⁰ Jonathan Zenilman, "The Guatemala Sexually Transmitted Disease Studies: What Happened," *Sexually Transmitted Diseases* 40, no. 4 (2013): 279.

²³¹ See Dr. Mahoney to Dr. Cutler, June 30, 1947, John C. Cutler's 1947 Correspondence, folder 11, Records of Dr. John C. Cutler; Dr. Cutler to Dr. Mahoney, August 25, 1947, John C. Cutler's 1947 Correspondence, folder 11, Records of Dr. John C. Cutler; Dr. Arnold to Dr. Cutler, April 19, 1948, Correspondence on Project, folder 13, Records of Dr. John C. Cutler; Dr. Cutler to Dr. Mahoney, June 22, 1947, Correspondence on Project, folder 13, Records of Dr. John C. Cutler.

Dr. Cutler remarked that the prison had a "custom of permitting sexual intercourse between the prisoner and his wife, paramour, or a prostitute whose fee the inmate himself pays," and that venereal disease prevention was to be tested "through the operation of this system."²³²

Dr. Cutler downplayed the involvement of the researchers, describing their role as more passive in nature than it necessarily was. He did this by using a vocabulary of volunteerism and by describing the deliberate exposure of subjects as "allowing" or "permitting" them to engage in sexual contact. In his final report, he explained:

Prostitution was legalised to the extent that prostitutes were allowed to pay regular visits to men in penal institutions. . . it was thought that the prostitutes serving the penitentiary could furnish a means of securing the desired information. This group, lowest in the social scale of legal prostitution and most frequently infected with syphilis and gonorrhoea were to be permitted, after discovery of presence of acute gonorrhoea or infectious syphilis, to continue going to the prison and were to be paid by us for offering their services to any inmate who desired to utilise her at no cost to himself. These volunteers were to receive prophylaxis or serve as controls as determined by the plan of study.²³³

According to this narrative, the researchers observed the infection status of the subjects, paid the women, and applied prophylaxis to the men, but did not themselves deliberately infect the women. Dr. Cutler's description removed ethical responsibility from the researchers. The women were permitted to work illegally, after medical authorities identified their infection, but, according to his report, they were not infected by the researchers. They were simply observed. This class of prostitute, after all, was the "most frequently infected with syphilis and gonorrhoea." Similar to the defense used by Dr. Neisser half a century earlier, Dr. Cutler refused to acknowledge his role in the transmission of venereal diseases to women who worked as prostitutes. Even the process of vetting male subjects was obscured in this account; the women were allowed to "[offer] their services to any inmate who desired to utilise her." Following this

²³² Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 13.

²³³ Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 8.

perspective, it was only after the researchers realized that rates of infection by this method were too low for a statistically relevant study to occur that they switched to medical inoculation.

Many historians and bioethicists have since described the USPHS study in similar terms.²³⁴ Historian of medicine Ilana Löwy, for example, distinguishes between early attempts to "produce a 'natural' infection through sexual intercourse with a contaminated sex worker," and "an increasingly 'unnatural,' aggressive, painful, and potentially harmful experimentation."²³⁵ In these accounts, the more natural method of transmission is not problematized, nor are the experimental overlaps between both types of experimentation analyzed.

The Experiments

What Dr. Cutler described in the final syphilis report differs from what was documented on patient index cards at the time of experimentation. According to the index cards, several different types of experiments occurred. In some, "exposure of volunteers to infected prostitutes would provide the testing opportunities."²³⁶ At the same time, not all of the "infected prostitutes" were infected through sexual commerce before being hired by the researchers. In fact, as previously noted, many were uninfected or their infection status was unknown before the experiment.

In one initial experiment, twelve prisoners "were exposed to two prostitutes who had been inoculated with *T. pallidum* [*Treponema pallidum*, the syphilis spirochete] into the cervical os and had developed asymptomatic infection."²³⁷ The researchers treated the women in much the

²³⁴ See, for example, Thomas R. Frieden and Francis S. Collins, "Intentional Infection of Vulnerable Populations in 1946-1948: Another Tragic History Lesson," *Journal of American Medical Association* 304, no. 18 (2010): 2063; Lynch, "Ethical Evasion," 32.

²³⁵ Löwy, "The Best Possible Intentions," 229.

²³⁶ Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 11.

²³⁷ Final Syphilis Report Part 5, folder 5, Records of Dr. John C. Cutler, 4.

same way that they treated acknowledged subjects of experimentation: they were deliberately infected with a venereal disease through direct medical intervention by American researchers before being encouraged to have unprotected sex with multiple partners. Although rhetorically treated as vectors of disease, they also functioned in this case as human subjects themselves.

In other instances, the role of the prostitutes became even more ambiguous. In some cases, the men were medically inoculated after sexual contact, implying that infection rates were more important to the researchers than the method of transmission. In other cases, uninfected prostitutes were having sex with uninfected men. If the motive in hiring prostitutes to have sex with prisoners and soldiers was not, or at least in most cases not primarily, to transmit infections - why were female prostitutes being hired at all?

It is possible, as Dr. Cutler claimed, that the initial program of study of hiring infected prostitutes to subsequently infect male prisoners and soldiers through sexual contact was quickly abandoned as unfeasible. As in many other instances throughout the experiments, rather than completely abandon the study, they simply adapted their research protocol haphazardly to fit changing circumstances. So, for example, they undertook a massive serologic testing program among school children and orphans, populations they did not initially intend to test for venereal disease, to try to understand high rates of false positives among the adult population.²³⁸ In a similar manner and aligning closely to what Dr. Cutler claimed in his final report, the researchers may have noticed very quickly that rates of infection through sexual contact remained low and decided to medically inoculate subjects instead.

Early experiments produced few infections. Only five infections had occurred after 138 exposures, and the majority of these infections occurred during experiments where the subjects were given alcohol before sex. Dr. Cutler even hypothesized that low rates of infection were due

²³⁸ Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 17.

to the short length of contact. Some contacts lasted only a minute, "so that exposure time to the infected vaginal secretions was short. The average length of exposure of this culture group to a prostitute is very short, according to experience of military physicians of the country so that it seems that the experimental group probably did not experience an unusually short period of contact as a result of experimental conditions."²³⁹

Methods of Transmission

Despite the researchers' seeming ease with abandoning techniques that were not giving them the results they desired, they were careful in their selection of methods of transmission. They justified their presence in Guatemala with the need to study a naturally produced and transmitted disease; when they began to medically inoculate the subjects, they worried about using the Nichols or Frew strain of inoculum; and they discussed which methods of medical inoculation most closely resembled sexual transmission.²⁴⁰ The Nichols and Frew strains were syphilis strains that had originated in humans but that had since been maintained for research purposes through a rabbit population. Dr. Cutler questioned "whether or not there might be a difference in the invasiveness of human-passage as compared with animal-passage organisms."²⁴¹ Before even knowing the outcomes of this research, however, they were willing to cut corners to more efficiently control their subject populations and transmit the infections under study.

In the process of cutting corners, they put subjects at even more risk. For example, to save time and the small amounts of inoculum that were not evacuated from the shaft during inoculation, needles were used on multiple subjects without being sterilised first, increasing the

²³⁹ Report Entitled-Experimental Studies in Gonorrhoea, folder 15, Records of Dr. John C. Cutler, 9.

²⁴⁰ Chronology 34, Experiment 12, January 31, 1948, Final Syphilis Report Part 3, folder 3, Records of Dr. John C. Cutler.

²⁴¹ Experiment 0903, Chronology 23, Final Syphilis Report Part 3, folder 3, Records of Dr. John C. Cutler.

likelihood of unintentionally transmitting secondary infections such as jaundice or meningitis.²⁴² In fact, in at least one case, a secondary infection was seen as the cause for subjects' symptoms. In experiment 0901, seven women with epilepsy had syphilis injected into their central nervous system in a drastic attempt to biologically shock their system and cure their epilepsy. Before treatment, "each patient showed signs and symptoms of acute syphilitic infection of the central nervous system such as headache lethargy, stiffness of the neck, and in the case of one, bilateral paralysis of legs and thighs." The researchers also treated the women for bacterial meningitis, explaining that "the inoculum, lesions taken from syphilitic patients, was certain to contain secondary bacterial invaders."²⁴³ However, despite proof to the contrary, Dr. Cutler dismissed the risks of secondary infection when it proved more efficient to re-use needles. In their search for efficiency, researchers also eventually abandoned the sexual exposure experiments.

Significantly, when the researchers were attempting to medically inoculate subjects, they discussed which methods most closely resembled "normal sexual exposure."²⁴⁴ In a 1936 article filed with Dr. Cutler's papers, at the end of his final syphilis report, Drs. Mahoney and Arnold argued that the contact method simulated "female to male transmission in the human."²⁴⁵ In 1947, Dr. Mahoney still believed that the contact method provided the best approximation of natural transmission. He considered scarification, for example, "drastic" and "beyond the range of natural transmission."²⁴⁶ During the experiments in Guatemala, the presumed direction of infection was always female to male. They did not hire male prostitutes, or infect male prisoners, with the

²⁴² See Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 47.

²⁴³ Final Syphilis Report Part 6, folder 6, Records of Dr. John C. Cutler, 14. See also Experiment 0901, Chronology 23, Final Syphilis Report Part 3, folder 3, Records of Dr. John C. Cutler.

²⁴⁴ Final Syphilis Report Part 5, folder 5, Records of Dr. John C. Cutler, 8.

²⁴⁵ An Experimental Resurvey of the Basic Factors Concerned in Prophylaxis in Syphilis, folder 9, Records of Dr. John C. Cutler, 2. For original citation, see Presidential Commission, " 'Ethically Impossible'," 163n46.

²⁴⁶ Dr. Mahoney to Dr. Cutler, September 8, 1947, Correspondence on Project, folder 13, Records of Dr. John C. Cutler.

intention of transmitting venereal diseases to women and studying prophylaxis among a female population. At the same time, the actual direction of infection during the experimental stage was often male donor to female prostitute to male human subject.²⁴⁷ The presumption of a "uni-directional mode of transmission" was not unique to the USPHS study in Guatemala but was symptomatic of larger perceptions of venereal disease.²⁴⁸

Despite the use of some female subjects, notably psychiatric patients and prostitutes, the researchers explicitly focused on improving male sexual health. The 1955 final report, for example, described the research as "a series of experimental studies on syphilis *in men*."²⁴⁹ Dr. Cutler clearly focused on protecting male sexual health, but perceptions of female bodies, both the bodies that needed to be protected and the bodies that needed to be sanitized, played a central role in the study.

Dr. Cutler described in detail the researchers' attempts to "simulate more nearly the natural conditions."²⁵⁰ Medical inoculation techniques were chosen with care, but another way to simulate natural disease transmission was through sexual contact itself. He explained that "a large number of the patients were permitted sexual contact with uninfected prostitutes, and immediately following contact, while the penis was still partially engorged and while the fluid of the ejaculate was at the meatus, inoculation was performed."²⁵¹ The researchers' were concerned with approximating natural conditions because public health, at its core, is a practical enterprise.

²⁴⁷ See, for example, Report Entitled-Experimental studies in Gonorrhoea, folder 15, Records of Dr. John C. Cutler, 3.

²⁴⁸ Brandt, *No Magic Bullet*, 31-32, 92. In the report on a 1941 epidemiological study of venereal disease among soldiers in El Paso, Texas, for example, Dr. Bascom Johnson wrote: "The prostitute has been found to be the major source of infection." Women, and not men, were seen as the vectors of disease. See Bascom Johnson, " 'When Brothels Close, V.D. Rates Go Down': Prostitution in the Spread of Venereal Disease in an Army Cantonment Area," *Journal of Social Hygiene* 28 (1942): 527.

²⁴⁹ Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 1 (emphasis mine).

²⁵⁰ Report Entitled-Experimental Studies in Gonorrhoea, folder 15, Records of Dr. John C. Cutler, 9 (mislabelled 8).

²⁵¹ Report Entitled-Experimental Studies in Gonorrhoea, folder 15, Records of Dr. John C. Cutler, 9 (mislabelled 8).

A prophylaxis, for example, that was messy, or too uncomfortable would not be used and did not, as a result, have much value from a public health perspective.²⁵² At the same time, they believed that sexual contact, even with an uninfected woman, could influence the likelihood of disease transmission.

Initially, the researchers presumed that sexual transmission occurred through an intact mucous membrane. Thus, to most closely approximate this, the researchers preferred "local application," otherwise known as the "contact method," where a cotton pledget moistened with infectious material was applied to the penis.²⁵³ It was only through observation of the male subjects' genitalia after sexual contact that the researchers noticed "evidence of physical trauma to the penile mucosa."²⁵⁴ The abrasions that resulted from sex "ranged from moderate reddening and engorgement of the penile mucosa, through mucosal abrasion with grossly visible bleeding points, to profuse bleeding from lacerations or tears in the frenum."²⁵⁵ On September 26, 1947, for example, the experimental notes included information on the occurrence of abrasions of the male genitalia after sexual contact. Terse and to the point, observations were only recorded as "no abrasion," "very slight abrasion," "slight abrasion," or "much abrasion."²⁵⁶ Since two of the three women hired for this experiment were uninfected, and all the men were medically inoculated after sexual exposure, sex was obviously not meant to be the primary method of transmission. In some cases, sexual contact might have acted as a natural method of creating abrasions, rather than

²⁵² Dr. Funes and laboratory technician Casta Luz Aguilar, co-authors of a 1952 report on a different venereal disease experiment explained, for example, that "all prophylactic methods have to be of extremely simple application, so that the prostitute can administer it even in very primitive sanitary conditions." See *La Solucion de Mafarside-Orvus en la Profilaxis de la Blenorragia en la Mujer*, folder 10, Records of Dr. John C. Cutler, 122 (my translation - "todo método profiláctico debe ser de aplicación extremadamente sencilla, de manera que pueda administrárselo la prostituta misma en condiciones sanitarias muy primitivas").

²⁵³ Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 47-48.

²⁵⁴ Chronology 13, Final Syphilis Report Part 3, folder 3, Records of Dr. John C. Cutler.

²⁵⁵ Chronology 12, Final Syphilis Report Part 3, folder 3, Records of Dr. John C. Cutler.

²⁵⁶ Guatemala Journal Studies with Military GC, Records of Dr. John C. Cutler, 58.

as a method of transmission. In fact, Dr. Cutler explicitly questioned "whether there was any relation between sexual activity immediately prior to the 'superficial inoculation' and rate of infection expected."²⁵⁷

Dr. Cutler's team hypothesized, because of the results of direct observation, that the "vigor of coitus could be related to extent of abrasion of mucosa."²⁵⁸ It was through this post-coital observation that the researchers concluded that syphilis was more easily transmitted through abraded rather than intact skin surfaces. They transferred their attempts from simple contact to include "mechanical abrasion" and came to prefer a technique known as "scarification and local application." Scarification and local application was a technique where the researcher scrapped the glans penis, ideally "short of drawing blood or serum, barely removing the surface layer, but not infrequently small bleeding points could be noted."²⁵⁹ Infectious material was then applied to the now-abraded skin. These were not the only methods of transmission but they were the two most frequently used and the two that were assumed to most closely resemble "normal" sexual exposure.

Additionally, a closer look at a timeline of the experiments suggests that sexual contact was not only being used as a method of transmission. Dr. Cutler arrived in Guatemala in August of 1946, and serology experiments began in the Penitentiary in November 1946. The first intentional exposure experiments of gonorrhea began in the Army in February 1947.²⁶⁰ On March 15th, for example, two "girls" had sexual contact with seven male subjects. None of the men was infected. On March 31st, the same two women had seven other sexual contacts; no infections of the men resulted. Both women had entered the venereal disease hospital on March 13th and

²⁵⁷ Report Entitled-Experimental Studies in Gonorrhea, folder 15, Records of Dr. John C. Cutler, 11.

²⁵⁸ Chronology 12, Final Syphilis Report Part 3, folder 3, Records of Dr. John C. Cutler.

²⁵⁹ Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 48.

²⁶⁰ Presidential Commission, " 'Ethically Impossible'," 116; "No. 1 Artificial Inoculation," Guatemala Journal Studies with the Military GC, Records of Dr. John C. Cutler.

tested positive for gonorrhea. However, by March 15th, when the experiments started, at least one of the women's statuses was inconclusive. This time, "all 3 cultures were negative."²⁶¹ At the time, diagnosing venereal diseases was an inexact science. Serologic testing and physical examination, both equally imperfect, were needed for accurate diagnosis.²⁶² The state of the medical field was such that even after months of observation "diagnosis could be difficult and uncertain."²⁶³ Perhaps to circumvent any uncertainty, both women were medically inoculated before the encounters took place.²⁶⁴ In the prison, before the sexual exposure experiments began, "sources of infection . . . [were] inoculated with human material" as a matter of course.²⁶⁵

For the researchers, these early experiments were disappointing. One of Dr. Cutler's supervisors, Dr. R. C. Arnold, for example, wrote that he "regretted that the normal exposure methods in gonorrhea [had] not produced more infections."²⁶⁶ Despite sexual exposure to the disease, no incidences of sexual transmission occurred until May 1947. On May 17, 1947, Dr. Cutler wrote to Dr. Mahoney that they "had the first success with the normal exposure with one patient of six showing positive results." He asserted that they would "continue both the normal

²⁶¹ "Experiment No. 2 Gonorrhea Prophylaxis," March 15, 1947, Gonorrheal Experiment #2, folder 31, Records of Dr. John C. Cutler.

²⁶² Funes, "Estudios Serológicos y Clínicos," 14.

²⁶³ Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 15. In 1988, Dr. Cutler reminisced on the state of the medical field: "At that time, diagnostic and treatment procedures for syphilis and gonorrhea were complex, time-consuming, expensive, heavily dependent upon individual initiatives, and 'primitive' according to today's advances." See Cutler and Arnold, "Venereal Disease Control," 372.

²⁶⁴ "Experiment No. 2 Gonorrhea Prophylaxis," March 15, 1947, Gonorrheal Experiment #2, folder 31, Records of Dr. John C. Cutler; "Experiment No. 3 Gonorrheal Prophylaxis," March 31, 1947, Gonorrheal Experiment #3, folder 32, Records of Dr. John C. Cutler.

²⁶⁵ Dr. Cutler to Mahoney, August 25, 1947, John C. Cutler's 1947 Correspondence, folder 11, Records of Dr. John C. Cutler.

²⁶⁶ Dr. Arnold to Dr. Cutler, July 30, 1947, John C. Cutler's 1947 Correspondence, folder 11, Records of Dr. John C. Cutler.

and artificial method of exposure in an effort to continue evaluation of the method and to determine the normal infection rate."²⁶⁷

It is also in May 1947 that the first exposure experiments of syphilis were undertaken in the Central Penitentiary and in the Asilo de Alienados. In the prison, the first sexual exposure experiments and the first medical inoculation experiments began that same month. Four months after the first experiments in the Army began, and at the same time that researchers were commenting on the ineffectiveness of sexual transmission, research at the prison began using both sexual and medical exposure techniques. Researchers had not yet abandoned the process of hiring prostitutes to engage in sex with soldiers and prisoners, but they were no longer relying solely on sexual contact as a method of infection.

Dr. Cutler then theorized that sexual contact with a female, whether she was infected or not, could increase rates of infection because of her production of mucin during sex. Mucin, the primary component of mucus, "might play a role in enhancement of invasive potentialities of *T. pallidum* and . . . it would be well to study possible effects of such a mixture on intact mucous membrane."²⁶⁸

Medical and religious authorities have a long history of describing female bodies as innately infectious and dirty. Some early writers posited, for example, that syphilis could occur spontaneously in the wombs of promiscuous women, or that a man who had sex with a menstruating woman would be infected with gonorrhea.²⁶⁹ Dr. Cutler wrote that "in view of

²⁶⁷ Dr. Cutler to Dr. Mahoney, May 17, 1947, John C. Cutler's 1947 Correspondence, folder 11, Records of Dr. John C. Cutler.

²⁶⁸ Chronology 22, Experiment 9, September 21, 1947, Final Syphilis Report Part 3, folder 3, Records of Dr. John C. Cutler.

²⁶⁹ For more on the social construction of venereal disease as a gendered symbol of moral and physical pollution, see Judith R. Walkowitz, *City of Dreadful Delight: Narratives of Sexual Danger in Late-Victorian London* (Chicago: University of Chicago Press, 1992), 22; Peter Lewis Allen, *The Wages of Sin: Sex and Disease, Past and Present* (Chicago: University of Chicago Press, 2000), 12, 46; Louis F.

evidence obtained in work with other organisms that mucin has the ability to reduce the defense mechanisms of the body it was used early in the course of studies." By the end of the studies, however, "there was no evidence to indicate that when applied locally and containing *T. pallidum*, mucin preparations had any effect in lowering the resistance of the mucous membrane to penetration by *T. pallidum*."²⁷⁰ Despite the fact that it was disproven, Dr. Cutler's early theory was that female bodies naturally contained and produced biological substances that increased the virulence of venereal diseases. Like his colleagues, Dr. Cutler remained mired in a medical culture that could not disentangle scientific knowledge from moral judgement. Despite some valiant attempts to de-stigmatize syphilis and gonorrhea, sexual female bodies continued to be demonized.²⁷¹ Uninfected prostitutes continued to be hired because of the assumption that there was an inherent link between female bodies and infection.

Power, Resistance and Stories on the Margins

Uninfected subjects, both male and female, were deliberately infected and were not always adequately treated. At the same time, supplies of penicillin were being used to garner good-will among Guatemalan officials.²⁷² It is difficult to determine the actual ratio of treatment

Qualtiere and William W.E. Slights, "Contagion and Blame in Early Modern England: The Case of the French Pox," *Literature and Medicine* 22, no. 1 (2003): 12; Marie E. McAllister, "Stories of the Origin of Syphilis in Eighteenth-Century England: Science, Myth, and Prejudice," *Eighteenth-Century Life* 24, no. 1 (2000): 33; Brandt, *No Magic Bullet*, 5, 10, 31; Janice Delaney, Mary Jane Lupton, and Emily Toth, *The Curse: A Cultural History of Menstruation* (New York: New American Library, 1976), 15.

²⁷⁰ Final Syphilis Report Part 7, folder 7, Records of Dr. John C. Cutler, 12.

²⁷¹ The career of Surgeon General Thomas Parran was particularly marked by an attempt to destigmatize venereal disease and treat infections as medical, and not moral problems. See, for example, Thomas Parran, "Syphilis: A Public Health Problem," *Science* 87, no. 2251 (1938): 147-152; Lynne Page Snyder, "New York, the Nation, the World: The Career of Surgeon General Thomas J. Parran, Jr., MD, (1892-1968)," *Public Health Reports* 110 (1995): 630-632. For more on the association of women with venereal disease, see Robert Eberwein, "World War II and the Attack on Venereal Disease," in *Sex Ed: Film, Video, and the Framework of Desire* (New Brunswick: Rutgers University Press, 1999), 63-101.

²⁷² Dr. Cutler to Dr. Mahoney, November 30, 1946, Correspondence on Project, folder 13, Records of Dr. John C. Cutler.

for the female prostitutes because so few records were kept on them. They did not receive patient numbers and only rarely had individual index cards dedicated to specific experiments performed on their bodies. Instead, they existed on and between the margins of the records of other patients. The women's now redacted names were listed beside times and duration of "contacts."²⁷³

Occasionally, they appear at the bottom of someone else's index card; one card, for example, described a 10 minute "exposure" on February 15th, 1947 between a 10-year-old private in the Honor Guard and a prostitute.²⁷⁴ The child-soldier was given Dr. Arnold's prophylaxis. At the edge of the card detailing this experiment, it is noted that "[n]o attempt was made to take culture from the girls at the time of exposure or at the clinic as the girls were quite apprehensive."²⁷⁵ In other words, the infection status of the women was not verified before the experiment. Interestingly, the subjects' emotional state was taken into consideration in this case. Although their agency was limited by hierarchies of power, the subjects were at times able to resist and change some aspects of the experimental procedure.

Despite their marginality, the Guatemalan subjects questioned the researchers' authority, resisted their medical intervention, or, conversely, complied for various reasons. Dr. Cutler and his team may have entered Guatemala with a very clear program of study and a clear, although ultimately slanted, idea of how their Guatemalan subjects would react to their medical authority, but the reality was much messier than could have initially been predicted. On occasion, the subjects disrupted the research program, forcing the researchers to take their desires and beliefs into consideration, however reluctantly, and ultimately to adapt their approach.

²⁷³ See, for example, Prophylactic Experiment No. 4, May 5, 1947, Gonorrheal Experiment #4, folder 33, Records of Dr. John C. Cutler.

²⁷⁴ This private was the youngest, but not the only underage subject, who was deliberately exposed by the USPHS researchers. See, Presidential Commission, " 'Ethically Impossible'," 181n319.

²⁷⁵ Index Card No. 11, Gonorrheal Experiment No. 1, folder 30, Records of Dr. John C. Cutler.

Resistance and power interact in complicated and often unintended ways. Resistance is never simply individuals' heroic confrontations against systems of oppression that restrict their freedoms; it is never separate from the workings of power. To the contrary, when scholars move away from an understanding of power as an all-encompassing imposition of the haves against the have-nots, a much messier narrative arises. Resistance does not always work and even if it does, sometimes, the changes it brings about are re-imaginings of old systems of power. So, for example, female asylum patients resisted the researchers' invasive medical gaze by appealing to old notions of feminine modesty. As a result, the doctors were not able to perform physical exams as they would have liked, causing some frustration and forcing the researchers to change some aspects of their experimental procedure. They did not, however, abandon using the women as a research group. Female asylum patients were still subjects of experimentation and, in their resistance to class and professional hierarchies, appropriated gendered notions of propriety that would not necessarily serve them in the long run. In contrast, the female prostitutes, as women who had already transgressed these norms of femininity, were not considered by the doctors as having the same rights to privacy and bodily integrity.

The anthropologist Lila Abu-Lughod encourages scholars to "use resistance as a *diagnostic* of power."²⁷⁶ While acknowledging the Guatemalan subjects' rationality and their demonstrated ability to resist, it is important to not lose sight of the multiple overlapping forms that power took in this situation. Dr. Cutler and his team embodied not only the power of foreign relations, as Americans entering an economically dependent Guatemala, but also the power of knowledge and professionalism. They opened doors for their Guatemalan colleagues and were able to withhold information from their Guatemalan subjects. Although some of the subjects'

²⁷⁶ Lila Abu-Lughod, "The Romance of Resistance: Tracing Transformations of Power Through Bedouin Women," *American Ethnologist* 17, no. 1 (1990): 42 (emphasis in original).

actions can be read as resistance, it was not always in reaction to the experimentation and, even when it was, it was often motivated by confusion and sometimes curtailed by the fact that they were not informed about what was going on. Their resistance was not an organized, large-scale protest in part because of this lack of knowledge. As a result, the form that the resistance took can tell us a lot about how they experienced the structures of power at play.²⁷⁷

Within the constraints of their positions, even within a heavily coercive environment, and according to the knowledge they had at the time, the subjects acted rationally. As a renowned feminist historian, Natalie Zemon Davis argues: "in human history. . . there exist cracks in every system, even the most coercive ones, through which freedom can find its own expression."²⁷⁸ Sometimes this meant actively resisting the researchers' demands, and sometimes this meant complying with a blood test for the promised pack of cigarettes. Subjects refused blood tests, escaped the institution, had homosexual contacts, and were generally non cooperative.²⁷⁹ Not all of these actions were forms of resistance because they lacked intentionality. A male soldier or asylum patient who had homosexual contacts was not responding to the experimentation. Because he was not aware of how his actions influenced the USPHS study, his motivations were distinct and separate. However, his actions were proof that he was not a passive object of experimentation and that the behaviour of the subjects could and did disrupt the research.

In one case, for example, the researchers noted with disappointment that "their" female donor was "leaving her profession for marriage and was no longer available" for further

²⁷⁷ For more on theories of resistance and power, see Lowell Gudmundson, "Firewater, Desire, and the Militiamen's Christmas Eve in San Gerónimo, Baja Verapaz, 1892," *Hispanic American Historical Review* 84, no. 2 (2004): 273.

²⁷⁸ Natalie Zemon Davis, "Women," in *A Passion for History: Conversations with Denis Crouzet* (Kirksville, Missouri: Truman State University Press, 2010), 119.

²⁷⁹ See, for example, Physical Examinations - Asilo, folder 27, Records of Dr. John C. Cutler; Final Syphilis Report Part 4, folder 4, Records of Dr. John C. Cutler, 5-6

studies.²⁸⁰ In some ways, despite being among the most vulnerable and certainly most neglected populations of the USPHS study, the prostitutes were able to most effectively withdraw from experimentation. Unlike the prisoners or mental patients, they were not institutionalized in one location; and unlike the soldiers they did not face military consequences for going AWOL. Although vulnerable on many levels, and often constrained in their choices, prostitutes could leave their profession in certain circumstances, including marriage, retirement at a certain age, or proof of an "honorable profession" and a desire for "moral regeneration."²⁸¹

On the other hand, the researchers were willing to breach gendered cultural protocol in examination and direct infection of female genitalia when the women were prostitutes, but acquiesced to womanly modesty when female asylum patients refused to disrobe for the male physicians. Dr. Cutler found it "difficult to examine the skin of abdomen, breast, or back and completely impossible to examine the genitalia" of the women in the Asilo de Alienados.²⁸² As a result, the researchers were limited in their ability to perform physical exams to properly diagnose infection, as well as in their ability to expose the women to venereal disease and to apply prophylaxis.²⁸³ The same concern for propriety apparently did not apply to the physical exams or to the method of inoculation of the female prostitutes. The prostitutes were often infected by the insertion of a swab into the cervix. Physical examinations were also undertaken and the presence or absence of cervical discharge was noted.²⁸⁴ Although, the researchers may have found it easier to physically examine women who had previous experience with venereal

²⁸⁰ Dr. Elliott L. Harlow to Dr. Mahoney, May 22, 1947, John C. Cutler's 1947 Correspondence, folder 11, Records of Dr. John C. Cutler.

²⁸¹ Direccion General, "Reglamento de la Seccion," 8-9, 13-14 (my translation - "ocupación honrada con manifiestas muestras de regeneración moral").

²⁸² Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 25.

²⁸³ Final Syphilis Report Part 5, folder 5, Records of Dr. John C. Cutler, 5

²⁸⁴ See, for example, "Gonorrheal Experiment Natural Exposure June 2 through June 5, 1947," Guatemala Journal Studies with the Military GC, Records of Dr. John C. Cutler.

disease exams, Dr. Cutler and his team also showed little concern for the bodily integrity of the prostitutes. Additionally, the fact that this subject group was perhaps more likely to submit to medical authority without resistance does not excuse the researchers' actions. To the contrary, bioethical protections should be even more stringently applied to populations that are least likely to question authority figures.²⁸⁵

The invasive medical gaze continued for some subjects throughout and sometimes after the experiment technically ended. On September 5, 1948, for example, one male subject who had left the asylum was tracked down in San Martín Jilotepequez.²⁸⁶ For others, however, the medical gaze was haphazard at best. The June 2 to 5, 1947 experiment, for example, exposed sixteen soldiers to gonorrhea through sexual contact. Two women had sex a total of 31 times with these sixteen men. On the bottom of the page detailing this experiment, one researcher had written by hand that "no infection resulted." This is not technically true, however, for the two women "had negative cultures prior to the inoculation." What the researcher meant is that none of the men was infected after sexual exposure. Both women, uninfected before the experiment and exposed through medical intervention, contracted gonorrhea. Despite this, they were not seen as subjects of experimentation and, unlike the men who were "restricted to the quarters" in an attempt to control the variables of the experiment, the women were not monitored. Inoculated on May 16, the "girls were lost from observation until May the 28th when both were found to be culturally positive."²⁸⁷ There was no mention of the sexual partners, whether clients, husbands, or lovers, they might have inadvertently infected during those twelve intervening days.

²⁸⁵ For more on empowering "naive human subjects," see Aultman, "Abuses and Apologies," 360, 366.

²⁸⁶ No. 142, Experiment 5, Insane Asylum Asilo Des Alienados Female Patients - continued, Records of Dr. John C. Cutler.

²⁸⁷ "Gonorrheal Experiment Natural Exposure June 2 through June 5, 1947," Guatemala Journal Studies with the Military GC, Records of Dr. John C. Cutler.

Soldiers in the War Against Syphilis

These subjects, whether prostitutes, soldiers, mental patients or prisoners were marginalized populations whose bodies were being used by an elite group of scientists in an attempt to solve a public health crisis out of concern for mainly white, American men. The impetus for funding and pursuing research into the prevention of venereal disease drew much of its urgency from the Second World War and the health crisis that was observed among young men in the American military and, upon their return home, their innocent wives and children.²⁸⁸ Dr. Cutler explained that it was not local Guatemalan health concerns that drove the research, but rather "a large number of questions of great importance . . . concerning programs of national [read American] and international control of venereal disease."²⁸⁹ In other words, Guatemalan bodies were endangered during this research, but they were not the ones who benefitted (or were meant to benefit) from it.

In view of the legacy of the Second World War to venereal disease research at the time, it is perhaps not surprising that one of the main subject groups were members of the Guatemalan military. In Guatemala at the time there was a sexual culture that encouraged young men to visit brothels; prostitution was seen as a necessary evil that protected well-bred young women from the predatory instincts of young men.²⁹⁰ This bordello culture was linked in popular consciousness to the military.²⁹¹ This is not to say, however, that individual soldiers had sexual

²⁸⁸ For more information, see Eberwein, "World War II," 69. Fears of "innocent infections" had motivated social hygienists since the late nineteenth century. See, Brandt, *No Magic Bullet*, 9.

²⁸⁹ Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 21-22.

²⁹⁰ José Manuel Mayorga, "Sobre el Proceso de Investigación," in *Encarnación: Selección de los Registros de Ménades y Otras Fuentes* (La Antigua Guatemala: Ediciones del Pensativo, 2013); López, "Las mujeres," 8.

²⁹¹ For a similar example of brothel culture in Revolutionary Mexico City, see Katherine Elaine Bliss, *Compromised Positions: Prostitution, Public Health, and Gender Politics in Revolutionary Mexico City* (University Park, Pennsylvania: Pennsylvania State University Press, 2001), 64, 75-76; For more on sexual commerce in Guatemala, see David McCreery, " 'This Life of Misery and Shame': Female Prostitution in Guatemala City, 1880-1920," *Journal of Latin American Studies* 18, no. 2 (1986): 333-353.

experience with prostitutes. Some of the men used in the experiment in fact claimed to have no sexual experience at all. While many listed their last contact as occurring with a prostitute, a pick-up, or their "own girl," some declared "no prior contact."²⁹² Despite this, military personnel were perceived to be one of prostitutes' main clients.

It must have seemed a natural extension of the experimental protocols to carry out studies that included both sexual contact and medical inoculation among Guatemalan soldiers. They would have been, after all, one of the primary targets of many anti-venereal disease campaigns and were already assumed to have experience with hiring women for sex. Additionally, like the male prisoners, the soldiers were assumed to be easily isolated from (female) sexual contact.

Assumed isolation did not always translate to actual isolation, however. In the penitentiary, for example, a prisoner who worked as secretary of the penitentiary hospital "had contact with one of [their] female hirelings whom [they] thought was non-infected." One of the researchers, Dr. Elliott L. Harlow wrote to Dr. Mahoney on May 22, 1947, that: "I could not help laughing at the irony of the situation. After trying for weeks to produce an infection we get one in the last man we cared to infect."²⁹³ Culture taken from the female contact at the Venereal Disease hospital was hard to identify, demonstrating the difficulties of diagnosing venereal disease.

Additionally, despite proof of it happening elsewhere, the possibility of these infections being spread through male to male transmission was disregarded. Soldiers were isolated on base or in the hospital, and were not supposed to have any contact with women except for that which was experimentally arranged, for three weeks during the experiments.²⁹⁴ Presumably, although

McCreery notes on page 346 that "a large, stable concentration [of houses of prostitution] persisted close by the army barracks on the Avenida de la Caballería."

²⁹² See Gonorrheal Experiments - Military, folder 36, Records of Dr. John C. Cutler.

²⁹³ Dr. Harlow to Dr. Mahoney, May 22, 1947, John C. Cutler's 1947 Correspondence, folder 11, Records of Dr. John C. Cutler.

²⁹⁴ Report Entitled - Experimental Studies in Gonorrhea, folder 15, Records of Dr. John C. Cutler, 4.

not always, the men were to be treated with penicillin before being released. At the same time, Dr. Cutler dismissed the possibility that these experimentally created infections could be further transmitted throughout the Guatemalan population. His main concern was in maintaining consistency among the control variables. Dr. Cutler asserted that "there was no possibility for intercourse with a female during this period and homosexuality was very uncommon among the soldiers under study. There was thus no chance to contract gonorrhea except experimentally."²⁹⁵ He does not discuss the risk of experimentally contracted gonorrhea being subsequently transmitted to a non-subject group. In reality, it was not the health of the lowest-ranking soldiers, the lowest-class of prostitutes, or their imprisoned clientele that concerned the USPHS researchers. To the American researchers, they were a class of people who were uneducated, superstitious, and already at high risk of contracting a venereal disease because of their sexual practices.

Some soldiers were even accused of deliberately exposing themselves to venereal disease so that they "could rest or obtain relief from a particularly unpleasant assignment."²⁹⁶ Dr. Carlos Tejeda, Chief of the Army Medical Department, described the technique that the men used to inoculate themselves; it "was to take by the end of a match from an acute case and to insert the contaminated end of the match into the urethra of the soldier desiring to infect himself."²⁹⁷ This is not unlike the deep inoculation method the researchers used, in which an infected toothpick swab was inserted "into the urethra, and carefully rubbed over the mucous membrane, so much so as to cause pain."²⁹⁸ Similarly, some of the women were inoculated by "inserting a cotton-tipped swab,

²⁹⁵ Report Entitled - Experimental Studies in Gonorrhea, folder 15, Records of Dr. John C. Cutler, 4.

²⁹⁶ Report Entitled-Experimental Studies in Gonorrhea, folder 15, Records of Dr. John C. Cutler, 9 (mislabelled 8).

²⁹⁷ Report Entitled-Experimental Studies in Gonorrhea, folder 15, Records of Dr. John C. Cutler, 9 (mislabelled 8).

²⁹⁸ Report Entitled-Experimental Studies in Gonorrhea, folder 15, Records of Dr. John C. Cutler, 6.

moistened with pus from an acute case of gonorrheal urethritis in the male, into the cervix and swabbing it around in the cervix with considerable vigor."²⁹⁹

Dr. Cutler and his team showed little regard for the pain, and even death, of their Guatemalan subjects. Autopsies were performed on the bodies of men and women who did not outlive the experiment. Some of the subjects of the experiment were drawn from "both acute and chronically ill patients." Rather than acknowledge that exposing already ill individuals to venereal disease may have contributed to or caused premature death, Dr. Cutler used this fact to distance himself from blame. "In view of the fact that we were able to utilise all patients in the institution," Dr. Cutler explained, "it so happened that from time to time one of the experimental patients died, either during the inoculation stage, during the active phases of the disease, or post treatment."³⁰⁰ At no time did Dr. Cutler acknowledge the potentially irreparable harm that he was causing his human subjects.

The risk of harm to these marginalized Guatemalan populations was justified because of the greater good these experiments were meant to promote. This greater good included the early prevention of venereal disease, especially among American soldiers, and their innocent wives and children.³⁰¹ Syphilis, once viewed as a punishment from God, was seen as a threat to good wives and children who were infected through no fault of their own. Although not necessarily sexually innocent, white servicemen were also seen as victims of the venereal disease epidemic that rendered them unproductive members of society. Equally important for government officials during the Second World War was the loss of manpower days that resulted from venereal disease

²⁹⁹ Report Entitled-Experimental Studies in Gonorrhoea, folder 15, Records of Dr. John C. Cutler, 3. See also, "Gonorrheal Experiment Natural Exposure June 2 through June 5, 1947," Guatemala Journal Studies with the Military GC, Records of Dr. John C. Cutler.

³⁰⁰ Final Syphilis Report Part 1, folder 1, Records of Dr. John C. Cutler, 40.

³⁰¹ An Experimental Resurvey of the Basic Factors Concerned in Prophylaxis in Syphilis, folder 9, Records of Dr. John C. Cutler, 1.

infections. "The prevention of the primary invasion of the male by the syphilis spirochete, as a means of minimizing the loss of effectiveness which is incident to established disease, still constitutes one of the most pressing problems of military medicine," claimed Drs. Mahoney and Arnold in 1936.³⁰² Despite the end of the Second World War, prophylaxis experiments continued to be of interest to the Army in 1947, and the USPHS continued to collaborate with the armed forces in their attempts to find medical solutions.³⁰³

Race and Racism

Certain marginalized populations were seen as especially prone to venereal diseases, and were often portrayed as the enemy of public health, rather than the victim. These populations included sexually experienced women, and, in the United States, African American men.³⁰⁴ Both race and gender were used as indicators of disease. The USPHS study was not race-based medicine in the sense that the researchers were not testing indigenous Guatemalans with the goal of verifying racial differences in reaction to penicillin.³⁰⁵ However, the study was based on a racialized and gendered understanding of syphilis. Despite the fact that syphilis was commonly understood at the time to be less virulent among "the Central American Indian and the Mixture of Indian-European or Indian-European-Negro," the researchers still substituted an indigenous

³⁰² An Experimental Resurvey of the Basic Factors Concerned in Prophylaxis in Syphilis, folder 9, Records of Dr. John C. Cutler, 1; Presidential Presidential Commission, " 'Ethically Impossible'," 163n46.

³⁰³ Dr. Mahoney to Dr. Cutler, September 8, 1947, Correspondence on Project, folder 13, Records of Dr. John C. Cutler.

³⁰⁴ Marilyn E. Hegarty, *Victory Girls, Khaki-Wackies, and Patriotutes: The Regulation of Female Sexuality During World War II* (New York: New York University Press, 2008), 62; Brandt, *No Magic Bullet*, 157-158.

³⁰⁵ For an example of this type of race-based medicine, see Susan L. Smith, "Mustard Gas and American Race-Based Human Experimentation in World War II," *Journal of Law, Medicine and Ethics* 36, no. 3 (2008): 517-521.

population group for their actual targets of health intervention, white American soldiers.³⁰⁶ They used Guatemalan bodies to find solutions that they hoped to apply to U.S. citizens.

Dr. Cutler described the Guatemalan subjects as "Indians from the backwoods."³⁰⁷ This does not necessarily mean that they were all indigenous, however; even those that were labelled by foreign doctors might not have self-identified as such. Dr. Cutler assigned racial categories in part based on the fact that the majority of Guatemalans, 85% according to his assessment, were indigenous. He also observed in his final syphilis report "that many of our patients had the classic, pure Indian features indicating little or no mixture. The large number of purely Indian names among our patients gave further evidence that the sample contained a sizable group of patients with pure or predominant Indian blood."³⁰⁸ Some patient index cards indicated a racial category, such as the 50-year-old indigenous male from Patzicía, or the 16-year-old Moreno from Livingston, or the 48-year-old Ladino from Quezaltenango.³⁰⁹ Many others were left blank.

However, Dr. Cutler acknowledged that "there was no means of securing the necessary information" to verify subjects' race.³¹⁰ In fact, there was no consensus even among Guatemalan officials on racial categories. When the Instituto Indigenista Nacional undertook an investigation into the living conditions of indigenous Guatemalans, they realized that racial classifications were not universal; who was considered an Indian changed depending on where they lived.³¹¹

In addition to the difficulty of classifying people along racial lines, race was understood in Guatemala differently than it was in the United States. National discourse in Guatemala claimed that racial categories were not as heavily weighted by biological determinism. In a country

³⁰⁶ Final Syphilis Report Part 6, folder 6, Records of Dr. John C. Cutler, 37.

³⁰⁷ Dr. Cutler to Dr. Arnold, September 16, 1947, Correspondence on Project, folder 13, Records of Dr. John C. Cutler

³⁰⁸ Final Syphilis Report Part 6, folder 6, Records of Dr. John C. Cutler, 38.

³⁰⁹ Index Cards, Prison Patients 1, Records of Dr. John C. Cutler.

³¹⁰ Final Syphilis Report Part 6, folder 6, Records of Dr. John C. Cutler, 38.

³¹¹ Handy, *Revolution in the Countryside*, 51.

founded on sometimes violent colonial *mestizaje*, or race mixture, the idea of blood purity functioned differently than in the United States where strict segregation was maintained through both legal and more informal channels.³¹² Ladinos, for example, were described by Dr. Cutler as "mixed-breed."³¹³ As commonly understood in Guatemala, Ladinos were a more complex social strata that embodied certain class and physical ideals. In other words, race categories could in some situations, although still with difficulty, be circumvented as a result of education, marriage, politics, residence, language, and movement between classes.³¹⁴

In 1955, one PASB cultural survey described the categories of Ladino and Indian as "what we can best call socio-cultural groups which have some historical racial parallels."³¹⁵ More recently, anthropologist Carol A. Smith explains that "there are 'Indians,' a social category used by social scientists, census officials, and non-Indian Guatemalans - but by very few Indians. . . [and] there are 'ladinos,' a social category used by social scientists, census officials, Indians, and some but not all ladinos."³¹⁶

At the same time, despite a discourse of *mestizaje*, race still figured prominently in Guatemalan national consciousness.³¹⁷ Among elite Guatemalans, blood purity remained a point of pride. Although national discourse supported the acculturation of indigenous Guatemalans into

³¹² Diane M. Nelson, "Bodies That Splatter: Gender, 'Race,' and the Discourses of *Mestizaje*," in *A Finger in the Wound: Body Politics in Quincentennial Guatemala* (Berkeley: University of California Press, 1999), 214.

³¹³ Final Syphilis Report Part 6, folder 6, Records of Dr. John C. Cutler, 38.

³¹⁴ For more on the process of ladinoization and the social construction of ethnic identities, see Pierre L. van den Berghe, "Ethnic Membership and Cultural Change in Guatemala," *Social Forces* 46, no. 4 (1968): 514-522; Grandin, "Can the Subaltern," 83-112; Adams, "Ethnic Images," 152-153.

³¹⁵ Richard N. Adams, "Guatemala," in *Cultural Surveys of Panama-Nicaragua-Guatemala-El Salvador-Honduras* (Washington, D.C.: Pan American Sanitary Bureau, 1957), 267.

³¹⁶ Smith, introduction, 3-4.

³¹⁷ For more on *mestizaje* and understandings of race in Guatemala, see Nelson, "Bodies that Splatter," 206-244.

Ladino society, ideas of heredity and genetic racial differences still circulated in informal conversations.³¹⁸

To complicate matters, Guatemala City had a different racial composition than rural Guatemala. Although indigenous Guatemalans might have been overrepresented in institutions such as the National Penitentiary, overall Guatemala City was historically ladino.³¹⁹ It would be misleading to assume that all of the subjects of experimentation were indigenous.

As problematic as they are, Dr. Cutler did keep records that hinted at the racial identities of his institutionalized subject populations. It is even more difficult, however, to analyze the roles of race and racism in interactions with the female prostitutes. With few records devoted to them, and no known photographs, nothing conclusive can be said about the racial identities of the prostitutes. Ladinass, like Ladinos, were the majority in Guatemala City. Out of an urban female population of 149,837, Ladinass accounted for 140,277 in 1950.³²⁰ However, this ratio did not necessarily translate to lower socio-economic groups, especially since Guatemalan racial categories were linked to understandings of class. Indigenous women, for example, might work as domestic servants in the houses of Ladinass, or sell produce in the marketplaces. If they lived in Guatemala City, however, they likely lived in the slums which had sprung up on the outskirts of the city to accommodate a rapid influx of migrants.³²¹ Low-class prostitutes who worked in the prison system might conceivably have been indigenous women or women who had newly migrated to the city, but the evidentiary record does not provide us with enough information to prove this one way or another. However, whether or not Dr. Cutler understood the complicated

³¹⁸ Nelson, "Bodies That Splatter," 213-214.

³¹⁹ Galarneau, " 'Ever Vigilant'," 38.

³²⁰ Harms, "Imagining a Place," 233.

³²¹ Harms, "Imagining a Place," 132; Vrana, " 'Do Not Tempt Us!!'," 26; Oscar Guillermo Peláez Almengor, "La Ciudad de Guatemala, 1776-1954, una panorámica histórica," (PhD diss., Tulane University, 1996), 272.

nature of race relations in Guatemala, he described the subjects of his experiments as primarily indigenous Guatemalans. This imposed label influenced how he interpreted the subject's resistance and how he justified the lack of informed consent.

Infections of Innocents

Ideas of race, gender, mental capacity, sexual practices and infection rates commingled during the USPHS study in Guatemala. Indigenous Guatemalans were described as suspicious of medical authority, and confused by scientific explanations.³²² Female prostitutes were already considered vectors of disease. In other words, the bodies of the Guatemalan subjects were treated as collateral damage in the USPHS' war against venereal disease.

The innocent wife and child back home in America was a heavy presence in the background of most anti-venereal disease programs directed by the USPHS at the time; the prostitute or "fallen woman" was the targeted scapegoat at the forefront. These two images of women, diametrically different images though they were, motivated public health campaigns. Men were exhorted to protect one type of woman while being taught to fear the other.³²³ In Guatemala, similar ideas revolved around the image of the unregistered or clandestine prostitute. The National Police conducted raids and forcibly quarantined women who were suspected of illegal prostitution under the guise of public health and disease eradication.³²⁴ The spectre of

³²² Dr. Cutler to Dr. Mahoney, January 2, 1947, John C. Cutler's 1947 Correspondence, folder 11, Records of Dr. John C. Cutler; Dr. Cutler to Dr. Arnold, August 21, 1946, Correspondence on Project, folder 13, Records of Dr. John C. Cutler.

³²³ See, for example, "Easy to Get. . . Syphilis and Gonorrhea," Images from the History of Medicine, U.S. National Library of Medicine; "Juke Joint Sniper: Syphilis and Gonorrhea," Images from the History of Medicine; see also Hegarty, *Victory Girls*, 107; Elizabeth Alice Clement, *Love for Sale: Courting, Treating, and Prostitution in New York City, 1900-1945* (Chapel Hill: University of North Carolina Press, 2006), 156.

³²⁴ Angel Ricardo Rodriguez, "Race, Syphilis, and Human Experimentation in Guatemala City, 1946-1948" (M.A. thesis, University of California, 2014), 24.

syphilis was considered particularly dangerous because it ignored social class and, through the body of the prostitute, could infiltrate "decent" society.

In an attempt to protect good Americans, the United States criminalized prostitution. Guatemala chose a different route. According to the Guatemalan Public Health Codes, prostitution was "a necessary evil" that they needed to regulate to contain the outbreak of venereal disease and to protect virginal daughters from the predatory advances of men.³²⁵ Neither the United States nor Guatemala included prostitutes in the category of "innocent victims" that needed protection. They may have been deemed unfortunate "fallen women" to be pitied, but they were also diseased bodies to be feared. American public health campaigns, including the USPHS study in Guatemala, were meant to protect the idealized wholesome American family. In the process, the health, sometimes even the lives of individual, marginalized Guatemalans was sacrificed.

³²⁵ Direccion General, "Reglamento de la Seccion," 3.

Conclusion: "The girls were quite apprehensive"³²⁶

Ana was paid twenty-five dollars, the equivalent of \$253 in 2011, to have sex with seven men on March 15, 1947. She was allowed to wash herself between every second encounter. The researchers continued to hire her throughout the next year. In total, she had sex 105 times at the researchers' bequest and, although she tested positive for gonorrhea before being sent to Dr. Cutler's team, she was still inoculated eleven times with different strains of the infection. It is unclear whether she was treated for these infections or not.³²⁷

Ana and other prostitutes who were hired by the researchers were not considered to be the subject of experimentation. She was just another "female donor" whose body was mined for infectious material. The researchers hired Ana to expose both herself and her sexual partners to infections. Regardless of what was perceived to be an unhealthy profession and unsanitary sexual practices, Ana and, by extension, her clients may never otherwise have been exposed to some of these experimentally transmitted strains of infection. When her body proved to be less infectious than desired, she was replaced by cotton pledgets and needles.

Although I use the vocabulary of "hiring," this may not, in fact, be the best way of describing the relationship between the researchers and the prostitutes. Some of the women were paid, certainly, but, for others, there are no records of payment.³²⁸ There is a general dearth of records on the prostitutes themselves, significant in part because it mirrors Dr. Cutler's neglect of and disinterest in the prostitutes. However, there may have been instances when the researchers

³²⁶ Index Card No. 1, Gonorrheal Experiment No. 1, folder 30, Records of Dr. John C. Cutler.

³²⁷ Presidential Commission, " 'Ethically Impossible'," 46, 183n364; Experiment No. 2 Gonorrhea Prophylaxis, March 15, 1947, Gonorrheal Experiment #2, folder 31, Records of Dr. John C. Cutler.

³²⁸ Presidential Commission, " 'Ethically Impossible'," 46.

did not pay the prostitutes, either because of neglect or disregard.

The women may have agreed to work in the prison system or among conscripted soldiers, but there is no evidence that they were fully informed of what the researchers were using their bodies for. In addition to engaging in sexual intercourse for, hopefully, payment, the women were infected with new or additional infections, and serologic tests and physical exams were performed on them. In other words, besides their role as workers, hired for sexual services, they took on an unacknowledged role as experimental subjects. Describing the interactions between the researchers and the prostitutes as instances of hiring sex workers does not fully capture the multiple roles of each actor.

Ana, and other female prostitutes, acted as sex workers when they engaged in sexual acts for the promise of financial payment; as objects of experimentation when their bodies were experimentally exposed to new infections; and as recalcitrant subjects of experimentation when they protected themselves from an invasive medical gaze. Dr. Funes, and the Guatemalan officials involved at various levels of the experiment, acted as significant medical researchers when the study was proposed, when they helped direct "donors" to the research team, and when they performed physical exams and serologic tests; as procurers when they sent prostitutes to Dr. Cutler; and as ethically implicated collaborators when they accepted personal and professional benefits from their close engagement in the study. Dr. Cutler, and the other American researchers, acted as public health officials when they performed prophylaxis demonstrations for the Guatemalan military; as medical researchers when they experimentally exposed Guatemalans to venereal infections; and as clients when they hired prostitutes.

The USPHS Study in Guatemala was the culmination of a particular set of circumstances that threw these three players, and their multiple roles, into close proximity, sometimes into collusion, but mainly into conflict. At times this was a direct conflict, as when subjects hid from the researchers or refused blood tests; but it was also a conflict of narratives based on each player's knowledge and perspective. For the women, this at times unusual job was not, as far as they knew, any more dangerous than the job they usually performed and might, in fact, contribute to their financial ability to survive. For the Guatemalan doctors, they were collaborating with cutting-edge research led by a leader in international public health. For Dr. Cutler's team, they were engaging in a medical experiment that might provide a break-through in the prevention of infections that had caused great economic and social ills and that spread rapidly between supposedly innocent and not-so-innocent victims.

The "Monstrous" Dr. Cutler

Contextualizing Dr. Cutler's actions is not meant to diminish the horror of what he chose to do. In fact, rendering Dr. Cutler a more complex human character is meant to discomfit readers by making him recognizable and bringing him in close proximity to ourselves and to our moral decisions. It is more comfortable to dismiss Dr. Cutler by othering him and his actions as evil. Reverby, after observing the media's trend to demonize Dr. Cutler, realized that "[i]f Dr. Cutler is productively to haunt our ethical and historical imaginations, it should be not just for what he did that we cannot imagine doing, but also for what he did that we *can* imagine doing, even when it

is horrific."³²⁹ As "the poster man for the problem of scientific passions left unchecked that trump human rights concerns, coupled to racist and seemingly evil assumptions about bodies made 'useful' for science," Dr. Cutler is a caricature of actions we would never take. As one recent news article realized, "It's easy to think he was a rogue doctor or a mad scientist. But his work was sponsored by lauded organizations."³³⁰

As the man who "believed strongly that women ought to be able to prevent infection and their own pregnancies," he becomes easier to identify with.³³¹ This forces us to ask more difficult questions about the continuity of practices and the current state of medical experimentation. On a larger scale, it sheds light on how we evaluate the utility of human bodies, and on the social role of medicine in healing and in policing sexual practices. As a demonized figure accused of deliberately evil actions, someone whose "name has become synonymous with unethical research," any moral judgements we pass on him will remain distanced from our own lives and present realities.³³² In essence, we dismiss the possibility that similar events might occur today, in our current sociopolitical reality, or that events that do occur today might share some similarities with what occurred then. By singling Dr. Cutler out, we place judgement squarely on the shoulders of one man, a man, it might be added, who is no longer alive. It tidily places the ethical failing in the past. As Reverby insightfully stated: "It is simpler to tell researchers *not* to be Dr.

³²⁹ Reverby, "Enemy of the People," 414.

³³⁰ Caplan, "Horrible Medical Tests."

³³¹ Reverby, "Enemy of the People," 408, 412.

³³² Spector-Bagdady and Lombardo, "'Something of an Adventure'," 697.

Cutler than it is to remind them they *could be* him."³³³ A more nuanced reading of his actions, one that takes into account the historical and institutional context in which he lived and worked, would analyze structural injustices *that still exist today*. A discussion that engaged with the "normative issue" of sex work might also shed light on international hierarchies of sexual health, and wellness.

Ana's Story

By focusing on Ana's story, and the social context in which she lived, I argue that marginalized bodies matter. By deconstructing Dr. Cutler's perceptions of his subject's bodies, and his language and actions in relation to those bodies, I illustrate the intersections between scientific knowledge, social prejudice, and rhetoric. How we talk about marginalized bodies also matters. In the struggle between history and remembrance, and between conflicting narratives of the past and of the role of medicine in our present, our most vulnerable world citizens are often caught in the cross-fire. Centering our narratives on the experimental subjects, especially those who are most often ignored, is not simply a matter of filling some ephemeral gap in the scholarship. Rather, and more importantly, tilting our narrative away from the medical researchers and towards the Guatemalan subjects highlights the multilayered complex of power that is an intrinsic part of international public health.

This viewpoint also highlights the agency of the human subjects. Power is always, in its essence, relational and wielded to varying degrees by everyone. The USPHS study in Guatemala

³³³ Susan M. Reverby, "Will the STI Studies in Guatemala be Remembered, and for What," *Sexually Transmitted Infections* 89, no. 4 (2013): 301.

is an excellent case study of multiple levels of power, from the macrocosm of international politics and dependency theory to the micro-resistances of individual refusals of blood withdrawals. Everyday emotionality, from anxiety to sexual desire, muddied the research parameters and reminded the USPHS researchers that humans were not simply larger Petri dishes.

The research subjects' bodies negotiated and navigated webs of identity constructed from local, national and international understandings of the meanings of "Indian," "Guatemalan," and "prostitute." Sexual practices and previous experiences, whether real (prostitutes did engage in unprotected sex for money) or imagined by the researchers (prostitutes may or may not have previously contracted a venereal disease), were important levers that supported the heavy weight of identity formation. Research into venereal disease prevention rested on preconceived notions of racialized gender and ideas of sexualized nationalism. In other words, the USPHS study was designed around a flawed disease model, one that posited that infections were always passed from an infected (often racialized) female body to an uninfected (often white) male body that represented and was needed in the defence of the national body. Sexually experienced women were already suspect, but indigenous women were even more so. This is in sharp contrast to white middle-class American women who were considered innocent victims of the syphilis epidemic and whose protection was a rallying cry in public health discourse.

The prostitutes' bodies were assumed to be diseased; such an assumption allowed the researchers to disregard the women's role as experimental subjects and to relegate them to the status of vectors of disease. Current historical and bioethical analysis of the USPHS study has

perpetuated this neglect. A narrative of the USPHS study that ignores the role of prostitution and the silences that veiled the key figure of the "infected woman" misses the point. The USPHS research was justified because it purported to study a natural disease transmission that began with women's bodies; its foreign location was justified because of the legality of prostitution that made women's bodies more readily accessible to the researchers. Despite the fact that the researchers explicitly concentrated on men, female bodies, both real and imagined, were at the centre of their research design and analysis. Ana deserves to be at the centre of ours.

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