

ABSTRACT

Title of Thesis: MIND BLOWN: U.S. INTELLIGENCE
AGENCY RESEARCH INTO MIND
CONTROL AND PSYCHIC ABILITIES, 1952-
1995

Eleanor Drummond, Master of Arts, 2025

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Starting in 1952, U.S. intelligence agencies dedicated resources to funding scientific research into mind control and psychic abilities, leading to the creation of the programs MK-ULTRA and STAR GATE. The U.S. Central Intelligence Agency (CIA) established the MK-ULTRA program in 1952 to research methods of brainwashing, and both the CIA and the U.S. Defense Intelligence Agency funded the STAR GATE program from 1972 to 1995, investigating methods of clairvoyant remote viewing. Both topics are today considered “pseudoscience,” but while STAR GATE researchers faced labels of “pseudoscientist,” brainwashing was not considered pseudoscience during the 1950s. I argue that the assumed reality of brainwashing meant that MK-ULTRA researchers did not feel pressure to make their experiments “scientific,” while skepticism and the controversy around the existence of psychic phenomena influenced STAR GATE researchers to make their experiments “scientific.”

MIND BLOWN: U.S. INTELLIGENCE AGENCY RESEARCH INTO MIND
CONTROL AND PSYCHIC ABILITIES, 1952–1995

by

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Introduction

During the latter half of the twentieth century, as they fought a war that had to remain cold, U.S. intelligence agencies became deeply invested in psychology for its potential to win wars without spilling blood.¹ However, in order to do so, intelligence agencies had to find ways to weaponize the human mind— and since they operated in secrecy, top officials could easily push aside concerns about acceptable science and pursue highly unorthodox lines of research, including mind control and clairvoyance through secret programs codenamed MKULTRA and STAR GATE, sponsored by the Central Intelligence Agency (CIA) and other agencies.² Although not directly related to each other— with different researchers, agency relationships, and methods— MKULTRA and STAR GATE both originated from a desire to manipulate the power of the human mind.³ Neither research program produced any verifiable results, yet many scientists at the time, and members of the public today, viewed MKULTRA as the more scientifically grounded of the two, while proponents of the STAR GATE program had to repeatedly argue for the validity of psychic phenomena as a research topic.⁴ As a result, CIA officials presumed MKULTRA was pursuing a valid line of research and did not subject the studies to close scientific scrutiny or require researchers to follow accepted scientific method, while STAR GATE researchers followed accepted scientific methods as closely as they could in

¹ “Planning for “Digest”, from Roger Dow to David J. Carpenter and Mr. Wilson, copy sent to Allan Evans,” 1957, Box 0007, Folder “OIR/PIRS-1957,” RG59, National Archives and Records Administration.

² Stephen Kinzer, *Poisoner in Chief: Sidney Gottlieb and the CIA Search for Mind Control*, First edition. (New York: Henry Holt and Company, 2019), 4; Edwin C. May and Sonali Bhatt Marwaha, eds, *The Star Gate Archives. Volume 1, Remote Viewing, 1972/1984 : Reports of the United States Government Sponsored Psi Program, 1972/1995* (Jefferson, North Carolina: McFarland & Company, Inc., Publishers, 2018), 8.

³ Kinzer, *Poisoner in Chief*, 4; May and Marwaha, *The Star Gate Archives*, 8.

⁴ Kinzer, *Poisoner in Chief*, 53; Massimo Introvigne, *Brainwashing : Reality or Myth?* (Cambridge: Cambridge University Press, 2022), 1.

an attempt to convince agency skeptics.⁵ The presumed validity of a research topic impacted how critically a research program was overseen, which determined how closely researchers felt required to adhere to scientific and ethical standards. CIA officials did not question the existence of brainwashing, and free from critical scrutiny, MK-ULTRA researchers conducted studies without regard for scientific or ethical standards; psychic research, however, was controversial, and STAR GATE researchers had to demonstrate their use and validity to critical observers.

Both the MKULTRA and STAR GATE programs grew out of the Cold War. The Cold War prompted the U.S. government to establish large intelligence agencies and government-funded science programs, creating the environment for intelligence agency scientific research programs such as MKULTRA and STAR GATE. Throughout the Cold War, the United States and the Soviet Union participated in a race to gain technological and scientific superiority, and U.S. intelligence agencies worked with scientists to develop research programs similar to those they believed the Soviet Union had.⁶ To the U.S. government, and particularly to their intelligence agencies, the Soviet Union posed an existential threat to America; intelligence officials viewed the Soviet Union as possessing both the will and the technoscientific skills to collapse Western society.⁷ The Soviet Union created its nuclear bomb shortly after the Americans had demonstrated their bomb at the end of World War Two, surprising some U.S. scientists who had been sure that the Soviet Union was decades from creating their own bomb.⁸ In response, the U.S. developed a bomb that was even more powerful— a hydrogen bomb— and in

⁵ Russell Targ, *Do You See What I See? : Memoirs of a Blind Biker* (Newburyport: Hampton Roads Publishing, 2010), 138.

⁶ Audra J. Wolfe, *Freedom's Laboratory : The Cold War Struggle for the Soul of Science* (Baltimore: Johns Hopkins University Press, 2018), 1-10.

⁷ Wolfe, *Freedom's Laboratory*, 45-48.

⁸ Wolfe, *Freedom's Laboratory*, 45-48.

the following decades, the U.S. and their allies, and the Soviet Union and their allies, would build bigger bombs and stockpile large numbers of bombs in the nuclear arms race. But nuclear bomb creation was not the only Soviet technological feat that shocked the United States; when the USSR launched Sputnik, the first man-made satellite, in 1957, the U.S. scrambled to respond and poured resources into the space race, which spurred development of U.S. rocketry and resulted in the U.S. placing the first man on the moon, cementing the U.S. reputation as a leader in space exploration. Developing rockets and nuclear bombs required significant amounts of money—adjusted for inflation, the U.S. government spent over 200 billion dollars on the Apollo program, and hundreds of billions of dollars on nuclear development.⁹

In order to improve military technological capability, the U.S. government also funded scientific research in fields such as physics, biology, oceanography, climatology, and chemistry. Developing scientific research programs could provide a basis for military superiority; research programs could develop more powerful weapons as well as offer ways to weaponize subjects of study.¹⁰ Biochemical research could produce weapons, as it did in the Korean and Vietnam wars, climatology research promised the ability to manipulate weather patterns to cause famines in the Soviet Union, and oceanography research allowed the U.S. Navy to better navigate the ocean and build more efficient submarines.¹¹ The Cold War became known as a golden era for scientific funding in the U.S., and the Soviet Union strove to keep up with, or outpace, the U.S. in technoscientific development.¹² Government funding for scientific research came from a

⁹ Roger Launius, *Reaching for the Moon: A Short History of the Space Race* (New Haven, CT : Yale University Press 2019), 72.

¹⁰ Naomi Oreskes, *Science on a Mission : How Military Funding Shaped What We Do and Don't Know about the Ocean* (Chicago: The University of Chicago Press, 2021), 1-15.

¹¹ Jacob Hamblin, *Arming Mother Nature : The Birth of Catastrophic Environmentalism* (Oxford, England: Oxford University Press, 2013); Oreskes, *Science on a Mission*, 39-45.

¹² Oreskes, *Science on a Mission*, 74.

number of different sources— Congress-budgeted scientific agencies such as the National Aeronautics and Space Administration (NASA), the National Science Foundation (NSF), the National Institute of Health (NIH), the Department of Defense’s Defense Advanced Research Projects Agency (DARPA), military branches such as the U.S. Navy and the U.S. Air Force, and intelligence agencies such as the CIA and the Defense Intelligence Agency (DIA).¹³

Intelligence agencies did not start as scientific research agencies, although their scope quickly expanded to include funding research projects. U.S. leaders granted intelligence officials a wide latitude to do what the intelligence officials felt was necessary to fight Communism and save America, with little need to account for their actions.¹⁴ Since intelligence agencies were concerned about the threat of Soviet scientific domination, they monitored Soviet laboratories and scientific publications as well as they could.¹⁵ This spurred technological development— in order to monitor top secret Soviet bases without detection, intelligence agencies wanted to use cutting-edge technology to spy on their enemy from great altitudes and from space— as well as scientific research. Intelligence agencies knew that the Soviet Union had secret research programs, and decided to counter with their own secret research programs.¹⁶ The CIA dedicated a branch to scientific and technological research, the Directorate of Science and Technology, in 1963.¹⁷ The Directorate of Science and Technology recruited agents with scientific backgrounds to manage research programs and contracted with external scientists and engineers to conduct the

¹³ Oreskes, *Science on a Mission*, 74; Wolfe, *Freedom’s Laboratory*, 1-10; Hamblin, *Arming Mother Nature*, 39-45.

¹⁴ Wolfe, *Freedom’s Laboratory*, 211-217. Top politicians such as President Ford attempted to shield the CIA from Congressional oversight, which they feared would hamper intelligence operations.

¹⁵ Wolfe, *Freedom’s Laboratory*, 8.

¹⁶ Launius, *Reaching for the Moon*, 72; Jeffery Richelson, *The Wizards of Langley : Inside the CIA’s Directorate of Science and Technology* (Boulder, Colorado: Westview Press, 2011), 13-20.

¹⁷ Richelson, *The Wizards of Langley*, 13-20. The office started as the Office of Scientific Intelligence, but it is now known as the Directorate of Science and Technology, although it was renamed in 1965.

majority of research and development.¹⁸ As a result, intelligence agencies cultivated close working relationships with universities, scientific agencies, and technological companies. The CIA worked with NASA to develop spy satellites and with Lockheed Martin to develop the U-2 spy plane, among other research partnerships. Internal agents also worked to create unobtrusive, disguised surveillance and assassination objects that agents could carry with them, such as exploding cigars.¹⁹

In order to maintain the effectiveness of their scientific and technological techniques, U.S. intelligence agencies attempted to prevent Soviet intelligence from learning about them. They worked hard to manage scientific research programs that were effective yet top secret, without the open sharing of ideas that many scientists advocated as necessary to the scientific process.²⁰ Contractor scientists who worked closely with intelligence agencies could publish the results of their experiments, but they could not mention intelligence agency involvement, and intelligence officials sometimes reviewed their papers to ensure the scientists did not include any compromising information.²¹ The intelligence utility of their research was kept quiet, and intelligence agencies rarely put scientists in contact with other scientists working on the same project; intelligence agencies prioritized secrecy.²² Scientists from different institutions could not work together to develop new ideas or review each other's work to evaluate their potential utility for intelligence gathering— if they knew that their research was in support of intelligence missions. Many scientists were unaware that intelligence agencies were funding their

¹⁸ Kinzer, *Poisoner in Chief*, 9-12.

¹⁹ Kinzer, *Poisoner in Chief*, 170-181.

²⁰ Kinzer, *Poisoner in Chief*, 40-42; Oreskes, *Science on a Mission*, 246.

²¹ "Planning for "Digest", from Roger Dow to David J. Carpenter and Mr. Wilson, copy sent to Allan Evans," 1957, Box 0007, Folder "OIR/PIRS-1957," RG59, Department of State, National Archives and Records Administration.

²² David H. Price, *Cold War Anthropology* (Duke University Press, 2016), 10-15.

experiments. Intelligence agencies established shell companies such as the Geshickter Fund, an outwardly private fund which funneled CIA money to scientists, through which they could funnel money for research development without detection.²³ As a result, their research programs were often siloed and splintered, and they rarely achieved quick and effective results from scientific research programs. Intelligence officials, not scientists, evaluated the research programs, and they were intrigued by the potential of science and technology.

Intelligence agencies' interest in science was not only fueled by fear of Soviet science, but by excitement for what else might be possible after the Manhattan Project had demonstrated that humans could split the atom to practical application.²⁴ Despite the failure of many of their research and development programs— the U-2 was a technological feat, but was spotted by the Soviet Union during one of its spy missions and shot down in 1960, less than five years after it became operational— intelligence agencies continued to pursue them.²⁵ The Manhattan Project had been a top secret research program that had produced a technological marvel that had seemed years away from fruition: the atomic bomb, which many Americans viewed as a technology of the future, had been brought into the present with awe-inspiring power.²⁶ Since the Manhattan Project had produced such results, intelligence officials believed that secret research programs could unlock new, previously unimaginable realities.²⁷ They funded research on the edge of the scientific frontier, hoping to create their own version of the atomic bomb. In particular, they saw the field of psychology as the next scientific field to shatter existing

²³ Price, *Cold War Anthropology*, 10-15.

²⁴ Wolfe, *Freedom's Laboratory*, 8-10; Kinzer, *Poisoner in Chief*, 16, 11.

²⁵ Richelson, *The Wizards of Langley*, 33; Price, *Cold War Anthropology*, 10-12.

²⁶ Wolfe, *Freedom's Laboratory*, 125-126.

²⁷ Wolfe, *Freedom's Laboratory*, 39-40; Kinzer, *Poisoner in Chief*, 16, 11.

paradigms.²⁸ They hoped to create a psychological equivalent of an atomic bomb, and took an approach similar to that of the Manhattan Project. The government recruited scientists from universities and contracted with private companies for supplies and technology development, hoping to guide the disparate actors to create an ultimate intelligence weapon.²⁹

In the mid-twentieth century, the field of psychology burgeoned; to intelligence officials such as the future CIA director Allen Dulles, it appeared to be rapidly developing towards a new understanding of the mind.³⁰ Sigmund Freud had popularized the field of psychology and his groundbreaking theories continued to influence mid-twentieth century psychology, but practical alternatives to Freudian psychoanalysis rose in strength in the mid-twentieth century. Freudian psychoanalysis rested on the idea that the human mind was unpredictable and difficult to control. Freud proposed that the mind was divided into three separate parts: the id, instinctive drive, the ego, rational thinking, and the superego, the conscience that mediates the id and the ego. He believed that the id, the unconscious mind governed by childhood trauma and sexual desire, was the true source of people's behavior and neuroses, and developed techniques of psychoanalysis—most famously, a patient lying on a couch talking to a psychoanalyst who guided them by asking questions about their dreams or their childhood—to access this unconscious mind. For much of the early twentieth century, Freudian psychoanalysis served as the framework for psychological research.³¹ However, when psychological researchers conducted experiments testing Freud's ideas in the 1920s and 1930s, they often struggled to find results confirming the existence of the

²⁸ Wolfe, *Freedom's Laboratory*, 56; "David Carpenter to Allan Evans, 9/23/57," September 23, 1957, Folder "OIR/PIRS-1957," Box 0007, RG59, National Archives and Records Administration.

²⁹ Price, *Cold War Anthropology*, 10-15; John Marks, *The Search for the "Manchurian Candidate"* (New York: Times Books, 1978), 35-36.

³⁰ Price, *Cold War Anthropology*, 13-16; Kinzer, *Poisoner in Chief*, 39-40.

³¹ Nicholas T. Rand and Maria Torok. *Questions for Freud: The Secret History of Psychoanalysis* (Cambridge, Mass: Harvard University Press, 1997), 34-40.

id, ego, or superego.³² Freud had rarely conducted experiments, instead describing case studies of his patients, and many of his theories were difficult to test.³³ As psychologists grew increasingly interested in identifying as scientists— an increasingly well-funded and respected profession— and doing scientific research, they distanced themselves from Freud. B.F. Skinner and Pavlov studied the theory of behaviorism— that human behavior was governed, not by the mind, but by conditioning to encourage or discourage certain behaviors— and the field of neuroscience began to develop, with psychologists researching methods of correcting undesired thoughts and behaviors with medication and surgery during the psychopharmacology revolution of the 1950s.³⁴ Each of these theories purported to explain how the human mind worked, and how it would be possible to shape it.

The ability to understand and manipulate minds appealed to U.S. intelligence agencies, who were particularly interested in psychology even if they did not always understand the science, as a way to win the Cold War in people’s “hearts and minds” while keeping the war cold.³⁵ In a confidential report on research responsibilities in 1952, an intelligence official argued that the “The most important of these [facets of intelligence production] is the Psychological Intelligence Research Staff,” a department established by the Department of State.³⁶ Intelligence officials took a broad view of psychology as a way to gather intelligence on how people thought, and how to alter that thinking. Agents prepared psychological reports on various countries that described what the attitudes of that country’s citizens was towards the U.S. and how to influence

³² John A. Mills. *Control: A History of Behavioral Psychology* (1st ed. New York: New York University Press, 1998): <https://doi.org/10.18574/nyu/9780814759967>, 66-71.

³³ Rand and Torok, *Questions for Freud*, 42.

³⁴ Mills, *Control*, 66-71.

³⁵ Wolfe, *Freedom’s Laboratory*, 3.

³⁶ “Confidential Report on R’s Responsibilities,” 1952, Box 0069, Folder VII. Psychological Strategy Board, RG59, National Archives and Records Administration.

feelings to be more positive. Propaganda, in intelligence agencies, was called “psychological warfare,” and comprised a significant amount of intelligence efforts; according to the 1952 confidential research responsibility report, “a sizeable and ever-growing demand of intelligence production arises in the psychological warfare field.”³⁷ However, some intelligence officials came to believe that the term “psychological warfare” was limiting, and should instead be called “public communications,” to better reflect the scope of their activities: a department of defense research agent argued in a letter to a department of defense evaluating official that the term psychological warfare “grossly distort[ed] the total picture of a government’s over-all use of all media of communication to influence in its favor domestic and foreign opinion the world around.”³⁸ Intelligence agencies, particularly in the early 1950s, saw psychology as a propaganda tool more than a scientific discipline.³⁹ The U.S. had conducted psychological warfare during World War Two using methods such as dropping propaganda leaflets.⁴⁰ However, at the start of the Cold War, intelligence officials searched for standardized methods of influencing opinion to consistently achieve the same result—reliability, in scientific terms—and started funding experiments to develop the “mind frontier.”⁴¹ Championed by Allen Dulles, intelligence agencies pursued a wide variety of psychological research topics, from the widely accepted theory of brainwashing to the controversial field of parapsychology.⁴²

³⁷ “Confidential Report on R’s Responsibilities,” 1952, Box 0069, Folder VII. Psychological Strategy Board, RG59, National Archives and Records Administration.

³⁸ “CIR/NIS Cyrus E. Peake to ERS Nathan A. Pelcovite,” October 19, 1955, Box 0005, Folder NIS-PEAKE, VX. 1954, RG59, National Archives and Records Administration.

³⁹ Wolfe, *Freedom’s Laboratory*, 3.

⁴⁰ Allison B. Gilmore. *You Can’t Fight Tanks with Bayonets: Psychological Warfare Against the Japanese Army in the Southwest Pacific. Studies in War, Society, and the Military* (Lincoln: University of Nebraska Press, 1998), 2.

⁴¹ Wolfe, *Freedom’s Laboratory*, 18; Richelson, *The Wizards of Langley*, 57.

⁴² Kinzer, *Poisoner in Chief*, 39; May and Marwaha, *The Star Gate Archives*, 8-13.

In 2025, most psychologists consider both brainwashing— at least, the 1950s theory of brainwashing— and parapsychology to be pseudoscience.⁴³ While proponents of these theories do not consider themselves pseudoscientists, the majority of the scientific community not only rejects their conclusions, but characterizes their research as straying too far from accepted scientific method to be called science. It is false, pseudo, science.⁴⁴ Brainwashing— the theory that, by using a set of specific techniques, someone could “[transform] the free human mind into an automatically responding machine”— was poorly studied in the 1950s and 1960s.⁴⁵ It became a major topic of discussion and research after the Soviet Union arrested Cardinal József Mindszenty, and he gave an apparently false confession in 1949.⁴⁶ These early brainwashing studies did not follow psychological experimental protocols, such as control groups and statistical analysis, that would become standard psychological science practice in the latter half of the twentieth century.⁴⁷ However, brainwashing did not conflict with popular psychological theories at the time, and remained widely accepted. Some psychologists expressed skepticism about “the empirical bases for the conclusions and broad generalizations” of brainwashing research, but they did not consider brainwashing researchers to be pseudoscientists.⁴⁸

Parapsychology, on the other hand, was never widely accepted. Parapsychologists researched psychic phenomena, such as telekinesis and telepathy, that were supposed examples

⁴³ Michael D. Gordin, *Pseudoscience : A Very Short Introduction* (New York, NY: Oxford University Press, 2023), 73-77; Introvigne, *Brainwashing*, 1.

⁴⁴ Gordin, *Pseudoscience*, 73-77.

⁴⁵ Joost A. M. Meerloo, *The Rape of the Mind: The Psychology of Thought Control, Menticide, and Brainwashing* (Cleveland, Ohio: The World Publishing Company, 1956), 13; Introvigne, *Brainwashing*, 1.

⁴⁶ Kinzer, *Poisoner in Chief*, 42.

⁴⁷ Some would argue that brainwashing remains poorly studied— there is no single definition of brainwashing that researchers use, making it difficult to ascertain whether such a phenomenon exists. Introvigne, *Brainwashing*, 2-3.

⁴⁸ Sydney H. Croog, “Review of Thought Reform and the Psychology of Totalism: A Study of ‘brainwashing’ in China and Coercive Persuasion: A Socio-Psychological Analysis of the ‘Brainwashing’ of American Civilian Prisoners by the Chinese Communists,” *American Journal of Orthopsychiatry* 31, no. 4 (October 1961): 832–35, <https://doi.org/10.1111/j.1939-0025.1961.tb02182.x>.

of the “obscure and startling powers of the human mind and body,” but most scientists never believed such phenomena really existed.⁴⁹ However, despite the evidence or lack thereof, both brainwashing and psychic abilities offered tantalizing possibilities to intelligence officials searching science for unexpected ways to gain the upper hand against the Soviet Union.⁵⁰

The Cold War impacted science as the U.S. government devoted funding to scientific research in order to win the Cold War, as historians Naomi Oreskes and Audre Wolfe explore.⁵¹ In *Science on a Mission: How Military Funding Shaped What We Do and Don't Know about the Ocean*, Naomi Oreskes discusses the history of oceanography, and how it changed when the U.S. Navy became a major source of funding; the Navy funded research into ocean currents and the seafloor, but they prioritized data collection over analysis and classified information, resulting in oceanography becoming a field focused on those subjects rather than geological movement of tectonic plates under the ocean floor. While the government did not specifically direct basic research into oceanography, its interest in basic research was determined by the potential for application, which led oceanographers to be more interested in studies that could have immediate use, such as the movement of ocean currents.⁵² Audra Wolfe also writes about the impact of Cold War funding in *Freedom's Laboratory: The Cold War Struggle for the Soul of Science*. She focuses on the perspective of the government, and argues that the government funded scientific research during the Cold War in order to create a diplomatic, rather than military, tool. Diplomacy and propaganda were powerful ways to spread U.S. influence and enact its policy of containing the Soviet Union. Psychological research appealed to U.S. intelligence officials for its

⁴⁹ May and Marwaha, *The Star Gate Archives*, 15; Richard Noakes, *Physics and Psychics : The Occult and the Sciences in Modern Britain* (Cambridge: Cambridge University Press: 2019), 2.

⁵⁰ May and Marwaha, *The Star Gate Archives*, 15; Marks, *The Search for the “Manchurian Candidate,”* 61.

⁵¹ Oreskes, *Science on a Mission*; Wolfe, *Freedom's Laboratory*.

⁵² Oreskes, *Science on a Mission*, 56, 202, 55.

propaganda, or “psychological warfare,” potential, but propaganda also led the U.S. government to fund general basic research, which allowed the U.S. to claim that it— unlike the Soviet Union— supported science free from undue government meddling. This meant that the U.S. defense industry rarely demanded that scientists find a specific result, and that scientists enjoyed significant government funding during the Cold War.⁵³ Neither Wolfe nor Oreskes discuss the MK-ULTRA or STAR GATE programs in detail, but their books provide an understanding of the programs’ context.⁵⁴ Cold War science, as Oreskes and Wolfe demonstrate, is a topic of interest to many historians of science, but it is a broad subject.⁵⁵ Relatively few historians have focused on the STAR GATE or MK-ULTRA programs, although some historians of science have written about these programs.⁵⁶ Histories of the MK-ULTRA program often focus on the unethical nature of the experiments rather than their validity, histories of STAR GATE are usually smaller parts of larger histories of parapsychology or pseudoscience, and no historian has written about both in the same book.⁵⁷

Many histories of MK-ULTRA have been written; however, as Michael Gundan argued in his book *Sensory Warfare in the Global Cold War: Partition, Propaganda, Covert Operations*, “Academics seem reluctant to investigate the matter and have left the subject largely to journalists and a handful of freelance writers.”⁵⁸ Of the histories written by journalists and independent writers, two have been particularly influential and are cited in virtually every

⁵³ Wolfe, *Freedom’s Laboratory*, 1-3, 24-219, 135-136.

⁵⁴ Oreskes, *Science on a Mission*; Wolfe, *Freedom’s Laboratory*.

⁵⁵ Walter Grunden, “Chapter Nine: Hallucinated Sensations: Brainwashing and Mind Control in Psychochemical CIA Experiments,” 167-183 in Mrozek, Bodo, ed., *Sensory Warfare in the Global Cold War : Partition, Propaganda, Covert Operations*, First edition (University Park, PA: The Pennsylvania State University Press, 2024), 4.

⁵⁶ Grunden in *Sensory Warfare*, 4; David Kaiser, *How the Hippies Saved Physics : Science, Counterculture, and the Quantum Revival* (1st ed. New York: W.W. Norton, 2011); Gordin, *Pseudoscience*, 73-77.

⁵⁷ Grunden in *Sensory Warfare*, 4; May and Marwaha, *The Star Gate Archives*, 1-11.

⁵⁸ Grunden in *Sensory Warfare*, 4.

academic book or article that exists on the subject: *The Search for the “Manchurian Candidate”*: *The CIA and Mind Control* by John Marks, and *Poisoner in Chief: Sidney Gottlieb and the CIA Search for Mind Control* by Stephen Kinzer. Marks wrote *The Search for the “Manchurian Candidate”* in 1979, after discovering a cache of CIA records on MK-ULTRA that had escaped destruction. This was the first comprehensive history of the program, and made many details of MK-ULTRA known and available to the public.⁵⁹ *Poisoner in Chief* is much more recent than *The Search for the “Manchurian Candidate”* and was published in 2019.⁶⁰ While Kinzer did not uncover CIA secrets as Marks had, he organized the history into a narrative following the career of Sidney Gottlieb, the scientist in charge of MK-ULTRA. Kinzer explores the dichotomy between Gottlieb’s personal life— all who knew him described him as affable and kind— and the unethical actions he took as the head of the MK-ULTRA program, authorizing and conducting experiments on unaware or unwilling human subjects. Kinzer attempts to explain how and why otherwise good people can do bad things. However, his argument— that fear, groupthink, and lack of accountability can create an environment where immoral actions are not questioned— is not the strongest part of his book, which often detours from that theme to explore one of the many stories of MK-ULTRA and its subprojects. *Poisoner in Chief* serves as an engaging, readable, and comprehensive history of MK-ULTRA.⁶¹

However, some academics have published histories of MK-ULTRA in recent years, such as Joel E. Dimsdale’s *Dark Persuasion: A History of Brainwashing from Pavlov to Social Media* and Andreas Killen’s *Nervous Systems: Brain Science in the Early Cold War*.⁶² In *Dark*

⁵⁹ Marks, *The Search for the “Manchurian Candidate,”* xiv.

⁶⁰ Marks, *The Search for the “Manchurian Candidate”*; Kinzer, *Poisoner in Chief*.

⁶¹ Kinzer, *Poisoner in Chief*, 1-20, 240-246.

⁶² Joel E. Dimsdale, *Dark Persuasion: A History of Brainwashing from Pavlov to Social Media* (Yale University Press, 2021): <https://doi.org/10.2307/j.ctv1prsst3>; Andreas Killen, *Nervous Systems: Brain Science in the Early Cold War : Brain Science in the Early Cold War* (US: Harper Paperbacks, 2025).

Persuasion, Dimsdale, a psychologist, analyzes the development of brainwashing in the 20th century and beyond, focusing on techniques and ideologies labeled brainwashing rather than on the scientific concept of brainwashing and the debate surrounding it. He acknowledges that the term brainwashing is “silly and unscientific,” and is “vague,” but does not explain why scientists might consider brainwashing to be “unscientific,” or provide his own definition of brainwashing.⁶³ In his book, brainwashing is a technique—or perhaps a set of techniques—that the USSR invented, the U.S. developed, and cults “stumbled on.”⁶⁴ While the USSR, U.S., and cults undeniably all use methods of culture and persuasion, this is not evidence to support Dimsdale’s argument that there was an invention and linear development of brainwashing as a unique phenomenon.⁶⁵ Killen, on the other hand, focuses on both scientific and public reactions to brainwashing in *Nervous Systems*. He situates brainwashing as part of psychological science in the Cold War, rather than concentrating solely on brainwashing. This allows him to critically analyze how brainwashing fit into the existing Cold War psychology programs, as well as how those programs extended beyond brainwashing and MK-ULTRA.⁶⁶

While several authors have written books about MK-ULTRA, there are no academic books about the STAR GATE program, there are a few books that discuss it, including *How the Hippies Saved Physics* by David Kaiser and *Pseudoscience: A Very Short Introduction* by Michael Gordin.⁶⁷ The generous federal funding for scientific research that Oreskes and Wolfe describe did not remain constant, as David Kaiser explores in *How the Hippies Saved Physics: Science, Counterculture, and the Quantum Revival*. According to Kaiser, when the federal

⁶³ Dimsdale, *Dark Persuasion*, viii-xii.

⁶⁴ Dimsdale, *Dark Persuasion*, viii.

⁶⁵ Dimsdale, *Dark Persuasion*, viii.

⁶⁶ Killen, *Nervous Systems*, 1-3, 15-30.

⁶⁷ Kaiser, *How the Hippies Saved Physics*; Gordin, *Pseudoscience*.

government reduced its spending on physics research in the 1970s, young physicists looked to unconventional research topics, such as quantum physics and psychic phenomena, in order to further their careers.⁶⁸ At Stanford University, these physicists coalesced into a club called the Fundamental Fysiks Group, which influenced scientists at the Stanford Research Institute (SRI) who did work for the STAR GATE program. The STAR GATE program falls under the the scope of Kaiser's work, and unlike Noakes, Oreskes, and Wolfe, he explicitly discusses it.⁶⁹ Parapsychology research is not the main focus of *How the Hippies Saved Physics*, but Kaiser argues that it played a role in influencing scientists' interest in finding new theories of reality.⁷⁰ However, psychic research remained controversial, and never fully shed a label of pseudoscience, as Michael Gordin points in his pocket-book history, *Pseudoscience: A Very Short Introduction*. Gordin argues that pseudoscience is a social label thrust upon disciplines that claim to be scientific but that orthodox scientists have judged to be unscientific, and not the result of a discipline failing criteria for a test that would separate science from pseudoscience. Psychic research, Gordin says, is among the oldest and largest pseudoscience fields, but it is not considered to truly be science. Gordin's book provides a helpful understanding of the pressures that STAR GATE researchers were under, as they had to argue that psychic research was not pseudoscience and was worthy of serious scientific investigation.⁷¹ For several decades, they succeeded.⁷²

In this thesis, I will explore why intelligence agencies funded MK-ULTRA and STAR GATE, and how and why scientists participated in the programs. My thesis will contribute to the

⁶⁸ Kaiser, *How the Hippies Saved Physics*, 50-55.

⁶⁹ Kaiser, *How the Hippies Saved Physics*, xxvi; Oreskes, *Science on a Mission*; Wolfe, *Freedom's Laboratory*.

⁷⁰ Kaiser, *How the Hippies Saved Physics*, 62-69.

⁷¹ Gordin, *Pseudoscience*, 73-77.

⁷² May and Marwaha, *The Star Gate Archives*, 1-11.

historical discussion of brainwashing by arguing that one of the most infamous examples of brainwashing, MK-ULTRA, was not concerned with contemporary scientific standards. This analysis of brainwashing science and its context in the early 1950s will add to the scholarship of authors such as Dimsdale by offering a critical understanding of how the concept of brainwashing developed, and the scholarship of authors such as Killen by focusing on the contested scientific nature of MK-ULTRA research.⁷³ My thesis will also contribute to the historical discussion of STAR GATE by providing a focused history of the program and how researchers justified their STAR GATE studies. I hope to read more histories of the STAR GATE program in the future. In this thesis, I will start with MK-ULTRA, the earlier and more infamous program, in Chapter One. Chapter One will analyze the origins of MK-ULTRA and the methodology of both internal and external researchers, as well as how both scientists and officials evaluated their work. Chapter Two will examine the STAR GATE program, focusing on two of the most major projects: remote viewing and astral projection via the Gateway process. I argue that the assumed reality of brainwashing meant that MK-ULTRA researchers did not feel pressure to make their experiments “scientific,” while skepticism and the controversy around the existence of psychic phenomena influenced STAR GATE researchers to make their experiments “scientific.”

⁷³ Dimsdale, *Dark Persuasion*; Killen, *Nervous Systems*.

Chapter 1: Minds Like Machines— Brainwashing and the MK-ULTRA Program

Introduction

In this chapter, I will provide a general history and background of the MK-ULTRA program, which the CIA established the MK-ULTRA program in 1953 to research methods of brainwashing, and explore how unexamined biases and beliefs shaped the program. I will start with MK-ULTRA research methodology, analyzing the impact of secrecy on both internal and external research, and will move to how the program was evaluated. Despite producing few practical results, MK-ULTRA received funding for a decade until Sidney Gottlieb ended brainwashing research in 1963.⁷⁴ I will end with an examination of the legacy of MK-ULTRA on both the CIA and the scientific community.

In 1949, the Communist Hungarian People’s Republic tried Cardinal József Mindszenty for treason against the government after he denounced the government’s dissolution of religious orders. The trial was televised, and when Mindszenty dazedly confessed to crimes he had apparently not committed, watchers in the U.S. became worried that the Soviet Union had developed new methods of manipulation.⁷⁵ Those fears crystallized in 1953, when the Democratic People’s Republic of Korea released video of captured U.S. soldiers confessing to war crimes; they appeared dazed, just as Mindszenty had, and spoke in a “robotic” monotone. Some elected to remain in Korea rather than return to the U.S., shocking CIA officials.⁷⁶ They became convinced that the People’s Republic of China and the Soviet Union had developed mind control techniques, such as a “lie serum” and conditioning methods based on the research of the

⁷⁴ Kinzer, *Poisoner in Chief*, 198.

⁷⁵ Marks, *The Search for the “Manchurian Candidate,”* 23-25.

⁷⁶ Grunden in *Sensory Warfare*, 168-169.

behaviorist Ivan Pavlov, and that the U.S. needed to close the “mind control gap.”⁷⁷ They started a scientific research program, which would become known as MK-ULTRA, to create their own methods of brainwashing. MK-ULTRA scientists and CIA leaders believed in the threat of Communism and the viability of brainwashing as common sense facts that went hand in hand with each other, and brainwashing was a generally accepted area of research among psychologists at the time.⁷⁸ As a result— and unlike STAR GATE researchers, which I will discuss more in the next chapter— MK-ULTRA researchers rarely had to justify their program’s continued existence by arguing that brainwashing was indeed a real phenomenon.⁷⁹ MK-ULTRA researchers did not have to demonstrate that brainwashing was a scientifically valid line of research, which would have been established by basic research and following accepted scientific methods.⁸⁰ MK-ULTRA researchers were unusually siloed from their fellow scientists. In the 1950s, mainstream U.S. scientists did not have formal, standardized research oversight, were not required to provide proof that research subjects had consented to research participation, and had no system of peer review before publication.⁸¹ Scientists believed that they did not need strict, systematic oversight; they felt that systems such as Institutional Review Boards would do harm by inhibiting or delaying research, and that scientists were educated and moral enough that oversight would not be necessary.⁸² However, there was “no debate whether researchers needed

⁷⁷ Allan Dulles, “Remarks at the National Alumni Conference of the Graduate Council of Princeton University at Hot Springs, Virginia,” (April 10, 1953), CIA.gov; Grunden in *Sensory Warfare*, 171.

⁷⁸ Kinzer, *Poisoner in Chief*, 53-55; Edward Hunter, *Brain-Washing in Red China*, New Ed. (Vanguard Press, 1953), 6-7.

⁷⁹ May and Marwaha, *The Star Gate Archives*, 1-23; Marks, *The Search for the “Manchurian Candidate,”* 61.

⁸⁰ Marks, *The Search for the “Manchurian Candidate,”* 79-85.

⁸¹ Laura Stark, *Behind Closed Doors : IRBs and the Making of Ethical Research. Morality and Society Series* (Chicago: University of Chicago Press, 2012)7; Melinda Baldwin, “Scientific Autonomy, Public Accountability, and the Rise of ‘Peer Review’ in the Cold War United States,” *Isis 109*, no. 3 (2018): 538–58. <https://doi.org/10.1086/700070>.

⁸² Stark, *Behind Closed Doors*, 114-115.

to get consent,” and scientists expected to publish their studies so other scientists could evaluate their research, even if they did not yet have to submit their work to systemized peer review.⁸³ MK-ULTRA scientists neither obtained consent nor published their research.⁸⁴ CIA leaders were unconcerned with scientific validity, and MK-ULTRA researchers did not have to report to any critical external oversight.⁸⁵ They concentrated on applied research without the need to show that brainwashing existed and was supported by the scientific field of psychology.⁸⁶

The growing field of psychology captured the interest of senior CIA officials such as Allen Dulles, and the desire for a method of mind control prompted the CIA to develop a secret program to conduct such research through the MK-ULTRA program. The program went through several periods of alternating focus and leadership, including Projects BLUEBIRD and ARTICHOKE, which researched the same subject as MK-ULTRA: controlling a person’s mind.⁸⁷ This would allow the CIA to force enemy agents to assassinate someone or share state secrets, protect their own secrets by making CIA agents forget targeted memories, and ensure the loyalty of Soviet deserters, among other benefits.⁸⁸ Project BLUEBIRD had started in 1950, but barely a year after its inception, Allen Dulles— now deputy director of the CIA— believed it had lost focus, and consolidated research into a new program, titled Project ARTICHOKE. Dulles believed that the Soviet Union had a “lie serum,” and wanted the CIA to develop its own mind

⁸³ Stark, *Behind Closed Doors*, 114; Baldwin, “Scientific Autonomy,” 538-540.

⁸⁴ Marks, *The Search for the “Manchurian Candidate,”* 79-85.

⁸⁵ Marks, *The Search for the “Manchurian Candidate,”* 61, 79-85.

⁸⁶ Introvigne, *Brainwashing*, 13-15.

⁸⁷ Marks, *The Search for the “Manchurian Candidate,”* 24-33.

⁸⁸ The program was called by code names, selected by those involved in its creation; the code names usually had some special meaning to those who came up with the names. For example, Allan Dulles’s favorite vegetable was artichokes. Later, the program’s code names would start with the prefix “MK,” indicating that they were part of the Technical Services Staff division. These code names would include MK-ULTRA as well as MK-DELTA, a support program for MK-ULTRA that was “established to govern the use of MKUltra materials abroad” (Church Committee Report, p.391), MK-SEARCH, which involved practical applications of MK-ULTRA research, and MK-NAOMI, which continued researching poisons until 1973. Marks, *The Search for the “Manchurian Candidate,”* 61-62, 211-215.

control drug.⁸⁹ The focus on drug development brought an emphasis on chemistry, and MK-ULTRA eventually branched into two areas of concentration: poison development and the creation of a brainwashing drug.⁹⁰ To head this program, the CIA recruited Sidney Gottlieb, a chemist working as a research associate at the University of Maryland, to— as Gottlieb described it— “organize a group of chemists to pursue the kind of work that the CIA thought they were interested in.”⁹¹ Dulles and another senior CIA official, Richard Helms, promoted Gottlieb to Chief of the Chemical Division of the Technical Services Staff, where he oversaw the mind control project. In 1953, Dulles became head of the CIA, and turned Project ARTICHOKE into a new program: MK-ULTRA. Under Gottlieb’s control, MK-ULTRA expanded significantly; by the time of its official dissolution, MK-ULTRA had over one hundred subprojects investigating any possible method of brainwashing, including hypnosis, neurosurgery, sensory deprivation, and a variety of drugs from marijuana to heroin.⁹² Sidney Gottlieb particularly emphasized the potential of a substance that would become the primary tool of MK-ULTRA: lysergic acid diethylamide, or LSD.⁹³

Gottlieb and other MK-ULTRA scientists considered LSD to be the most promising substance, owing as much to its known hallucinogenic properties as to its unknown properties, which gave the drug the potential to be a miracle drug. LSD was a relatively new substance; Dr. Albert Hofmann, a chemist at a Swiss pharmaceutical company, had first created LSD in 1939 and subsequently discovered its use as a hallucinogen in 1943. Psychiatrists became interested in

⁸⁹ Dulles, “Remarks”; Marks, *The Search for the “Manchurian Candidate,”* 60-61.

⁹⁰ Kinzer, *Poisoner in Chief,* 44.

⁹¹ Sidney Gottlieb, “Deposition of Sidney Gottlieb, PhD, in Civil Action No. 80-3163, Mrs. David Orlikow, et al., Plaintiffs, vs. United States of America, Defendant,” May 17, 1983, 174 Pp, National Security Archive.edu.

⁹² Kinzer, *Poisoner in Chief,* 40-49; Marks, *The Search for the “Manchurian Candidate,”* 44-45.

⁹³ Bruce Shlain and Martin A. Lee, *Acid Dreams : The Complete Social History of LSD : The CIA, the Sixties and Beyond* (London: Pan, 2001), 7-15.

the drug after World War Two, hoping that it would cure schizophrenia and spreading it to their colleagues. After taking it himself in 1951– as many other psychiatrists did– Gottlieb became convinced that LSD would be, as Kinzer described it, “the key to mind control.”⁹⁴ LSD, unlike many of the other drugs tried under Projects BLUEBIRD and ARTICHOKE, was a powerful hallucinogenic that was relatively safe.⁹⁵ Chemists and psychiatrists had not yet determined the extent of its properties, or its potential. The unknown possibilities led Gottlieb– and other scientists unaffiliated with the MK-ULTRA program– to believe that LSD could be the drug that would unlock their ambitions.⁹⁶ Self-experimentation with LSD, which was common at the time, only strengthened such hopes; one of the effects of acid trips is a sense of euphoria and of being at one with the universe, with a feeling that there is little difference between the self and the world.⁹⁷ This could be a potentially mind-changing experience. There was little evidence LSD would allow a scientist to control another person’s mind, but there was not yet evidence that LSD would be ineffective in doing so. While mainstream psychiatrists experimented with LSD as a way to cure hysteria and schizophrenia, MK-ULTRA scientists researched how LSD could be used to brainwash people.⁹⁸

⁹⁴ Grunden in *Sensory Warfare*, 173-179; Kinzer, *Poisoner in Chief*, 85-86, 100. The CIA would order large quantities of LSD from the Swiss company– Sandoz Pharmaceutical Corporation– to the point that it became difficult for other interested parties to obtain the drug. Eventually CIA chemists learned how to produce it themselves. As a result of CIA efforts, LSD became widely available in the U.S., particularly among academics, and indirectly contributed to the hippie movement.

⁹⁵ Danielle Giffort, *Acid Revival: The Psychedelic Renaissance and the Quest for Medical Legitimacy* (Minneapolis; University of Minnesota Press, 2020), 2-4.

⁹⁶ Marks, *The Search for the “Manchurian Candidate,”* 65; Giffort, *Acid Revival*, 51-55

⁹⁷ In the 1950s, it was not unusual for scientists to experiment on themselves. The Nuremberg Code included a clause that researchers should not subject participants to dangers that they would not take themselves. Giffort, *Acid Revival*, 55, 60; Stark, *Behind Closed Doors*, 103.

⁹⁸ Giffort, *Acid Revival*, 57-59; Kinzer, *Poisoner in Chief*, 35-36, 59-60.

Armed with new substances and generous financial support, MK-ULTRA researchers dove into exploring brainwashing.⁹⁹ They contracted with external academic researchers to establish methods of coercive persuasion and dosage limits, and their internal researchers, with access to the subjects the CIA wished to brainwash, conducted their own brainwashing attempts.¹⁰⁰ Brainwashing had not yet been scientifically established— despite MK-ULTRA funding of external research— but the CIA treated it as a reality. They were interested in how they could protect American agents from Soviet mind control and in how they could brainwash others, both Soviet agents and their own agents.¹⁰¹ Researchers expressed fears that entire societies could be brainwashed, as they struggled to understand why people adopted ideologies such as fascism and Communism.¹⁰²

Thinking the Unthinkable

MK-ULTRA was a Cold War program, but had roots in World War Two scientific research. At the end of the war, the U.S. feared that the USSR would recruit the scientists of their defeated enemies Germany and Japan, and so the U.S. worked to recruit them first.¹⁰³ This included Shiro Ishii, who had been the head of Japan’s infamous Unit 731, conducting a barrage of medical experiments on victims in China, as well as Kurt Blome and former general Walter Schreiber, who had overseen experiments with mescaline on victims at concentration camps.¹⁰⁴

⁹⁹ Marks, *The Search for the “Manchurian Candidate,”* 61-66.

¹⁰⁰ U.S. Central Intelligence Agency, “Memorandum for Director of Central Intelligence, “Successful Application of Narco-Hypnotic Interrogation (ARTICHOKE),” CIA FOIA; U.S. Central Intelligence Agency, “Memorandum for Director of Central Intelligence, “Project MKULTRA, Subproject 35,” Top Secret, November 15, 1954, National Security Archive.edu.

¹⁰¹ Marks, *The Search for the “Manchurian Candidate,”* 61-66.

¹⁰² Hunter, *Brain-Washing in Red China,* 10-12.

¹⁰³ Marks, *The Search for the “Manchurian Candidate,”* 11.

¹⁰⁴ Unit 731 experiments included, but were not limited to, tying victims to stakes in the snow to see how long frostbite took to set in, infecting victims with various diseases to see how long they could survive, and conducting vivisections on victims while they were still alive. Unlike Blome, Ishii was not recruited to serve as an active

MK-ULTRA officials recruited them to supervise brainwashing experiments done on Soviet “expendables” held at a safehouse in West Germany in the early 1950s.¹⁰⁵ The CIA disregarded the Nuremberg Code, which was a set of ten rules—the first and most central of which was voluntary consent—that Allied scientists had established in 1947 in reaction to Nazi experiments during the Holocaust.¹⁰⁶ The CIA was not put off by this professional condemnation of Nazi experimental ethics, and employed former Nazi doctors. MK-ULTRA researchers felt the mescaline experiments showed promise, and wanted to utilize that research to their own ends. With the assistance of doctors such as Blome and Schreiber, they hoped to create a method of brainwashing a targeted individual.¹⁰⁷

However, researchers also published work on the methods of mass Nazi brainwashing and the possibility of resisting targeted brainwashing. The Dutch social psychologist Joost A. M. Meerloo argued that modern brainwashing had originated with the Nazis in his 1956 book *The Rape of the Mind: The Psychology of Thought Control, Menticide, and Brainwashing*. Meerloo claimed that there were two kinds of brainwashing, one that was insidious and directed at the masses, and one that was “brutal” and directed at an individual.¹⁰⁸ He pointed to the 1933 confession of Marinus Van der Lubbe to burning the Reichstag, not Cardinal József Mindszenty’s confession in 1949, as the first example of modern brainwashing targeting an individual. While few others claimed that Van der Lubbe’s confession was the result of

scientist. The U.S. promised him immunity, and protection from Chinese and Soviet officials who wished to prosecute him for the crimes of Unit 731, in exchange for his reports of Unit 731 results. Marks, *The Search for the “Manchurian Candidate”*; Alfred W. McCoy, “Science in Dachau’s Shadow: Hebb, Beecher, and the Development of CIA Psychological Torture and Modern Medical Ethics,” *Journal of the History of the Behavioral Sciences*, Volume 143 (4), 2007, 411-412.

¹⁰⁵ McCoy, “Science in Dachau’s Shadow,” 411-412.

¹⁰⁶ Stark, *Behind Closed Doors*, 7.

¹⁰⁷ McCoy, “Science in Dachau’s Shadow,” 411-412.

¹⁰⁸ Meerloo, *The Rape of the Mind*, 35.

brainwashing, Meerloo's analysis reveals that brainwashing was not only associated with Communism, but with other ideologies that believers of the theory found abhorrent. Meerloo described the efforts of himself and other "anti-Nazis," including though not limited to Dutch resisters like himself, to "find medical and psychiatric preventives to harden us against the Nazi torture we expected," as MK-ULTRA researchers would attempt to do to protect their own agents from Soviet brainwashing.¹⁰⁹ There is no evidence that Meerloo worked for the CIA, but his book helped establish the conception of brainwashing that MK-ULTRA researchers would pursue.

CIA officials were also interested in the insidious mass brainwashing of societies, fearing the threat it posed as well as using it to provide an exculpatory explanation of an enemy's behavior.¹¹⁰ While the methods of mass brainwashing that researchers such as Meerloo and Hunter described were methods of propaganda, they believed that modern "mass communication" and psychological discoveries allowed propaganda to be spread more effectively than before.¹¹¹ The term they called it, "brainwashing," carried connotations of methods more sinister and modern than propaganda; while Hunter and Meerloo never identified specific methods of mass brainwashing that made it different from propaganda, their introduction of a new term implied that a new phenomenon was occurring.¹¹² This phenomenon could explain the spread of ideologies that most Americans in the 1950s considered "so absurd that no normal citizen could ever embrace it," including Communism and fascism.¹¹³

¹⁰⁹ Meerloo, *The Rape of the Mind*, 24.

¹¹⁰ Kinzer, *Poisoner in Chief*, 138-139; Meerloo, *The Rape of the Mind*, 49; Dulles, "Remarks."

¹¹¹ Meerloo, *The Rape of the Mind*, 35; Hunter, *Brain-Washing in Red China*, 10-12.

¹¹² Meerloo, *The Rape of the Mind*, 96-97; Hunter, *Brain-Washing in Red China*, 10.

¹¹³ Introvigne, *Brainwashing*, 1.

The United States had allied with its erstwhile fascist enemies; West Germany was now a part of the anti-Communist array in Europe, and the United States hoped Japan would also be a bulwark against Communism in Asia.¹¹⁴ In a 1953 speech at the National Alumni Conference of Harvard University, Allan Dulles argued that the Nazis had succeeded in “conditioning vast numbers of Germans to follow Hitler’s mad experiments,” and Japan too had developed a system of “thought control.” However, Nazi and Japanese brainwashing had not lasted for very long before they were defeated, and had “had little permanent effect on the ... mind.” Germans and Japanese had been freed and restored to their senses, and could be trusted to fight against Communism. Communist brainwashing, on the other hand, was more complete and more terrifying. The Communists, warned Dulles, had “made rapid strides in the nefarious art of breaking down men’s minds.” Fascist brainwashing had been defeated, but its threat paled in comparison— according to Dulles and other American scientists— to the threat posed by Communist brainwashing.¹¹⁵

During the 1950s and 1960s, at the height of the Cold War and McCarthyism, Communism was framed as an unthinkable horror that would assimilate its subjects and turn them into drones of the collective.¹¹⁶ Dulles claimed that the most rational explanation for the adoption of Communism among Soviet citizens was Communist brainwashing, achieved after “leveling” and sweeping aside the protective bulwark of Christianity.¹¹⁷ Most U.S. studies of brainwashing focused on victims of supposed Communist brainwashing. Many of the books

¹¹⁴ Odd Arne Westad, *The Cold War : A World History*, First edition (New York: Basic Books, 2017), 14.

¹¹⁵ Dulles, “Remarks.”

¹¹⁶ Science fiction films such as *Invasion of the Body Snatchers* reflected this anxiety; however, it was not relegated to science fiction, as Meerloo’s book makes clear. Kinzer, *Poisoner in Chief*, 187; Meerloo, *The Rape of the Mind*, 82.

¹¹⁷ Dulles, “Remarks.”

published on brainwashing made this connection explicit: Edward Hunter, a CIA propagandist, published *Brainwashing in Red China: The Calculated Destruction of Men's Minds* in 1951, and Meerloo specifically warned readers of Communist efforts to “bring the human mind into a condition of enslavement and submission” in *The Rape of the Mind*.¹¹⁸ Both books frame Communist brainwashing as an existential threat to the U.S., raising fears of infiltrators poisoning America from within.¹¹⁹

While fears of brainwashing carried with it fears of Communism, brainwashing was not equally associated with all Communist countries. It is worth noting that, while researchers implicated the Soviet Union in the fears of Communist brainwashing, they particularly singled out the People’s Republic of China. For instance, Hunter’s book was not about brainwashing in Red Russia but about brainwashing in “Red China,” an attitude that was echoed in later books such as *Coercive Persuasion: A Socio-psychological Analysis of the “Brainwashing” of American Civilian Prisoners by the Chinese Communists* by psychiatrist Robert Jay Lifton.¹²⁰ Hunter and Lifton identified the term “brainwashing” as a translation of the Chinese term *xi nao*, literally “clean brain.”¹²¹ However, the English-language term “brainwashing” and the Chinese term “xi nao” have different meanings; “xi nao” carries connotations of enlightenment which “brainwashing” lacks.¹²²

American researchers nevertheless found other reasons to connect brainwashing to China. The language that China used to describe its political prisons, “thought reform” and re-education

¹¹⁸ Hunter, *Brain-Washing in Red China*, 4; Meerloo, *The Rape of the Mind*, 13.

¹¹⁹ Hunter, *Brain-Washing in Red China*, 4; Meerloo, *The Rape of the Mind*, 13.

¹²⁰ Hunter, *Brain-Washing in Red China*; Robert Jay Lifton, *Thought Reform and the Psychology of Totalism; a Study of “Brainwashing” in China* (New York State: Norton, 1961).

¹²¹ Hunter, *Brain-Washing in Red China*, 10; Lifton, *Thought Reform*, 3.

¹²² The term “xi nao” was coined by a Chinese psychologist seeking to modernize an older term, *xi xin*, “clean heart.” *Xi xin* meant to reject impure attitudes and untruth to pursue truth and enlightenment. Introvigne, *Brainwashing*, 11; Marks, *The Search for the “Manchurian Candidate,”* 133.

camps, echoed the language that U.S. researchers used to describe brainwashing. Many U.S. citizens, including intelligence officials, were convinced that the People's Republic of China was brainwashing its citizens.¹²³ The majority of reports on foreign brainwashing centered China and the "brainwashing techniques of the Chicoms."¹²⁴ This association persisted into the public imagination. In the film *The Manchurian Candidate*, Chinese scientists brainwash an American soldier by administering mind-altering drugs and hypnotizing him; when he returns to the U.S., he is monitored by a Chinese spy pretending to be granted them advantage in applying mind control in operational conditions.¹²⁵

MK-ULTRA researchers believed that the field of psychology had already established a foundational understanding of mind control; they focused on finding a way to apply methods of mind control.¹²⁶ During the 1950s, psychologists did not publish many studies critical of the concept of brainwashing, although neither did they publish many studies that supported "brainwashing."¹²⁷ They did, however, publish a number of studies about how to influence or coerce certain behaviors and attitudes, which popular writers such as Meerloo and Hunter bundled together under the term "brainwashing."¹²⁸ These collections of studies gave CIA officials the impression that brainwashing was a well-defined subject of psychological research with experimental evidence. Since there was not yet a scholarly controversy, the officials holding the purse strings felt little need to pressure their lead science chief, Sidney Gottlieb, to

¹²³ Meerloo, *The Rape of the Mind*, 109; Kinzer, *Poisoner in Chief*, 54.

¹²⁴ "Weekly roundup from Wilson and Pelcovits to Allan Evans, 5/7/57," May 7, 1957, Box 0007, "OIR/PIRS-1957," RG59, National Archives and Records Administration.

¹²⁵ Meerloo, *The Rape of the Mind*, 109; Kinzer, *Poisoner in Chief*, 54.

¹²⁶ Marks, *The Search for the "Manchurian Candidate,"* 61.

¹²⁷ Introvigne, *Brainwashing*, 1-4.

¹²⁸ Introvigne, *Brainwashing*, 12-15; Hunter, *Brain-Washing in Red China*; Meerloo, *The Rape of the Mind*.

demonstrate the validity of brainwashing.¹²⁹ In a 1951 meeting with British intelligence, a CIA representative noted that the developing brainwashing program should fund “research into the means whereby an individual may be brought temporarily or perhaps permanently into the control of another.” The representative did not suggest that the CIA fund research into *whether* it was possible that a person could be “brought...into the control of another.”¹³⁰ As a result, MK-ULTRA researchers could explore any questions about brainwashing methodology that occurred, without the need to justify their top-secret assumptions to either officials or non-CIA scientists.

Methodology

Since MK-ULTRA was a top secret program, few researchers had access to all the information, and fewer had to account for their actions. The central conceit of MK-ULTRA research— that, when subjected to brainwashing, the “brain...becomes a phonograph playing a disc put on its spindle by an outside genius over which it has no control”— was the guiding principle of experiments.¹³¹ However, it was rarely tested. Internal researchers were interested in applied research, and did not have to justify their small samples or the unethical tests they ran to a critical public.¹³² External researchers, too, could avoid critical scrutiny of their brainwashing research, although they also rarely tested the hypothesis of brainwashing if they even knew that developing mind control was the goal of their funders.¹³³

¹²⁹ Some 1950s psychologists were interested in brainwashing as a psychological theory, while others dismissed it. However, the term had not yet become a subject of controversy with the label “pseudoscience,” as it would in the 1980s with court cases over cults and deprogramming, so a nonspecialist looking at the evidence in the 1950s would find little rejection of the idea of brainwashing. Introvigne, *Brainwashing*, 28-29.

¹³⁰ U.S. Central Intelligence Agency, “Report of Special Meeting Held in [Deleted] on 1 June 1951,” Classification unknown, June 1, 1951, National Security Archive.edu.

¹³¹ Dulles “Remarks”; Marks, *The Search for the “Manchurian Candidate,”* 61.

¹³² John S. Earman, Inspector General, U.S. Central Intelligence Agency, “Report of Inspection of MKULTRA/TSD,” July 26, 1963, National Security Archive.edu.

¹³³ Marks, *The Search for the “Manchurian Candidate,”* 118-119.

The CIA contracted external scientists to conduct basic research— research establishing baseline knowledge— for MK-ULTRA. However, external researchers rarely knew the extent or goals of the MK-ULTRA program, if they knew the program existed in the first place.¹³⁴ The CIA did not require or desire researcher awareness of their goals; they only wanted researchers’ professional knowledge. From its inception, the CIA had been interested in scholarly expertise. Academics represented advanced knowledge, and access to university professors— what the CIA called “P-sources” – meant access to the most recent intellectual developments, as well as the ability to use leading experts to answer the CIA’s questions, such as how to brainwash people.¹³⁵ However, recruiting large numbers of professors, some of whom were politically or ethically opposed to CIA activities, would pose a security threat in the eyes of the agency. Therefore, the CIA set up shell foundations that would provide funding for their research while hiding their involvement, including the Geschickter Research Fund.¹³⁶ The Geschickter Research Fund, a seemingly private fund established by the pathologist and CIA liaison Charles Geschickter, channeled MK-ULTRA money into research projects without the researchers’ awareness.¹³⁷ Through the Geschickter fund, the CIA paid for the opening of a wing of the Georgetown University Hospital in order to provide “cover ... for highly sensitive projects” and obtain access to “[h]uman patients and volunteers for experimental use.”¹³⁸ Owing to the need for secrecy,

¹³⁴ However, unwitting scientists were not the only “P-sources” that the CIA had. Some academics were, like Charles Geschickter, very willing to work for the CIA .Price, *Cold War Anthropology*, 10; Marks, *The Search for the “Manchurian Candidate,”* 118-119.

¹³⁵ Later, during the Vietnam War protests, it would also give the CIA a built-in spy network to keep tabs on dissident students and other professors. Price, *Cold War Anthropology*, 10-15; Kinzer, *Poisoner in Chief*, 188.

¹³⁶ Price, *Cold War Anthropology*, 115; Marks, *The Search for the “Manchurian Candidate,”* 63.

¹³⁷ Since Gottlieb destroyed most of the records of MK-ULTRA, it is impossible to know precisely who did and did not receive MK-ULTRA funding. Marks, *The Search for the “Manchurian Candidate,”* xiv.

¹³⁸ Specifically, the Gorman Annex. U.S. Central Intelligence Agency, Memorandum for Director of Central Intelligence, “Project MKULTRA, Subproject 35,” Top Secret, November 15, 1954, National Security Archives.edu.

these projects tended to be basic research studies that the CIA hoped would improve their understanding of various aspects of brainwashing, even if the researchers never used the term “brainwashing.” Since they were not testing the theory of brainwashing, their results did not find evidence supporting the existence of brainwashing, but they gave MK-ULTRA scientists such as Gottlieb ideas for further research into how to control minds.¹³⁹

Several of the psychologists who the CIA funded would later become known for ethical issues in the MKULTRA research studies, despite their experiments’ relative lack of secrecy at the time.¹⁴⁰ MK-ULTRA agents directly recruited several well-respected psychologists, including the chairman of the Department of Pharmacology at Emory University School of Medicine, Dr. Carl C. Pfeiffer, and the 1953 president of the American Psychiatric Association, Dr. Ewan Cameron.¹⁴¹ While Dr. Pfeiffer was aware of CIA involvement, his research was explicitly basic.¹⁴² The CIA wanted to determine the maximum doses of LSD they could give people, and learn about the effects of extremely high doses. Pfeiffer was well-connected and could direct research in prisons, which MK-ULTRA researchers considered an ideal laboratory: scientists could easily control and monitor the human subjects, and prisoners had few authority figures willing to stand up for their well-being.¹⁴³ MK-ULTRA researchers were not alone in this view: despite the Nuremberg Code’s emphasis on voluntary consent, most U.S. scientists felt that the code was meant “for monsters” such as the Nazis, and did not apply to them.¹⁴⁴ Prisoners were convenient research subjects, and the 1964 World Medical Association’s Declaration of

¹³⁹ U.S. Central Intelligence Agency, “Project MKULTRA, Subproject 35.”

¹⁴⁰ Price, *Cold War Anthropology*, 10; U.S. Central Intelligence Agency, “Project MKULTRA, Subproject 35.”

¹⁴¹ Marks, *The Search for the “Manchurian Candidate,”* 63, 140-148.

¹⁴² It is unclear if Dr. Cameron was aware of CIA funding, but MK-ULTRA dedicated a subproject to his research. Marks, *The Search for the “Manchurian Candidate,”* 141.

¹⁴³ Sidney Gottlieb, Memorandum for the Record by Sidney Gottlieb, Chief, Technical Services Section, Chemical Division, “MKULTRA, Subproject 47,” Classification unknown, June 7, 1956, National Security Archive.edu.

¹⁴⁴ Stark, *Behind Closed Doors*, 78.

Helsinki enshrined scientists' right to use prisoners in experiments, a standard that confirmed pre-existing research practices of scientist such as Dr. Pfeiffer.¹⁴⁵ By 1956, Pfeiffer had started an MK-ULTRA research study at the United States Penitentiary in Georgia.¹⁴⁶ Prisoners— many of whom were already suffering from addiction to other drugs— volunteered to participate in trials of a drug, LSD, in exchange for a favorable note on their record or to receive a small amount of the drug they were addicted to.¹⁴⁷ Pfeiffer and other prison psychiatrists claimed that they obtained full informed consent from the prisoners, but many of the prisoners did not remember being clearly told the study's nature or the potential side effects of LSD, and sued the psychiatrists. They lost the lawsuit because they failed to establish that the consent forms the prisoners signed hid or withheld information.¹⁴⁸ However, it is very possible that neither party was lying; a prisoner suffering from withdrawal may not have been able to understand the study well enough to give truly informed consent, and he would have been desperate.¹⁴⁹ This desperation makes prisoners very appealing “for experimental use.”¹⁵⁰ The CIA was explicitly interested in captive populations and gave psychiatrists such as Dr. Pfeiffer the resources and approval for their unethical experiments, but psychologists— particularly psychologists in the 1950s and 1960s— were not constrained by ethical considerations from their fellow scientists, as the case of Dr. Ewen Cameron makes clear.¹⁵¹

¹⁴⁵ The U.S. would eventually require special protections for prisoners in 1979. *Regulations for the Protection of Human Subjects of Biomedical and Behavioral Research* 45 CFR 46 Subpart C, 1979. Stark, *Behind Closed Doors*, 138; Scott v. Casey, 562 F. Supp. 475 (N.D. Ga. 1983).

¹⁴⁶ Scott v. Casey,; Sidney Gottlieb, “MKULTRA, Subproject 47.” In the internal memo from 1956, Gottlieb says that he requests funds to *continue* Pfeiffer's research project. It is unclear precisely when the project began.

¹⁴⁷ Kinzer, *Poisoner in Chief*, 97-98.

¹⁴⁸ Scott v. Casey.

¹⁴⁹ Scott v. Casey.

¹⁵⁰ U.S. Central Intelligence Agency, “Project MKULTRA, Subproject 35.”

¹⁵¹ Marks, *The Search for the “Manchurian Candidate,”* 140-148.

Dr. Ewen Cameron was a well-regarded psychiatrist living and working in Canada, and was responsible for some of the most infamous MK-ULTRA experiments. Cameron was the head of the Allan Memorial Institute at McGill University in Montreal.¹⁵² By 1956, he had gained a reputation of being, according to former patient Velma Orlikow, the “greatest [psychiatrist] in the world.”¹⁵³ With his reputation, people experiencing psychological disorders traveled to the Allan Memorial Institute and committed themselves to Cameron’s care when he said he could treat them.¹⁵⁴ However, most patients were unaware that his treatment was highly experimental.¹⁵⁵ Cameron believed that he could cure mental illnesses by “depatterning” people, destroying their mental faculties, and then building a new and more well-adjusted personality by “psychic driving,” bombarding them with repeated messages.¹⁵⁶ While Cameron did not call his research “brainwashing” or “mind control,” MK-ULTRA researchers were intrigued. Wiping a person’s mind and then implanting a directive to act or think a certain way echoed much of their theories about brainwashing. They reached out to Cameron through a shell society, the Society for the Investigation of Human Ecology, and provided him with money and access to LSD.¹⁵⁷

¹⁵² Marks, *The Search for the “Manchurian Candidate,”* 140-148.

¹⁵³ Orlikow interview in Marks, *The Search for the “Manchurian Candidate,”* 140-148. It is possible that Orlikow was exaggerating to Marks in order to communicate the betrayal she felt, but in any case Cameron had a good reputation and was the head of psychological institutions such as the American Psychiatric Association, which made him an authoritative figure.

¹⁵⁴ Orlikow v. United States, 682 F. Supp. 77 (D.D.C. 1988); Marks, *The Search for the “Manchurian Candidate,”* 148-149.

¹⁵⁵ Experimental treatment can be helpful when conventional treatment fails. However, many of Cameron’s patients suffered from issues such as postpartum depression, which likely would have been adequately addressed with conventional (at the time) psychotherapy and medication. A. E. Schwartzman and P. E. Termansen, “Intensive Electroconvulsive Therapy: A Follow-Up Study,” *Canadian Psychiatric Association Journal*, 12(2), 1967, 217-218.

¹⁵⁶ D. Ewen Cameron, “Psychic Driving,” *The American Journal of Psychiatry* 112, no. 7 (1956): 502–9, <https://doi.org/10.1176/ajp.112.7.502>, 502.

¹⁵⁷ There is no evidence that Cameron was aware of CIA involvement. Marks, *The Search for the “Manchurian Candidate,”* 141.

With CIA resources, Cameron tested his theories of depatterning and psychic driving on patients who did not realize the full extent of his treatment.¹⁵⁸ Depatterning was extremely invasive, involving restraints and electroshock therapy, and carried risk of harm to the patient.¹⁵⁹ It was also highly experimental.¹⁶⁰ Experimental treatment can be helpful when conventional treatment fails, but many of Cameron's patients suffered from issues such as postpartum depression, which likely could have been adequately addressed with contemporary conventional psychotherapy and medication.¹⁶¹ However, according to the testimonies of his former patients and their families, he did not clearly inform patients of the experimental nature of his treatment, its risks, or the availability of other treatment options.¹⁶² Cameron's treatment "represented a massive departure from the accepted psychodynamic methods," but patients and their loved ones did not realize precisely what their other options might be, or what the risks of psychic driving might be, when they agreed to Cameron's treatment.¹⁶³ At this time in the 1950s, while the scientific community required consent, they did not consistently require proof of consent, or define precisely how researchers should go about obtaining consent.¹⁶⁴ Cameron's patients did assent to his treatment, but Cameron was not required to provide proof of consent; only people involved in his research knew what consent issues existed.¹⁶⁵ His patients did not fully understand what they had consented to by agreeing to his "depatterning" treatment, which involved repeated periods of LSD trips, sleep deprivation, medically induced sleep, and

¹⁵⁸ Harvey Weinstein, *Psychiatry and the CIA : Victims of Mind Control* (Washington, DC: American Psychiatric Press, 1990), 15-27.

¹⁵⁹ Marks, *The Search for the "Manchurian Candidate,"* 140-148.

¹⁶⁰ Marks, *The Search for the "Manchurian Candidate,"* 140-148.

¹⁶¹ Marks, *The Search for the "Manchurian Candidate,"* 140-148; Weinstein, *Psychiatry and the CIA*, 15-27.

¹⁶² Weinstein, *Psychiatry and the CIA*, 15-27; "Orlikow v. United States, 682 F. Supp. 77 (D.D.C. 1988)," *Justia Law*.

¹⁶³ Weinstein, *Psychiatry and the CIA*, 124.

¹⁶⁴ Stark, *Behind Closed Doors*, 114.

¹⁶⁵ Weinstein, *Psychiatry and the CIA*, 121-123.

electroshocks. They became disoriented and confused, losing their memories and control of their bodily functions.¹⁶⁶ Cameron then played constant repeated audio messages, such as “you never stood up for yourself” or “you mean to get well,” in a patient’s ears; he called this “psychic driving.”¹⁶⁷ In a study published in 1956, he posited that “psychic driving may continue to produce additional effects after the period of actual driving has been terminated” and that patients would be cured of their mental illnesses as a result.¹⁶⁸

However, the evidence from Cameron’s studies did not support his claim that depatterning and psychic driving could help patients recover from mental illnesses. Most patients regained their memories and full control of their faculties after they stopped the treatment—although some did not— but few claimed that the treatment had helped them in any way.¹⁶⁹ In 1964, psychologists A. E. Schwartzman and P. E. Termansen conducted a review of Cameron’s experiments and concluded that there was no evidence for psychic driving.¹⁷⁰ However, his credentials had not only convinced patients to agree to the treatment, but convinced the CIA to fund him and furthered their belief that brainwashing was a real phenomenon. Serious psychologists were researching theories that closely resembled their own theory of brainwashing.¹⁷¹ MK-ULTRA funded scientists such as Pfeiffer and Cameron, whose experiments were riddled with ethical issues, as well as psychologists conducting research ethically, but only MK-ULTRA scientists knew precisely what theory these experiments were supposed to provide evidence of.¹⁷²

¹⁶⁶ Orlikow v. United States.

¹⁶⁷ Marks, *The Search for the “Manchurian Candidate,”* 145-146.

¹⁶⁸ Cameron, “Psychic Driving,” 502.

¹⁶⁹ Marks, *The Search for the “Manchurian Candidate,”* 146-149; Weinstein, *Psychiatry and the CIA,* 15-27.

¹⁷⁰ Schwartzman and Termansen, “Intensive Electroconvulsive Therapy,” 217-218.

¹⁷¹ Gottlieb, “Deposition”; Kinzer, *Poisoner in Chief,* 137-139.

¹⁷² John S. Earman, Inspector General, “Report of Inspection of MKULTRA/TSD.”

Internal researchers working for the CIA as part of the MK-ULTRA program believed “that testing of materials under accepted scientific procedures fails to disclose the full pattern of reactions and attributions that may occur in operational situations”— in other words, that “scientific procedures” could not provide accurate information on how materials and methods would operate when an agent actually attempted to use them in the field.¹⁷³ They were not interested in finding ways to understand brainwashing, but in implementing it and providing “operational support” to CIA spy missions.¹⁷⁴ As a result, MK-ULTRA researchers, directed by Gottlieb, became convinced that it was necessary to test brainwashing techniques such as hypnosis and LSD administration under field conditions.¹⁷⁵

MK-ULTRA scientists experimented on prisoners held at CIA blacksites around the world, injecting them with a variety of substances— though primarily LSD— and subjecting them to a number of different coercive interrogation techniques, from hypnosis to torture.¹⁷⁶ The research would have been top secret, and since Gottlieb destroyed the majority of MK-ULTRA records, the extent of blacksite experimentation will never be known. Blacksite prisoners were a captive population held abroad, further from institutional oversight and closer to the CIA’s international purview, that MK-ULTRA researchers could test operational brainwashing on with secrecy and impunity.¹⁷⁷ MK-ULTRA researchers dosed two captured Soviet agents with LSD and hypnotized them in an attempt to gain accurate and reliable information for them; it is

¹⁷³ Earman, “Report of Inspection of MKULTRA/TSD.”

¹⁷⁴ U.S. Central Intelligence Agency. Chief, Inspection and Security Staff, Sheffield Edwards, “Project Bluebird,” Top Secret, April 5, 1950, National Security Archive.edu.

¹⁷⁵ Marks, *The Search for the “Manchurian Candidate,”* 73.

¹⁷⁶ Kinzer, *Poisoner in Chief*, 63-68.

¹⁷⁷ Kinzer, *Poisoner in Chief*, 63-68.

unclear what happened to the agents afterwards.¹⁷⁸ The researchers were not concerned about safety and did not obtain information on long-term effects.¹⁷⁹ CIA agents referred to the victims of their field experimentation as expendable and noted that, if someone died, then “disposal of the body would be no problem.”¹⁸⁰ Evidently, they expected that at least some of the prisoners would weaken and potentially die as a result of MK-ULTRA interrogation techniques, even if they wanted to keep the prisoners alive. One such prisoner was a double agent, Dmitri Dimitrov, who had defected to the United States; MK-ULTRA researchers held him for years and experimented with using brainwashing methods on him to determine whether his defection was authentic and his information trustworthy.¹⁸¹ The results were inconclusive.¹⁸²

MK-ULTRA scientists lacked control groups and operational definitions of positive results. In standard modern scientific procedure, researchers design experiments to prove or disprove their hypothesis, and if they fail to find evidence that their hypothesis is false, they publish their research as evidence supporting their hypothesis.¹⁸³ This is synonymous with good science today, but the scientific standards were different in the mid-twentieth century.¹⁸⁴ In the 1950s, psychologists would praise theoretical models that lacked clear evidence, but they expected those models to be tested by “empirical investigation” that could provide “new data” and be replicated in later studies.¹⁸⁵ Hypotheses had to be tested to be confirmed; no matter how convincing an idea might sound, scientists expected evidence to show that a hypothesis or theory

¹⁷⁸ Memorandum for Director of Central Intelligence, “Successful Application of Narco-Hypnotic Interrogation (ARTICHOKE).”

¹⁷⁹ Kinzer, *Poisoner in Chief*, 68.

¹⁸⁰ Marks, *The Search for the “Manchurian Candidate,”* 41. From Marks’ interview with Dr. Samuel Thompson, an ARTICHOKE scientist present at the safehouses in Germany.

¹⁸¹ Kinzer, *Poisoner in Chief*, 52.

¹⁸² Marks, *The Search for the “Manchurian Candidate,”* 69.

¹⁸³ Baldwin, “Scientific Autonomy,” 539.

¹⁸⁴ Baldwin, “Scientific Autonomy,” 539.

¹⁸⁵ Croog, “Review of Thought Reform,” 834.

was not wrong. MK-ULTRA researchers, headed by Sidney Gottlieb, did not consider the possibility that their hypothesis might be wrong for nearly a decade.¹⁸⁶ They subjected prisoners to a number of forcibly administered substances and tortuous conditions in order to see what would happen— which substance would have the desired effect— without a specific hypothesis that they could prove or disprove. Researchers justified this by arguing that testing field conditions was of paramount importance.¹⁸⁷

MK-ULTRA researchers wanted to develop brainwashing methods that could not only be used on captured enemies, which would take time and effort, but secretly used on enemy agents without their knowledge. To test mind control under these field conditions, MK-ULTRA researchers experimented with using brainwashing techniques on “unwitting persons.”¹⁸⁸ For Gottlieb and other internal MK-ULTRA researchers, their fellow CIA officials and agents were convenient subjects to dose without their knowledge.¹⁸⁹ MK-ULTRA scientists, at least initially, limited their internal test subjects to only other MK-ULTRA officers, although rumors quickly spread through the agency that MK-ULTRA researchers would dose any unsuspecting CIA agent with LSD to observe their reactions. An internal CIA memo about an office holiday party warned attendees not to drink from the punch bowl, which would likely be spiked with LSD.¹⁹⁰ Without control groups or standardized note-taking to observe behavior under “field conditions,” it is

¹⁸⁶ Gottlieb, “Deposition.”

¹⁸⁷ Marks, *The Search for the “Manchurian Candidate,”* 73.

¹⁸⁸ U.S. Central Intelligence Agency, Memorandum for Director of Central Intelligence, “CIA R&D and testing of Behavioral Drugs,” 1975, CIA.gov.

¹⁸⁹ U.S. Central Intelligence Agency, Memorandum for Director of Central Intelligence, “CIA R&D and testing of Behavioral Drugs”; Kinzer, *Poisoner in Chief*, 129-130.

¹⁹⁰ Kinzer, *Poisoner in Chief*, 129-130.

unclear what applicable information MK-ULTRA researchers obtained from these experiments.¹⁹¹

However, they did learn that giving people LSD without their knowledge could have consequences. In 1953, during a meeting with other officials and scientists working for the CIA to discuss “testing on unwitting persons,” Gottlieb added LSD to a bottle of liquor that people at the meeting were drinking. According to an official report written after the meeting, the attendees “had agreed in principle that such a program should be explored” but were surprised when Gottlieb told them their drinks had been spiked.¹⁹² One scientist, Frank Olson, had a particularly bad reaction.¹⁹³ He became paranoid and depressed, and MK-ULTRA officials convinced him to travel to New York City for psychiatric treatment; while staying in a hotel, he apparently committed suicide by jumping out a window.¹⁹⁴ The CIA reprimanded Gottlieb for causing his death by secretly dosing him with LSD, which officials said “served to trigger the act leading to [Olson’s] death.”¹⁹⁵ However, while this curtailed Gottlieb’s secret dosing of CIA agents, it did not stop him from experimenting on “unwitting persons.”¹⁹⁶

MK-ULTRA researchers also experimented on “unwitting” members of the American public.¹⁹⁷ Perhaps the most dramatic– and almost certainly the most lurid– example of internal MK-ULTRA scientists’ experiments on the public is Subproject 18, also known as “Midnight

¹⁹¹ Earman, “Report of Inspection of MKULTRA/TSD.”

¹⁹² U.S. Central Intelligence Agency, “CIA R&D and testing of Behavioral Drugs.”

¹⁹³ Marks, *The Search for the “Manchurian Candidate,”* 84-89.

¹⁹⁴ Suspicious circumstances surrounding Frank Olson’s death– including the presence of a CIA agent in his room and severe abrasions which a second autopsy concluded had happened prior to his death– has prompted many people, including Frank Olson’s son, to believe that the CIA murdered him. Kinzer, 251; Robert Evans, *Behind the Bastards*, “MKUltra: When The CIA Tried to Destroy Free Will,” Apple Podcasts, October 2022.

¹⁹⁵ U.S. Central Intelligence Agency, “CIA R&D and testing of Behavioral Drugs.”

¹⁹⁶ U.S. Central Intelligence Agency, “CIA R&D and testing of Behavioral Drugs.”

¹⁹⁷ George White, “George White Appointment Book Entry, June 9, 1952,” June 9, 1952, CIA.gov; U.S. Central Intelligence Agency, “CIA R&D and testing of Behavioral Drugs.”

Climax.” Gottlieb hired a narcotics officer, George Hunter White, to create a ring of prostitutes to lure men back to an apartment in San Francisco where White— on Gottlieb’s orders— would secretly dose them with LSD and observe them from behind a one-way mirror.¹⁹⁸ No professional doctor or scientist— or anyone with medical training— was present at these sessions, and there is no record of Gottlieb ordering placebos or requiring a second assistant to be present to take notes to confirm White’s impressions.¹⁹⁹ While mainstream scientists might have also pursued a topic such as the effects of LSD on sex, they would have made an effort to make their research convincing to other scientists, who could provide scholarly validation. This would have forced scientists to obtain at least nominal informed consent, take steps to ensure the reliability of their results and control for unrelated variables, and develop a falsifiable hypothesis.²⁰⁰ MK-ULTRA scientists did not have to worry about publication, and they were convinced they would get results.²⁰¹ MK-ULTRA researchers developed tunnel vision on the subject of mind control; while many scientists, such as Ewen Cameron, have developed similar tunnel vision and refusal to admit their hypotheses were wrong, they had to publish their results.²⁰² MK-ULTRA scientists did not.²⁰³

¹⁹⁸ Gottlieb denied that White had also had a safehouse in New York. Gottlieb, “Deposition”; White, “Appointment Book Entry.”

¹⁹⁹ White’s notes were lost in the purge, but their reliability is doubtful. Some of White’s invoices remain, showing he bought alcohol to drink while observing people he had secretly dosed with LSD. Other MK-ULTRA researchers would sometimes join White in observation, but their presence was not required and they were not always there. Since Gottlieb destroyed as many records as he could and later claimed not to remember any details when MK-ULTRA became public knowledge, the number of men dosed and their reactions will never be known. Marks, *The Search for the “Manchurian Candidate”*; Gottlieb, “Deposition.”

²⁰⁰ Gordin, *Pseudoscience*, 73-77.

²⁰¹ U.S. Central Intelligence Agency, “Report of Special Meeting Held in [Deleted] on 1 June 1951,” Classification unknown, June 1, 1951, National Security Archives.edu.

²⁰² Gordin, *Pseudoscience*, 73-77.

²⁰³ Earman, “Report of Inspection of MKULTRA/TSD.”

Evaluation

While the broad and poorly-defined concept of brainwashing left MK-ULTRA researchers working on a theoretical framework without a theory, it also provided them with a broad range of results they could use to justify their program's existence.²⁰⁴ Since intelligence officials at an early program meeting had declared that "even though no radical discoveries are made, even small gains in knowledge will justify the effort expended," MK-ULTRA researchers could point to anything that they had learned as justification.²⁰⁵ External research, such as Dr. Ewen Cameron's studies into psychic driving, furthered knowledge of brainwashing.²⁰⁶ Experimenting on prisoners furthered knowledge of brainwashing techniques by establishing the effects of various drugs in combination with interrogation methods such as hypnotism and sleep deprivation.²⁰⁷ An MK-ULTRA security officer reported in a memo to the Director of Central Intelligence on the experiments done on two Soviet agents that "the tests demonstrated conclusively the effectiveness of the combined chemical-hypnotic technique."²⁰⁸ The security officer said that CIA operatives felt that the information the Soviet agents gave under these techniques was "extremely valuable," but did not specify what made the information valuable or the tests conclusive.²⁰⁹ Since MK-ULTRA researchers did not continue pursuing "the combined chemical-hypnotic technique," they apparently decided that the tests had not been conclusive and did not reliably produce "extremely valuable" information.²¹⁰

²⁰⁴ Dulles, "Remarks."

²⁰⁵ Sheffield Edwards, Chief, Inspection and Security Staff, U.S. Central Intelligence Agency to Director of Central Intelligence, "Project Bluebird," Top Secret, April 5, 1950, National Security Archives.edu.

²⁰⁶ Cameron, "Psychic Driving," 502.

²⁰⁷ U.S. Central Intelligence Agency, Memorandum for Director of Central Intelligence, "Successful Application of Narco-Hypnotic Interrogation (ARTICHOKE), 1952, CIA.gov.

²⁰⁸ U.S. Central Intelligence Agency, "Successful Application of Narco-Hypnotic Interrogation (ARTICHOKE)."

²⁰⁹ U.S. Central Intelligence Agency, "Successful Application of Narco-Hypnotic Interrogation (ARTICHOKE)."

²¹⁰ U.S. Central Intelligence Agency, "Successful Application of Narco-Hypnotic Interrogation (ARTICHOKE)."

However, a comprehensive and objective evaluation of MK-ULTRA results was hampered by the sensitivity of the program and the attending secrecy. According to a report by Inspector General John Earman, only two members of the Technical Services Staff had “full substantive knowledge of the program,” and they “pursued a philosophy of minimum documentation.”²¹¹ This made it difficult for CIA officials to determine whether the program was making progress in establishing brainwashing techniques, or whether researchers had indeed found evidence of brainwashing as defined by Allan Dulles.²¹² However, after ten years of failing to develop a practical method of mind control, Gottlieb felt that he had failed to establish brainwashing, and in 1963 decided to end brainwashing research.²¹³

Conclusion

Senior CIA officials did not require scientific evidence to believe in brainwashing, or to spend millions of dollars and risk reputational damage by experimenting on U.S. citizens in pursuing the ability to brainwash.²¹⁴ Many current psychologists consider brainwashing to be “pseudoscience,” and believe that brainwashing has never been possible.²¹⁵ MK-ULTRA could never have succeeded in creating mind control, but it did affect many people. After the Senate Select Committee forced the CIA to acknowledge the existence of MK-ULTRA, the author John Marks published *The Search for the Manchurian Candidate* with information he had uncovered from MK-ULTRA documents that had escaped Gottlieb’s purge.²¹⁶ After reading Marks’

²¹¹ Earman, “Report of Inspection of MKULTRA/TSD.”

²¹² Dulles, “Remarks.”

²¹³ This marked the end of MK-ULTRA as a brainwashing research program, although Gottlieb continued parts of the program to develop poisons until he left the CIA in 1972, at which point the program was officially dissolved. Kinzer, *Poisoner in Chief*, 208-214.

²¹⁴ Marks, *The Search for the “Manchurian Candidate,”* 61.

²¹⁵ Introvigne, *Brainwashing*, 1-2.

²¹⁶ Marks, *The Search for the “Manchurian Candidate,”* xiv.

research, those affected by MK-ULTRA's unethical studies realized what had been done and who they might hold accountable.²¹⁷ Victims of Cameron and Pfeiffer, two MK-ULTRA researchers Marks had identified in his book, brought new lawsuits based on CIA involvement.²¹⁸ The lawyers for victims of Pfeiffer's experiments argued that CIA involvement should have been disclosed, and Cameron's former patients sued the United States for funding Cameron's studies.²¹⁹ The lawsuits generated media interest, which gave MK-ULTRA victims a platform to describe their experiences in detail.²²⁰ From the sensational and critical media coverage, the perpetrators of MK-ULTRA gained infamy and the program became synonymous with government conspiracies and mad scientists.²²¹ The MK-ULTRA revelations also impacted the CIA's relationship with the U.S. government.

U.S. legislators had grown increasingly skeptical of the CIA after several conspicuous intelligence scandals, including the CIA's failed attempt to overthrow Fidel Castro during the 1961 Bay of Pigs invasion, the magazine *Ramparts*'s 1967 expose of secret CIA involvement with Michigan State University, and a *New York Times* article about the CIA's efforts to encourage a coup in Chile.²²² These scandals had forced the CIA into the public eye and invited critical scrutiny. U.S. legislators had been largely uninformed of CIA operations, as the CIA was

²¹⁷ Weinstein, *Psychiatry and the CIA*, 27; Orlikow v. United States; Scott v. Casey.

²¹⁸ Marks, *The Search for the "Manchurian Candidate,"* 140-148, 63; Orlikow v. United States; Scott v. Casey.

²¹⁹ Orlikow v. United States; Scott v. Casey.

²²⁰ Ed Bradley, "MKUltra/Mind Control Experiments." *60 Minutes*. December 23, 1984; Jack Anderson, "Lawsuit Forces CIA Confession on MK-ULTRA," *Washington Post*, 28 August 1982.

²²¹ Orlikow v. United States; Scott v. Casey.

²²² The article about CIA involvement in Chile was prompted by a book the John Marks had published about the CIA with Victor Marchetti in 1974, *The CIA and the Cult of Intelligence*. Marks and Marchetti had uncovered the information, but the CIA had required them to censor it. However, Marks and Marchetti chose to censor their work by literally redacting sections of their book, allowing determined readers to figure out clues to what had been censored. David Shamus McCarthy, *Selling the CIA: Public Relations and the Culture of Secrecy* (University Press of Kansas, 2018): Lawrence, Kansas, 1-4, 21; Tity de Vries, "The 1967 Central Intelligence Agency Scandal: Catalyst in a Transforming Relationship between State and People," *The Journal of American History* 98, no. 4 (2012): 1075-92. <http://www.jstor.org/stable/41509576>.

not subject to congressional oversight, resulting in the 1975 Senate Select Committee which revealed MK-ULTRA.²²³ MK-ULTRA was a unique scandal of CIA involvement in medical research on U.S. citizens, rather than foreign policy operations, and would impact human research in the intelligence community.²²⁴

MK-ULTRA added another layer to the pressures shaping the changing intelligence research standards of the 1970s. The intelligence community recognized that the unethical and shocking research of MK-ULTRA invited criticism from both politicians and the public.²²⁵ MK-ULTRA was also revealed shortly after the press broke the news of the U.S. Public Health Service's syphilis experiments in Tuskegee, leading to public outcry.²²⁶ In their response to this scandal, scientists rallied around review boards as a way to demonstrate the ethicality of their research, and the 1974 National Review Act required Institutional Review Boards.²²⁷ U.S. intelligence researchers took a similar tactic when developing their own review boards to evaluate internal human research. The MK-ULTRA program provided impetus for the U.S. intelligence community to preemptively stop scandals such as MK-ULTRA in future scientific research by developing methods of establishing how ethical a scientific study was, such as the Surgeon General's Human Research Review Board.²²⁸ However, the U.S. intelligence community primarily addressed the ethical issues that had invited problems for the CIA when MK-ULTRA became public knowledge, rather than the systems that had enabled MK-ULTRA researchers to continue experimenting with brainwashing for a decade.²²⁹ The MK-ULTRA

²²³ McCarthy, *Selling the CIA*, 21, 36.

²²⁴ Marks, *The Search for the "Manchurian Candidate,"* 61.

²²⁵ Marks, *The Search for the "Manchurian Candidate,"* 61; McCarthy, *Selling the CIA*, 55.

²²⁶ Stark, *Behind Closed Doors*, 7.

²²⁷ Stark, *Behind Closed Doors*, 7, 78.

²²⁸ Brian Buzby, "CENTER LANE Information Papers for the Director of the Defense Intelligence Agency," 1984, CIA.gov; Marks, *The Search for the "Manchurian Candidate,"* 23-33.

²²⁹ Marks, *The Search for the "Manchurian Candidate,"* 23-33.

program's failure to establish brainwashing was not as widely covered as the unethical actions researchers took in an attempt to create brainwashing.²³⁰ MK-ULTRA tarnished the reputation of the CIA, but despite the scientific community's rejection of mind control, public interest in brainwashing remains high to this day.²³¹

²³⁰ Marks, *The Search for the "Manchurian Candidate,"* 61.

²³¹ Introvigne, *Brainwashing*, 1-2; Rin Ushiyama, "Discursive Opportunities and the Transnational Diffusion of Ideas: 'Brainwashing' and 'Mind Control' in Japan after the Aum Affair," *British Journal of Sociology* 70, no. 5 (December 2019): 1730-1737.

Chapter 2: Finding the Mind's Eye, Psychic Research and the STAR GATE Program

Introduction

While the CIA attempted to close the “mind control gap” in the 1950s and 1960s, by the 1970s intelligence officials were investigating a new scientific gap: psychic abilities.²³² In order to develop psychic abilities that could compete with supposed Soviet psychics, several U.S. defense and intelligence agencies– the Central Intelligence Agency (CIA), the Defense Intelligence Agency (DIA), and the U.S. Army– funded research into a program to study psychic phenomena. This program became known as STAR GATE.²³³ In this chapter, I will examine two of the largest and longest-lasting subjects of STAR GATE research: clairvoyant remote viewing and astral projection through a protocol known as the “Gateway Program.”²³⁴ I will start with a brief history of psychic research, which was controversial but well-established by the 1970s, and then analyze the roles that skeptics, believers, and experts played in establishing the protocols for both basic and applied research, as well as the qualifications for success.²³⁵ The STAR GATE program grew during a time when politicians and the public were increasingly scrutinizing U.S. intelligence agencies and their human research.²³⁶ However, these agencies funded controversial research that many contemporaries called “pseudoscience.”²³⁷ In this chapter, I argue that these two pressures helped to shape a model of research on human abilities which was grounded,

²³² Grunden in *Sensory Warfare*, 171; Kaiser, *How the Hippies Saved Physics*, 62-69.

²³³ May and Marwaha, *The Star Gate Archives*, 1-11.

²³⁴ May and Marwaha, *The Star Gate Archives*, 1-11.

²³⁵ Kaiser, *How the Hippies Saved Physics*, 62-69.

²³⁶ United States Senate, “Church Committee Reports,” 1975-1976.

²³⁷ Gordin, *Pseudoscience*, 73-77.

transparent, and ethical— at least, when compared to other secret human research programs, such as MK-ULTRA.

MK-ULTRA and STAR GATE both studied unusual powers of the human mind, but STAR GATE scientists researched the potential of psychic powers rather than mind control. While belief in psychic powers— the ability to manipulate and view reality with only the power of the human mind— was not widespread, some intelligence officials, such as the head of the Central Intelligence Agency, Allen Dulles, did believe that psychic abilities were both real and powerful enough to be deployed against the Soviet Union.²³⁸ Politicians, military generals, and intelligence officials, who were familiar with science but were not on the cutting edge of physics research, had been shocked by the atom bomb and its demonstration of the reality of splitting atoms. They reasoned that, if humans had the power to split atoms, they could very well have the power to bend the limits of reality and its relatively pedestrian physics with their mind.²³⁹ And, just as the U.S. could not let the Soviet Union gain an advantage in nuclear weapons, U.S. scientists and intelligence officials felt that they had to study psychic abilities to prevent the Soviet Union from gaining a psychic advantage.

Both the United States and the Soviet Union feared the other side gaining the upper hand in any field, no matter how unconventional that field was. Rumors spread of clandestine American and Soviet parapsychology research programs, and it is unclear which research program came first. Soviet scientists called the subject of their research “psychoenergetics,” and focused on psychic abilities to manipulate the world through telepathy and telekinesis, not just

²³⁸ Richelson, *The Wizards of Langley*, 23.

²³⁹ Richelson, *The Wizards of Langley*, 23.

view it through clairvoyance.²⁴⁰ Although their research interests differed, both Soviet and American leadership were intrigued by the possibilities of psychic abilities, and by the 1970s, a psychic arms race was under way.²⁴¹

Starting in 1972, the U.S. funded a secret research program to conduct experiments to understand psychic phenomena. Agencies also ran operations to use psychic powers in an attempt to gather intelligence.²⁴² The CIA helped to establish the program that would become known as STAR GATE in 1977. However, it did not start as STAR GATE– the program’s first code name was GONDOLA WISH. The following year, after a joint U.S. Army and CIA committee found the program promising but not likely to produce immediately useful results, the Defense Intelligence Agency (DIA) took control of the program and renamed it GRILL FLAME, contributing the majority of funding, along with Army Intelligence and Security Command (INSCOM). Although the CIA did not contribute significant amounts of funding or oversee parapsychology research, they maintained an interest in the program.²⁴³ The code name GRILL FLAME lasted until 1983, at which point the program went through a quick succession of focus and code name changes– including Special Access Program (SAP), SUN STREAK, and DRAGOON ABSORB– until 1991, when the program found its final moniker, STAR GATE. This was the name it had in 1995, when the Defense Department terminated the program and declassified thousands of documents relating to the research.²⁴⁴ Since the declassification, STAR

²⁴⁰ This assessment was the opinion of the CIA, which evaluated Soviet research. It is possible that the Soviet Union successfully kept its clairvoyance secret from the CIA, but the assessment indicates a strong Soviet interest in telepathy and telekinesis. Central Intelligence Agency, “ESP: A Special Report,” 1966.

²⁴¹ Gordin, *Pseudoscience*, 73; May and Marwaha, *The Star Gate Archives*, 7.

²⁴² May and Marwaha, *The Star Gate Archives*, 7.

²⁴³ At least according to prominent researcher Russell Targ, although his description of their involvement is vague and does not delineate CIA intelligence activity from DIA intelligence activity. Russell Targ, *Do You See What I See? Memoirs of a Blind Biker* (United States: Red Wheel Weiser, 2010), 135-137.

²⁴⁴ May and Marwaha, *The Star Gate Archives*, 11.

GATE has become the term that most people know the program by, and it is the code name that I will be using throughout this paper. Through the STAR GATE program, U.S. intelligence agencies funded psychic research for decades.²⁴⁵

However, not everyone in the intelligence agencies agreed on the validity or use of studying psychic phenomena; psychic researchers constantly sought to demonstrate reasons why their research should continue to receive money.²⁴⁶ This was not unusual—intelligence agencies wanted to develop scientific understanding and technology that they could use in their operations, and evaluated research programs for their contributions to operational goals. But parapsychology was a controversial field that many orthodox scientists considered pseudoscience.²⁴⁷ Psychic researchers not only had to prove that their research could provide practical benefits to intelligence operations, but also that psychic phenomena existed. The question of the validity of psychic research led to an emphasis on basic research studies that attempted to demonstrate the existence of remote viewing.²⁴⁸ STAR GATE scientists did so by following the scientific standards of the 1970s through the 1990s, which placed a greater emphasis on oversight than the scientific standards of the 1950s.²⁴⁹ Psychic researchers could find statistical significance and publish their findings in peer-reviewed scientific journals to justify further research into the potential of psychic abilities, although researchers struggled to conduct applied research and develop a program for reliably making use of psychic abilities for

²⁴⁵ LaBerge, Davis, Tighe, Thompson, Brown, and Shapiro, “Proceedings of GRILL FLAME Meeting,” 1979, October 30, CIA.gov.

²⁴⁶ LaBerge, Davis, Tighe, Thompson, Brown, and Shapiro, “Proceedings of GRILL FLAME Meeting.”

²⁴⁷ Gordin, *Pseudoscience*, 73-74.

²⁴⁸ May and Marwaha, *The Star Gate Archives*, 7-11.

²⁴⁹ Particularly through Institutional Review Boards and the system of peer review prior to publication in respected and peer-reviewed scientific journals. Stark, *Behind Closed Doors*, 75; Baldwin, “Scientific Autonomy,” 539.

intelligence operations.²⁵⁰ Intelligence agencies periodically assembled committees, sometimes composed of internal agency officials and sometimes composed of external scientists, to review the program and evaluate the scientific validity of psychic phenomena. Researchers were able to point to published results in scientific journals.²⁵¹ Due to the questioned validity of psychic research, basic research became the primary justification for research funding, while applied research failed to produce results and eventually provided a reason for intelligence agencies to end funding. However, since the declassification of STAR GATE in 1995, psychic researchers have been able to use defense intelligence involvement in both basic and applied research as evidence that psychic phenomena are both real and powerful.

Basic research is a category of government-funded science that extends beyond the STAR GATE program, of course. But the weight placed on parapsychological basic research was heavier than it was in many other scientific fields. In basic research the government funds scientific studies in order to further knowledge of the field, but does not direct those studies to find a particular result or answer a specific question the government has.²⁵² Scientists who receive the money are free to conduct their studies to further their own research. But in order to receive the money, their research interests must align with the research interests of the government agency controlling the funds.²⁵³ For parapsychological researchers, this included intelligence agencies, which funded basic research in order to “understand fundamental, underlying mechanisms for Anomalous Mental Phenomena (AMP).”²⁵⁴ Psychic phenomena— or

²⁵⁰ Jessica Utts and Richard Hyman, “An Evaluation of the Remote Viewing Program: Research and Operational Application,” *American Institute for Research* (1995, September 22), 2-5.

²⁵¹ May and Marwaha, *The Star Gate Archives*, 9-13.

²⁵² Oreskes, *Science on a Mission*, 37.

²⁵³ Oreskes, *Science on a Mission*, 37-43.

²⁵⁴ U.S. Defense Intelligence Agency, “Project STAR GATE Research and Peer Review Plan,” 1994. Psychic researchers used the term “Anomalous Mental Phenomena,” which they felt more accurately described their subject than more supernatural terms such as clairvoyance or telepathy.

AMP– have never been well explained, even by parapsychologists; studies have failed to clearly and consistently establish *how* psychic powers work. In the eyes of skeptics, this mystery casts further doubt on the existence of psychic phenomena. Therefore, STAR GATE program managers hoped to use basic research to establish that psychic abilities were possible. This would help them gain a better understanding of how they could be adapted to intelligence gathering operations, and to provide evidence to funders that psychic phenomena were real.²⁵⁵ Basic parapsychology research had an epistemological burden of proof; intelligence agencies were spending taxpayer money on research and development in a field that was not widely accepted as real and scientific. Researchers sought to demonstrate that psychic phenomena existed so that they could develop applied uses for intelligence agencies, and so that they could prove to both funders and fellow scientists that parapsychology was not pseudoscience.²⁵⁶

Since mainstream scientists– and non-scientists– considered psychic phenomena to be “nonsense,” the CIA and DIA kept their involvement in STAR GATE classified out of fear of scandal and embarrassment; however, as peer review was an essential part of validating psychic phenomena, researchers were free to publish the results of their basic research. Researchers involved with STAR GATE came to call intelligence agency this fear of reputational damage the fear of the “giggle factor,” but as long as government involvement was not publicized and classified information was not spread, intelligence agencies did not require or desire that researchers keep their basic research classified and hidden from the public.²⁵⁷ Government money funded several studies, published in scientific journals, attempting to discover how psychic phenomena worked– whether psychics could be trained, whether telekinesis could

²⁵⁵ U.S. Defense Intelligence Agency, “Project STAR GATE Research and Review Plan.”

²⁵⁶ LaBerge, Davis, Tighe, Thompson, Brown, and Shapiro, “Proceedings of GRILL FLAME Meeting.”

²⁵⁷ May and Marwaha, *The Star Gate Archives*, 13; Central Intelligence Agency, “ESP: A Special Report,” 1966.

produce noticeable results, and whether distance mattered to telepathy.²⁵⁸ The researchers claimed statistically significant results, but the effect sizes remained small and the government, which hoped to make use of psychic phenomena, reduced or ended funding research into telekinesis and telepathy.

Positive evidence alone could not further U.S. defense interests, and intelligence agencies complemented their funding of basic research with funding of applied research programs. Intelligence officials— and U.S. political leaders such as President Carter and Charlie Rose, a Democratic congressman from North Carolina— wanted to use psychic abilities to achieve their own goals.²⁵⁹ Researchers needed to find evidence that remote viewing had practical applications for intelligence gathering problems. Applied research fell into two categories: one, which was similar to basic research, in which researchers conducted studies into the viability of remote viewing for intelligence gathering operations, and another in which researchers attempted to use remote viewing to gather intelligence.²⁶⁰ Statistical significance and peer review mattered less to applied research than it did to basic research, and the studies— which involved active intelligence operations— were kept classified.²⁶¹ Despite the classified nature of applied research, many of the same scientists that conducted basic research were conducting research into demonstrating applications at the same time.²⁶² However, since the research was sensitive, and since they were not looking for statistical evidence, but for a large effect size, the number of participants was

²⁵⁸ Russell Targ, Phyllis Cole, and Harold Puthoff, “Development of Techniques to Enhance Man/Machine Communication,” Report to National Aeronautics and Space Administration, 1974, 43-56, in *STAR GATE Archives*. “Remote Viewing Transcript for Subject S6 Learner/Control, First Experiment.”

²⁵⁹ LaBerge, Davis, Tighe, Thompson, Brown, and Shapiro, “Proceedings of GRILL FLAME Meeting.”

²⁶⁰ Defense Intelligence Agency, “Project STAR GATE Research and Peer Review Plan,” 1994.

²⁶¹ Targ, *Do You See What I See*, 112-113.

²⁶² Department of Defense, *Gale Committee Report*, 1980, CIA.gov.

even smaller than in basic research.²⁶³ This may have been inconvenient for scientists and the intelligence officials funding them, but it was not unusual in the history of psychic research.

The History of Psychic Research

STAR GATE scientists conducted a number of experiments into the nature of psychic phenomena. It was not well understood, despite decades of research into psychic powers that had developed into its own field, called “parapsychology.” Defense intelligence funding came at a unique point in the history of parapsychology studies, which was experiencing a resurgence of physical science research. Defense intelligence money funded what remote viewing researchers May and Marwaha believe to be the largest parapsychology research program in the world and reinforced the trend towards studies grounded in physics and quantitative statistical analysis.²⁶⁴

Scientific investigation of the possibility of unusual human abilities—“obscure and startling powers of the human mind and body”—was not new.²⁶⁵ Experiences of phenomena that Victorian-era scientists would term “psychic,” such out-of-body experiences and prophetic dreams, can be traced back for thousands of years.²⁶⁶ While such experiences were unusual, those familiar with them often considered them to be tied with the divine, not necessarily unnatural.²⁶⁷ Out-of-body experiences and prophetic dreams were communication with the divine, and the divine was part of the natural order.²⁶⁸ Investigation into the natural order was investigation into the divine.²⁶⁹ While this did not immediately change with the advent of

²⁶³ Department of Defense, *Gale Committee Report*, 1980.

²⁶⁴ May and Marwaha, *The Star Gate Archives*, 15; Noakes, *Physics and Psychics*, 2.

²⁶⁵ Noakes, *Physics and Psychics*, 8-11.

²⁶⁶ Noakes, *Physics and Psychics*, 9.

²⁶⁷ Noakes, *Physics and Psychics*, 55.

²⁶⁸ Noakes, *Physics and Psychics*, 13.

²⁶⁹ Noakes, *Physics and Psychics*, 10.

structured scientific investigation that conducted experiments to test a hypothesis, such scientific investigations tended to center around phenomena that were more easily observed and measured, such as the movement of the stars or the chemical composition of substances such as gunpowder.²⁷⁰ Investigation into the divine became separated from investigation into the natural order, and the majority of scientific research into psychic phenomena conceptualized psychic abilities as originating from the physical world rather than from contact with the divine. During the Victorian and Edwardian eras, early psychic researchers were also physicists— or, at least, the precursors to physicists in fields such as astronomy and thermodynamics.

However, physicists' interest in psychic phenomena dropped after the end of spiritualism, while scholars in other fields, such as psychology, grew more interested. Spiritualism rose in popularity in the late 19th century and continued into the start of the 20th century. Psychic mediums claimed that they could channel the spirits of the dead, prompting skeptics to debunk their claims and their evidence of psychic phenomena.²⁷¹ In response, believers with scholarly credentials used their academic backing to research the claims in search of positive evidence.²⁷² Physicists attempted to demonstrate the validity of general psychic phenomena with explanations from the natural world, not the afterlife— scientists such as [name] argued that ghosts were not apparitions of the deceased, but were the manifestations of unconscious psychic abilities in the living.²⁷³ However, skeptics' debunking of Spiritualist claims spread skepticism and discredited psychic phenomena in the eyes of the public.²⁷⁴ Physics was starting to coalesce into a well-defined scientific field distinct from other disciplines, and most early 20th-century physicists

²⁷⁰ Noakes, *Physics and Psychics*, 9.

²⁷¹ Noakes, *Physics and Psychics*, 51-53, 59-60.

²⁷² Rene Sudre, *Parapsychology* (New York: Citadel Press, 1960), pg. 42-45.

²⁷³ Noakes, *Physics and Psychics*, 21-26.

²⁷⁴ Noakes, *Physics and Psychics*, 83.

derided scientific research into psychic phenomena as backwards. According to historian Jeremy Noakes, a physicist's interest in psychic phenomena became a flaw in a career that should be grounded in the observable world.²⁷⁵ However, scholars in other fields did not face the same pressures to reject psychic phenomena as superstition and continued to research psychic phenomena.

At first, researchers tended to come from fields such as English, history, or anthropology, and were largely based in Europe.²⁷⁶ If psychology was used to investigate psychic phenomena, it was through psychoanalysis. Freud pioneered psychoanalysis by describing case studies of his patients rather than testing hypotheses and statistically analyzing results, and psychoanalytic psychic research followed in his footsteps.²⁷⁷ Researchers conducted case studies which featured qualitative analysis of individual experiences, but no quantitative statistical analysis.²⁷⁸ Instead, researchers compiled accounts and case studies and categorized them. Precognition referred to seeing the future, telepathy referred to mind-reading, telekinesis referred to physically moving objects with only the mind, and clairvoyance referred to seeing events and objects using only the mind's eye. While these terms were not new, psychic researchers in the late 19th and early 20th centuries firmly defined them and what phenomena the terms could apply to. For example, researchers started to separate clairvoyance from future-telling, which became known as precognition: the emphasis on "cognition" an indication of the growing impact of psychology on psychic research.²⁷⁹

²⁷⁵ Noakes, *Physics and Psychics*, 51-53.

²⁷⁶ Sudre, *Parapsychology*, 46. Early psychic research was particularly concentrated in Britain and France.

²⁷⁷ Nicholas T. Rand and Maria Torok, *Questions for Freud: The Secret History of Psychoanalysis* (Cambridge, Mass: Harvard University Press, 1997).

²⁷⁸ Sudre, *Parapsychology*, 11-12.

²⁷⁹ Sudre, *Parapsychology*, 49, 11.

As psychic research spread into the United States in the 1930s, psychologists came to dominate the field.²⁸⁰ There was a growing emphasis on quantitative data that came with the field of psychology's attempt to establish itself as a veritable science; these new psychic researchers wanted to conduct experiments, just as other psychologists were conducting.²⁸¹ Older psychic researchers worried that the scientific method would be inadequate for capturing and understanding evidence of psychic phenomena. However, the promise of hard, demonstrable scientific evidence led to psychological research gaining greater prominence, until the field became called "parapsychology."²⁸² Later physicists attempted to rename the field again to "psi," the name given to the mysterious underlying force of the human mind that made psychic abilities possible, when they started researching the subject in the 1970s. In the 1990s psychic researchers again rebranded their field to the study of Anomalous Mental Phenomena (AMP).²⁸³ However, regardless of what the phenomena were called, orthodox scientists have consistently considered it to be pseudoscience.²⁸⁴ Early 20th-century physicists mocked scientists such as Oliver Lodge for his interest in psychic phenomena. Mid-century scientists such as Dennis Rawlins deemed psychic research to be fraudulent with "no connection with valid science whatever," and modern psychologists such as Arthur Reber and James Alcock dismiss psychic phenomena as an "existential impossibility."²⁸⁵ However, interest has never died. Despite 150 years of research with no conclusive proof, parapsychology has repeatedly found results that promise tantalizing

²⁸⁰ Sudre, *Parapsychology*, 11-12; Noakes, *Physics and Psychics*, 337.

²⁸¹ Sudre, *Parapsychology*, 11-12; Noakes, *Physics and Psychics*, 324.

²⁸² Allan Angoff, and Diana Barth, *Parapsychology and Anthropology: Proceedings of an International Conference Held in London, England, August 29-31, 1973* (New York: Parapsychology Foundation, 1974).

²⁸³ Kaiser, *How the Hippies Saved Physics*, 34.

²⁸⁴ Noakes, *Physics and Psychics*, 1, 19.

²⁸⁵ Noakes, *Physics and Psychics*, 1, 19; Dennis Rawlins, "What They Aren't Telling You: Suppressed Secrets of the Psychic World, Astrological Universe, and Jeane Dixon," *The Zetetic* 2, no. 1 (1977): 62–83.; Arthur S. Reber and James E. Alcock, "Searching for the Impossible: Parapsychology's Elusive Quest," *American Psychologist* 75, no. 3 (April 2020): 391–99, <https://doi.org/10.1037/amp0000486>.

breakthroughs.²⁸⁶ Today, psychic researchers hope to find evidence with the rapidly developing field of neuroscience, but in the early 1970s, psychic researchers believed that quantum physics could explain psychic phenomena.²⁸⁷ Quantum physics researchers investigated physics on a subatomic level; they studied the gaps between the nucleus and electrons, as well as the movement of electrons, whose position and direction cannot be known at the same time.²⁸⁸ Manipulation of subatomic particles offered a possible explanation for psychic phenomena to 1970s researchers.²⁸⁹ At the time, quantum physics was an emerging field, and many of the early quantum physicists were interested in both quantum phenomena and psychic phenomena, which were similarly difficult to observe.²⁹⁰

Much of the published psychic research hinged on statistical significance. Still, studies in which researchers claimed statistical significance failed to convince skeptics. In some psychic research studies, researchers would paint one side of a card green, place it in an envelope, and ask participants to guess whether the card's green side was facing up or down. Participants with supposed psychic abilities could guess whether the card was green-side up or not at a rate higher than the 50-percent probability dictated by random chance.²⁹¹ Researchers demonstrate that the rate is higher than random chance by conducting a statistical analysis of the results to determine the probability of getting those results if the null hypothesis— in this case, that psychic abilities are not real— is true. If the probability is below a certain number, then the researchers have found statistically significant evidence to support their hypothesis— in this case, that psychic abilities

²⁸⁶ Noakes, *Physics and Psychics*, 1-5.

²⁸⁷ Kaiser, *How the Hippies Saved Physics*, 50-55.

²⁸⁸ Kaiser, *How the Hippies Saved Physics*, 60-69.

²⁸⁹ Kaiser, *How the Hippies Saved Physics*, 60-62.

²⁹⁰ Kaiser, *How the Hippies Saved Physics*, 60-62.

²⁹¹ Russell Targ and Harold Puthoff, "Research on Techniques to Enhance Extraordinary Human Perception," Proposal to National Aeronautics and Space Administration, 1972, in *STAR GATE Archives*.

are real.²⁹² Psychic researchers have consistently found statistically significant results; however, this is not enough to convince skeptical scientists.²⁹³ The number that a probability– the p-value– must be lower than to be significant is an arbitrary number.²⁹⁴ The maximum p-value that is considered significant is not mathematically determined; it is arrived at by scientific consensus, and varies by scientific field.²⁹⁵ In addition, since the p-value is a measure of probability, it is not difficult to massage the data and run multiple analyses to find a statistically significant result.²⁹⁶

Even though psychic researchers can find statistically significant results, they often have a small effect size, and lack an explanation of how psychic abilities function. This gives skeptical scientists reasons to doubt that psychic researchers have found real evidence of psychic abilities, regardless of statistical significance.²⁹⁷ If evidence for psychic phenomena is statistically significant but there are no observable effects, it is unclear what the evidence demonstrates, according to these critics. Psychic researchers must explain why their results matter if the effect size is small. However, with a large effect size, they could argue that psychic phenomena are both powerful and real, and cannot be dismissed by questioning the statistical analyses conducted.²⁹⁸ The interests of psychic researchers and intelligence agencies aligned: researchers wanted to convince skeptics that psychic phenomena were real, and intelligence agencies that funded the research hoped to use the powers to practical effect, and beat the Soviet Union in a

²⁹² Ann Cannon, George Cobb, Bradley Hartlaub, Julie Legler, Robin Lock, Thomas Moore, Allan Rossman, and Jeffrey Witmer, *STAT2: Modeling with Regression and ANOVA* (Palgrave Macmillan, 2019).

²⁹³ Targ, *Do You See What I See*, 89; Reber and Alcock, “Searching for the Impossible,” 391–99.

²⁹⁴ Cannon, Cobb, Harlaub, Legler, Lock, Moore, Rossman, and Witmer, *STAT2*, 134-150.

²⁹⁵ If the maximum p-value is too high, then too many false positives occur; if it is too small, then too many false negatives occur. The maximum p-value in psychology is high at 0.05 to account for the high number of variables that would be difficult to control for; however, some psychologists believe the p-value is too high and is contributing to the replication crisis in psychology. Cannon, Cobb, Harlaub, Legler, Lock, Moore, Rossman, and Witmer, *STAT2*, 134-150.

²⁹⁶ Cannon, Cobb, Harlaub, Legler, Lock, Moore, Rossman, and Witmer, *STAT2*, 134-150.

²⁹⁷ Utts and Hyman, “An Evaluation of the Remote Viewing Program,” 4-15.

²⁹⁸ May and Marwaha, *The Star Gate Archives*, 11-13.

psychic arms race. Scientific research into parapsychology offered both scientists and intelligence agencies an opportunity to pursue their goals through two different kinds of research.

Parapsychology research funded by U.S. intelligence agencies followed two different paths: basic research, to better understand the mechanisms behind psychic abilities, and applied research, to achieve a specific end goal of learning new intelligence about Soviet activities.²⁹⁹

Remote Viewing

While the potential of all psychic abilities intrigued intelligence officials, one field of psychic research particularly promised results that would be more useful to U.S. defense interests: remote viewing.³⁰⁰ Remote viewing, the supposed ability of a human actor to psychically “see” things that they could not physically see, received substantial funding far longer than other branches of parapsychology did. While parapsychology researchers soon gave up hope of producing telekinesis powerful enough to have practical applications for the agencies funding them, both researchers and agencies pursued remote viewing research throughout the 1980s and early 1990s.³⁰¹ Telekinesis did not require specialized interpretation, and results rested on a binary: either an object moved, or it did not. Remote viewing, on the other hand, required interpretation, and evidence existed on a spectrum. Remote viewers were asked to psychically “see” a scene that was out of sight, called a target, and to describe what they saw.³⁰² Researchers would compare the remote viewer’s description to the actual target and evaluate on a numerical scale how closely the description matched the actual target.³⁰³ They were looking for similarities,

²⁹⁹ May and Marwaha, *The Star Gate Archives*, 12-15.

³⁰⁰ May and Marwaha, *The Star Gate Archives*, 7-11.

³⁰¹ May and Marwaha, *The Star Gate Archives*, 11.

³⁰² Targ, *Do You See What I See*, 71-77.

³⁰³ Harold Puthoff and Russell Targ, “Perceptual Augmentation Techniques— Technical Proposal,” 1973, in *STAR GATE Archives*.

and very often they found them. This, combined with the straightforward intelligence gathering potential of remote viewing, meant that parapsychological researchers received large amounts of money for basic research into remote viewing; however, they had to demonstrate success to their funders.³⁰⁴

In order to provide convincing proof of psychic phenomena— success, in basic research— researchers made an effort to follow acceptable scientific methods of the time, despite the small sample sizes and subjective interpretation often involved in remote viewing research.³⁰⁵ Basic researchers such as Harold Puthoff and Russell Targ, prominent and prolific psychic researchers at the Stanford Research Institute (SRI), followed the scientific method: an experiment was designed to test a hypothesis, results were noted and statistically analyzed to determine whether the null hypothesis should be rejected, and the process was written up in a paper that described the hypothesis, methods, results, and a discussion of the results.³⁰⁶ The hypothesis of remote viewing varied slightly in different studies. Sometimes the target was an object, and sometimes it was a location, but the hypothesis and methodology remained broadly similar.³⁰⁷ Participants were told to find the target and produce some evidence of it. Researchers would then analyze that evidence for similarity with the target.³⁰⁸ This required subjective judgement calls— for example, in one study, a researcher drew an image that was hidden from the participant.³⁰⁹ The participant

³⁰⁴ Targ, *Do You See What I See*, 79.

³⁰⁵ LaBerge, Davis, Tighe, Thompson, Brown, and Shapiro, “Proceedings of GRILL FLAME Meeting.” 1979, October 30.

³⁰⁶ Harold Puthoff and Russell Targ, “Proposed Grill Flame Protocol: Proposed SRI International Applied Remote Viewing Protocol,” 1979, in *STAR GATE Archives*.

³⁰⁷ Puthoff and Targ, “Proposed Grill Flame Protocol: Proposed SRI International Applied Remote Viewing Protocol.”

³⁰⁸ Puthoff and Targ, “Proposed Grill Flame Protocol: Proposed SRI International Applied Remote Viewing Protocol.”

³⁰⁹ Harold Puthoff and Russell Targ, “Information transmission under conditions of sensory shielding”, *Nature* 251 (1972), 602-607.

was then asked to draw what they thought the image was, and the researchers then compared the participant's drawing to their own. Some participants drew objects that matched impressions they felt about the target, with one participant drawing a pitchfork and cross when asked to draw a target image of the devil. Other participants drew images that matched the shape of the target, at least if viewed from a certain angle. One participant drew a beetle when asked to draw a target image of a volcano. Researchers flipped the beetle drawing upside down and found that the shape was similar to that of the volcano they had drawn. The similarity of these images was difficult to quantitatively measure, but both psychic researchers and their funders found the similarities compelling.³¹⁰ However, basic research required peer review; psychic researchers did not only have to convince intelligence agencies. They also had to convince external experts, which required publication in peer-reviewed journals.³¹¹ Parapsychology studies were published in a number of highly respected journals, and the editor of prestigious science journal *Nature* published a study by Targ and Puthoff, albeit with the expectation that it would stir controversy.³¹²

Controversial science was accepted at the Stanford Research Institute (SRI) where Targ and Puthoff worked, which quickly became the largest STAR GATE research program.³¹³ SRI, which had formally split from Stanford University just a few years before the STAR GATE program began, was an organization dedicated to conducting research on behalf of clients, including on controversial topics. While the most visible controversies were university student protests about the military research scientists did at SRI, parapsychology was controversial

³¹⁰ Puthoff and Targ, "Information transmission under conditions of sensory shielding", 602-607.

³¹¹ Department of Defense, *Gale Committee Report*.

³¹² Melinda Baldwin, *Making "Nature": The History of a Scientific Journal*, Chicago: University of Chicago Press, 2015, <https://doi.org/10.7208/9780226261591>, 211-213.

³¹³ Department of Defense, *Gale Committee Report*.

among scientists, many of whom did not consider parapsychology to even be a science.³¹⁴ For the most part, however, fellow scientists ignored Puthoff and Targ; most did not consider their studies worth the time and money to attempt replication. Still, SRI attracted many scientists who were interested.³¹⁵ Despite its prestigious reputation— or perhaps contributing to its reputation— Stanford University was also a center of controversial physics research, particularly in the years leading up to SRI’s formal separation from the university.³¹⁶ The center of this research was the Fundamental Fysics Group discussed in *How the Hippies Saved Physics*. This group developed in the 1960s and 1970s, when Cold War funding of traditional physics had begun to melt away, and New Age beliefs— and drugs— were becoming widespread, leading to exploration of unorthodox beliefs and a desire to understand the nature of a reality in a way traditional scientists were not.³¹⁷ Targ and Puthoff were not members of the Fundamental Fysics Group from its inception, but the group laid the groundwork for interest in psychic phenomena at Stanford, and rekindled physicists' interest in psychics.³¹⁸

During the STAR GATE program, scientists with otherwise mainstream research interests, including Puthoff, Targ, and May, joined SRI.³¹⁹ Edwin May was a physicist who managed the program, and while he contributed to some basic research studies, he was not the primary experimenter, unlike Puthoff and Targ.³²⁰ Harold Puthoff was a doctor of electrical engineering at Stanford, and Russell Targ had dropped out of university but had established a

³¹⁴ Reber and Alcock, “Searching for the Impossible,” 391-395.

³¹⁵ May and Marwaha, *The Star Gate Archives*, 13.

³¹⁶ Kaiser, *How the Hippies Saved Physics*, 63.

³¹⁷ Kaiser, *How the Hippies Saved Physics*, 37.

³¹⁸ Kaiser, *How the Hippies Saved Physics*, 110-113.

³¹⁹ May and Marwaha, *The Star Gate Archives*, 11-13.

³²⁰ Targ, *Do you See What I See*, 126-128.

career researching laser sensors for Lockheed Martin.³²¹ Targ met Puthoff at a conference, and he worked closely with Puthoff as a physicist in the STAR GATE program at SRI; the two would become the principle researchers. Puthoff and Targ tackled accusations of pseudoscience head-on, arguing that dismissing the possibility of psychic phenomena without serious consideration was unscientific in itself.³²²

The SRI researchers worked closely with the people who participated in their studies. Since their funding came from intelligence agencies which hoped to use psychic spies, they conducted several basic research experiments to find a way to generally improve psychic abilities.³²³ In order to find a method for training psychic abilities, they needed participants who would be willing to return repeatedly for further tests. As a result, the psychic researchers were concerned about the wellbeing of their participants, who were often asked to evaluate how enjoyable they had found the testing; most found the experience extremely positive, and expressed an interest in further exploring their psychic abilities.³²⁴ However, despite the number of participants who said they would be open to further testing, psychic researchers relied on a small number of repeat participants, including the researchers' children as well as three psychics that were featured in news stories throughout the 1970s and 1980s: Ingo Swann, Uri Geller, and Pat Price.³²⁵ The psychic researchers believed that these participants possessed the most

³²¹ Targ, *Do You See What I See*, 127.

³²² Russell Targ and Harold Puthoff, "Research on Techniques to Enhance Extraordinary Human Perception," Proposal to National Aeronautics and Space Administration, 1972, in *STAR GATE Archives*.

³²³ Russell Targ and David Hurt, "Learning Clairvoyance and Precognition with an Extra Sensory Perception Teaching Machine," 1971. CIA FOIA.

³²⁴ Targ and Hurt, "Learning Clairvoyance," 41-45.

³²⁵ Targ, *Do You See What I See*, 24-30.

powerful psychic abilities, and sought to use their apparent powers to demonstrate the validity of psychic phenomena to their peers.³²⁶

Intelligence agency funding of basic research relied on the publication and peer review of scientific experiments.³²⁷ Publication in a peer-reviewed journal— which, in the case of Puthoff and Targ, sometimes meant a journal only peer-reviewed by psychic researchers and not by mainstream scientists – gave other researchers the opportunity to replicate results. Despite the fact that successful replications of parapsychology experiments were rarely published, intelligence agencies, similar to universities, paid more attention to published studies than to replication.³²⁸ Publication was the final step in the process of providing and interpreting scientific evidence; the results of intelligence agency-funded basic research were not kept secret.³²⁹ Peer reviewed validation meant success. Although psychic researchers believed in their results regardless of what their peers thought, they still depended on peer review. If fellow scientists found parapsychology valid, then STAR GATE researchers could point to their response as evidence that psychic phenomena was real and deserved funding for further investigation from intelligence agencies.

However, while secret intelligence agencies were the largest funders of psychic research, they were not parapsychologists' only sources of government funding. Puthoff and Targ wrote grant applications to the Jet Propulsion Laboratory (JPL) NASA center in California, asking for funding to develop an “automated testing machine” that could reinforce correct psychic answers— for example, a machine that could track participants' responses and play a chime if they correctly

³²⁶ May and Marwaha, *The Star Gate Archives*, 13.

³²⁷ U.S. Defense Intelligence Agency, “Project STAR GATE Research and Review Plan,” 1994, CIA.gov.

³²⁸ Jessica Utts and Raymond Hyman, “An Evaluation of the Remote Viewing Program: Research and Operational Application,” *American Institute for Research*, 1995.

³²⁹ May and Marwaha, *The Star Gate Archives*, 11-13.

guessed whether a card was green or red.³³⁰ This would allow Puthoff and Targ to train psychics to become more powerful.³³¹ They argued that psychic abilities and training should be seriously considered— after all, they said, they were conducting scientific research and had found statistical significance, and the Stanford Research Institute was meant to push the boundaries of knowledge in any case.³³² NASA granted their request, which aligned with the interests of Ed Mitchell, a former Apollo 14 astronaut and a passionate believer in parapsychology.³³³ Mitchell was retiring from NASA at the time, but he had agency connections and advocated for Targ and Puthoff’s research.³³⁴ These investors were not skeptics, but they expected scientific evidence, and psychic researchers believed they could provide it.

While the bulk of parapsychological research for intelligence agencies was done at small laboratories such as Puthoff and Targ’s, defense intelligence agencies turned to larger, external scientific research institutions to review evidence and evaluate research results.³³⁵ These institutions included the Science Applications International Corporation, which advises the federal government on information technology, and the American Institute for Research, which evaluates the scientific aspects of federal government programs.³³⁶ These institutions conducted audits of the unclassified results produced by parapsychological researchers. While the intelligence agencies did not direct basic research studies to find particular results, they expected evidence that they were not wasting their money.³³⁷ Funding parapsychological research was

³³⁰ Targ and Puthoff, “Research on Techniques to Enhance Extraordinary Human Perception,” 4.

³³¹ Targ and Puthoff, “Research on Techniques to Enhance Extraordinary Human Perception,” 4.

³³² Targ and Puthoff, “Research on Techniques to Enhance Extraordinary Human Perception,” 1-2.

³³³ Targ and Puthoff, “Research on Techniques to Enhance Extraordinary Human Perception,” 1-4.

³³⁴ May and Marwaha, *The Star Gate Archives*, 12-21.

³³⁵ Defense Intelligence Agency, “Project STAR GATE Research and Peer Review Plan.”

³³⁶ SAIC.com; AIR.org.

³³⁷ Defense Intelligence Agency, “Project STAR GATE Research and Peer Review Plan”; Utts and Hyman, “An Evaluation of the Remote Viewing Program,” 7-20.

controversial within the intelligence agencies. Psychic phenomena were not well-established facts, and although high-ranking leadership was interested in the potential of psychic abilities, potential results would not keep funding flowing from the investors.³³⁸

STAR GATE researchers needed people with powerful psychic abilities to achieve practical, applied results, and they turned to Pat Price, Ingo Swann, and Uri Geller. The researchers were familiar with them from their participation in SRI basic research studies, and not only believed in their remote viewing talents, but viewed them as experts in psychic abilities and solicited their input when designing research studies.³³⁹ All three worked closely with researchers in the late 1970s on developing the protocols for applied programs which they would participate in, and were asked to psychically “see” secret locations that included both Soviet and American air bases.³⁴⁰ Most studies involved the psychic participant describing their visions at the same time as they claimed to be remotely viewing a target; the psychic participant would report moving through a scene, often starting from a far-off vantage point and a general description of the environment, which would get more specific as the psychic participant would move closer to the target, sometimes describing activities taking place at the target, or peeking inside a target building. They would then draw maps or pictures to illustrate their words. In one study, Price described descending through a flock of birds to see a forested area, part of which had been cleared to make way for runways and airplane hangers. He drew a map of what he said he had psychically seen, and an observer with the required security clearance reviewed Price’s

³³⁸ LaBerge, Davis, Tighe, Thompson, Brown, and Shapiro, “Proceedings of GRILL FLAME Meeting.”

³³⁹ Russell Targ and Harold Puthoff, “Remote Viewing of Natural Targets,” presented at *Quantum Physics and Parapsychology Conference*, Geneva, August 26-27, 1974. <https://www.cia.gov/readingroom/docs/CIA-RDP96-00787R000500410001-3.pdf>

³⁴⁰ Targ, *Do You See What I See*, 89.

map and description, concluding that Patrisse had seen a secret American Air Force base.³⁴¹ It would be impossible to peer review this conclusion, at least without the proper security clearance. However, it demonstrated how potentially powerful remote viewing could be to U.S. intelligence agencies.

Intelligence agencies wanted to apply the power of remote viewing to learn information about the location of Soviet bases and the activities that were going on at Soviet locations. They turned to remote viewing when conventional methods, such as satellites, failed. However, since psychic abilities were experimental compared to traditional intelligence gathering methods, they were a last resort and never the default approach. This rankled the psychic researchers, who complained about an unfair standard being placed on remote viewing, since remote viewing was used only in the most difficult operations.³⁴² Evidently they did not have a high success rate. This distressed researchers used to pursuing evidence that psychic phenomena existed. However, STAR GATE managers felt that such last-resort cases provided good evidence for the usefulness of psychic abilities. As intelligence officials argued in a 1994 research plan recommendation, the “intelligence utility of [psychic] data may in some cases be only weakly connected to [psychic] quality.”³⁴³ In other words, “quality” psychic data— data that was controlled, validated, and theoretically replicable— was often not useful for intelligence missions. If researchers fully validated psychic abilities in a laboratory setting, but those abilities could not provide information that the government could have obtained through other means, psychic abilities

³⁴¹ Harold Puthoff and Russell Targ, “Project Scanate: Exploratory Research in Remote Viewing,” 1975, in *STAR GATE Archives*.

³⁴² May and Marwaha, *The Star Gate Archives*, 17-21.

³⁴³ Defense Intelligence Agency, “Project STAR GATE Research and Peer Review Plan.”

would not have significant “intelligence utility” and intelligence agencies would have no reason to continue funding their development.³⁴⁴

Applied research funding did not require demonstration of the existence of psychic phenomena, or an explanation of how it worked. However, it did require evidence that those phenomena could be harnessed to gather intelligence in the near future. Intelligence agents were not interested in the answer to esoteric questions such as how psychic abilities functioned. They wanted to know how they could make psychic abilities useful, and parapsychology researchers struggled to answer this question.³⁴⁵ Parapsychology researchers could claim some successful cases of using psychic abilities to find out information, such as the location of the Soviet atomic bomb laboratory in Semipalatinsk.³⁴⁶ Finding Semipalatinsk, and identifying classified information such as code names via remote viewing, convinced parapsychology researchers and intelligence officials that remote viewing had potential. For example, Russell Targ noted instances of remote viewers describing potential Soviet locations in detail in 1974 and 1979, and those details later being validated when the locations were found using conventional methods. Based on the strength of those similarities, he claims that remote viewers could have found Saddam Hussein much quicker than the U.S. did if the STAR GATE program had not been terminated.³⁴⁷ However, the examples of success that Targ cites are examples of data validation supporting the hypothesis of remote viewing existing and being powerful— not examples of practical utility.

³⁴⁴ Defense Intelligence Agency, “Project STAR GATE Research and Peer Review Plan.”

³⁴⁵ LaBerge, Davis, Tighe, Thompson, Brown, and Shapiro, “Proceedings of GRILL FLAME Meeting”; Harold Puthoff, “Memo to Gale re: Gale Committee Meeting,” August 3, 1979, CIA.gov; Utts and Hyman, “An Evaluation of the Remote Viewing Program.”

³⁴⁶ Targ, *Do You See What I See*, 126-130.

³⁴⁷ Targ, *Do You See What I See*, 126-130; xxix.

The line between basic and applied research could become blurry, and at times the differing goals and methods between basic and applied research led to clashes. At a 1979 meeting to discuss the future of the program, scientists Dr. Stephen LaBerge and Dr. Ruth Davis, along with military commanders Lieutenant General Eugene Tighe, Major General Thompson, Major General Brown, and Rear Admiral Sumner Shapiro, bemoaned what Dr. Davis called the “gee whiz” attitude of researchers who focused on the fundamental mechanisms behind psychic phenomena, rather than on making it usable.³⁴⁸ They admired Army researchers, who they felt were more grounded and to the point than scientists concerned with, as Targ described his goals, “questioning...conventional reality.”³⁴⁹ Researchers such as Targ felt constrained by the requirements of applied research; despite the greater flexibility offered by operational settings, many parapsychology researchers did not start researching psychic phenomena in order to gain an edge over the Soviet Union.³⁵⁰ They felt they were pursuing greater truths, and they wanted to share those truths. Classification, said Targ, was “not part of anyone’s spiritual path,” and he left STAR GATE in 1982, after renewed pressure to pursue applied rather than basic research led to the program’s focus splitting between different research programs at different sites, rather than concentrated at SRI.³⁵¹ In part, this was due to the report of an internal evaluating committee chaired by a science advisor for the Department of Defense, Manfred Gale, in 1980. The report had recommended that the DIA “not support scientific understanding” and reduce “SRI dependence” in an effort to develop operational remote viewing.³⁵²

³⁴⁸ LaBerge, Davis, Tighe, Thompson, Brown, and Shapiro, “Proceedings of GRILL FLAME Meeting.”

³⁴⁹ LaBerge, Davis, Tighe, Thompson, Brown, and Shapiro, “Proceedings of GRILL FLAME Meeting”; Targ, *Do You See What I See*, 160-166.

³⁵⁰ Targ, *Do You See What I See*, 162.

³⁵¹ Targ, *Do You See What I See*, 162.

³⁵² Department of Defense, “Gale Committee Report.”

There are few examples of remote viewers successfully finding information that they had been directed to see; it is possible that successful examples remain classified, but research evaluations from 1979 to 1994 consistently described a viable psychic spy development program as a possibility that would soon be realized, not as one that was currently in use.³⁵³ However, despite these consistent evaluation reports, U.S. intelligence agencies continued funding the STAR GATE program for two decades. In part, this was due to the fact that the reports never dismissed psychic abilities as an impossibility, and expressed interest in their potential for use in intelligence operations. U.S. intelligence officials in charge of funding read these reports and “had the vision” to see the potential; even if psychic abilities were not operational at the moment, they might be soon, and U.S. intelligence officials focused on this future possibility rather than the current reality. This would be a major asset to U.S. intelligence capabilities, but it would never materialize if officials did not continue funding the STAR GATE program.

The Gateway Program

While remote viewing researchers used scientific research to provide justification for further funding, astral projection researchers at a private research institute—the Monroe Institute of Applied Sciences (MIAS)—relied on the appeal of personal experience to sell products and programs based on their research to many customers, including the DIA.³⁵⁴ The DIA bought training programs for a pre-existing MIAS consumer program, called the “Gateway Program.”³⁵⁵ A former radio presenter, Robert Allan Monroe, had established MIAS and directed researchers to study astral projection, or out-of-body experiences. Monroe had claimed to have had some

³⁵³ Department of Defense, “Gale Committee Report”; Utts and Hyman, “An Evaluation of the Remote Viewing Program,” 7-20.

³⁵⁴ May and Marwaha, *The Star Gate Archives*, 17; Buzby, “CENTER LANE Information Papers,” 4-5, 14.

³⁵⁵ Monroe Institute of Applied Sciences, “Monroe Institute Schedule of Activities,” 1981, CIA.gov.

such experiences himself, and with his knowledge of radio signals, he became interested in using sound waves to control out-of-body experiences.³⁵⁶ In 1975, he patented the “Hemi-Sync” technology, which played different frequencies in the left and right ears to “promote brain-wave synchronization between the two hemispheres.”³⁵⁷ MIAS researchers claimed that this increased users’ conscious control of their body and their ability to learn without being conscious. Using Hemi-Sync technology, MIAS “developed a highly experimental program for the training of consciousness itself,” which it called the Gateway Program.³⁵⁸

The Gateway Program promised its trainees a range of benefits that appealed to both the general public and intelligence operatives. According to brochures and advertisements distributed by the MIAS, the Gateway Program would allow trainees to control pain, give their body an energy boost, and dispel negative emotions.³⁵⁹ MIAS emphasized these self-help benefits in their advertising, and collected testimonials from users who claimed that the Gateway Program had indeed helped to improve their lives. However, MIAS researchers said that enhancing daily life was only the beginning. They named the process the “Gateway Program” because they believed it would “lead to a gateway...into different modes of perception.”³⁶⁰ If a trainee was not hampered by fear, MIAS researchers said that they could control time and access a higher plane of existence, where they could psychically become one with the universe. This would allow trainees to send psychic messages and psychically observe what was happening in another part of the world.³⁶¹ STAR GATE officials were intrigued by this possibility, and sent

³⁵⁶ “Re: Robert Allan Monroe,” CIA.gov.

³⁵⁷ Monroe Institute of Applied Sciences, “Monroe Institute Presents the GATEWAY Program,” CIA.gov.

³⁵⁸ Monroe Institute of Applied Sciences, “Monroe Institute Presents the GATEWAY Program.”

³⁵⁹ Monroe Institute of Applied Sciences, “Monroe Institute Presents the GATEWAY Program.”

³⁶⁰ Monroe Institute of Applied Sciences, “Monroe Institute Presents the GATEWAY Program.”

³⁶¹ Buzby, “CENTER LANE information papers,” 23, 4-5.

intelligence operatives to Gateway training camps in 1978 to 1983.³⁶² In 1983, they spent 24,400 dollars on MIAS training, including retreats and training programs.³⁶³

MIAS leaders focused on developing astral projection training programs and selling them to clients such as the DIA; their research was primarily internal to the institute, not published for peer review. They touted the “seriousness” and “objectivity” of their research in advertising materials, but they did not make an effort to validate their research in the eyes of mainstream scientists.³⁶⁴ MIAS researchers included few statistical analyses and did not attempt to publish their studies in peer-reviewed journals.³⁶⁵ As an informational summary of the MIAS program put it, the MIAS did not have “the intent of offering proof...to the scientific community.”³⁶⁶ MIAS researchers only focused on potential practical applications of aural stimulation, energy healing, and astral projection.³⁶⁷ “[O]rthodox scientific method” could offer some benefits, but MIAS researchers did not feel they had to rely on it.³⁶⁸ They were not selling their research to the scientific community, but to the public, who evaluated MIAS research on different criteria. MIAS customers wanted to improve their lives, and regardless of whether MIAS could provide more effective improvement than mainstream medical treatment and therapy, if MIAS customers had a good personal experience and felt they had gained some benefits, they were likely to spread the word and bring more customers to MIAS.³⁶⁹

³⁶² Buzby, “CENTER LANE information papers,” 30-37.

³⁶³ Buzby, “CENTER LANE information papers,” 14.

³⁶⁴ Monroe Institute of Applied Sciences, “Monroe Institute of Applied Sciences Bulletin,” CIA.gov.

³⁶⁵ Monroe Institute of Applied Sciences, “Monroe Institute of Applied Sciences Summary,” CIA.gov.

³⁶⁶ Monroe Institute of Applied Sciences, “Monroe Institute of Applied Sciences Summary.”

³⁶⁷ Monroe Institute of Applied Sciences, “Monroe Institute Presents the GATEWAY Program.”

³⁶⁸ Monroe Institute of Applied Sciences, “Monroe Institute of Applied Sciences Summary.”

³⁶⁹ Monroe Institute of Applied Sciences, “Monroe Institute of Applied Sciences Summary.”

However, the DIA was not the public, and MIAS benefited from scientifically structured psychic research, such as the SRI experiments. MIAS did not have to demonstrate the legitimacy of psychic abilities to DIA officials, as they were already convinced by other STAR GATE researchers.³⁷⁰ The STAR GATE project manager from 1983 to 1985, Lieutenant Colonel Brian Buzby, saw the Gateway program as a way to train psychic spies to become practically effective remote viewers.³⁷¹ During the 1980s, DIA officials prioritized applied research, and Buzby was concerned with producing useful field results.³⁷² The SRI research had established the existence and potential of psychic remote viewing, but could not produce reliable intelligence information about Soviet activities.³⁷³ Convinced that training for field results required field conditions, not laboratory conditions, STAR GATE officials such as Buzby turned towards less scientific training methods that could make the scientific research work for practical intelligence operations.³⁷⁴ The Gateway Program was promising.

Monroe created his institute with the ethos that research was worthless without practical applications, which appealed to STAR GATE officials trying to develop psychic abilities that could be used in the field.³⁷⁵ MIAS promoted their position on research and development in their advertising materials, including a summary overview of the institute that they sent to DIA officials.³⁷⁶ According to the summary, the MIAS belief was that “The results of related research

³⁷⁰ Buzby, “CENTER LANE information papers,” 4, 10.

³⁷¹ Robert A. Monroe to Brian Buzby, December 5, 1983. Buzby was the project manager of the STAR GATE program when it was known as CENTER LANE; the GRILL FLAME program briefly became the CENTER LANE program under the purview of U.S. Army Intelligence and Security Command, although STAR GATE operative Joe McMoneagle forgot that the program had been renamed and called it GRILL FLAME in a 1982 report.

³⁷² Buzby, “CENTER LANE information papers,” 4.

³⁷³ Department of Defense, “Gale Committee Report.”

³⁷⁴ Robert A. Monroe, “Monroe Institute Of Applied Sciences Letter to Brian Buzby,” December 5, 1983, CIA.gov.

³⁷⁵ Monroe Institute of Applied Sciences, “Monroe Institute of Applied Sciences Summary”; Buzby, “CENTER LANE information papers,” 4.

³⁷⁶ Monroe Institute of Applied Sciences, “Monroe Institute of Applied Sciences Summary.”

effort are meaningful only if reduced to practical application, to ‘Something of Value.’”³⁷⁷ To STAR GATE officials, “‘Something of Value’” meant psychic spy training.³⁷⁸ They spent thousands of dollars on Gateway training materials and program retreats for agents.³⁷⁹ At the Gateway retreats, MIAS researchers guided people through the different meditative stages of their program, with the goal of helping attendees achieve “Focus 12,” which MIAS claimed would allow people to unlock higher consciousness. STAR GATE operatives reported that they had achieved “Focus 12,” while many other attendees had not prepared well enough to “benefit from” the retreat.³⁸⁰ The STAR GATE operatives had studied Gateway tapes for six weeks before attending the retreat, but felt that six weeks “almost did not appear to be sufficient.”³⁸¹ They believed that extensive prior training was necessary to achieve the results promised by Gateway promoters, but that such results were possible and would be extremely useful to remote viewing operations. They recommended that STAR GATE operatives regularly listen to Gateway tapes and attend training seminars, as the “MIAS program...is imperative in advanced training and the continued success of GRILL FLAME operations.”³⁸²

However, despite the enthusiasm of STAR GATE program trainees, the Gateway program failed to produce psychic spies. The 1995 American Institute of Research report on the STAR GATE program, which included the experimentation with the Gateway process, found no evidence that the research had resulted in any “operationally” useful abilities.³⁸³ Even before 1995, STAR GATE officials had started to question the Gateway Program. When STAR GATE

³⁷⁷ Monroe Institute of Applied Sciences, “Monroe Institute of Applied Sciences Summary.”

³⁷⁸ Monroe Institute of Applied Sciences, “Monroe Institute of Applied Sciences Summary.”

³⁷⁹ Buzby, “CENTER LANE information papers.”

³⁸⁰ Joseph McMoneagle, “Trip Report, 18-26 June 1982,” 1982, CIA FOIA.gov.

³⁸¹ McMoneagle, “Trip Report.”

³⁸² McMoneagle, “Trip Report.”

³⁸³ Utts and Hyman, “An Evaluation of the Remote Viewing Program,” 7-20.

officials briefed the Director of Army Staff, Lieutenant General Brown, about their research in 1984, he “directed cessation of all [U.S. Army] involvement with [MIAS].”³⁸⁴ Lieutenant General Brown was concerned about the lack of oversight and adherence to “scientific standards.”³⁸⁵ STAR GATE officials persuaded him to let them continue some advanced training programs, but STAR GATE would never be quite so involved with MIAS again.³⁸⁶ The DIA and U.S. Army had been drawn to the Gateway Program because MIAS eschewed basic research in favor of applied research, but by the 1990s, officials evaluating the STAR GATE program were critical of that lack of basic research.³⁸⁷ Gateway researchers did not aim to prove the existence of astral projection with results that could be scientifically validated, which left room for doubt.³⁸⁸ If astral projection was not a real phenomenon, then continuing to spend money on astral projection training would be a waste. Ultimately, STAR GATE officials rejected the Gateway psychic training because it failed to adhere to “scientific standards.”³⁸⁹

Despite its lack of “scientific standards,” the Gateway program’s emphasis on practical application appealed to intelligence officials and the general public.³⁹⁰ It still appeals today. MIAS still exists, and sells Gateway tapes on its website, with DIA operative testimonials.³⁹¹ While the revelation of U.S. intelligence involvement with psychic research might have been

³⁸⁴ U.S. Army Intelligence and Command, “Memoranda for the Record re: Continuation of MIAS,” 1984, in TMI Army Files, Monroe Institute Collection, Internet Archive.

³⁸⁵ U.S. Army Intelligence and Command, “Memoranda for the Record re: Continuation of MIAS.”

³⁸⁶ U.S. Army Intelligence and Command, “Memoranda for the Record re: Continuation of MIAS.” While the advanced training programs were allowed to continue, training for new personnel was discontinued.

³⁸⁷ Utts and Hyman, “An Evaluation of the Remote Viewing Program,” 7-15.

³⁸⁸ Monroe Institute of Applied Sciences, “Monroe Institute of Applied Sciences Summary.”

³⁸⁹ U.S. Army Intelligence and Command, “Memoranda for the Record re: Continuation of MIAS.”; Utts and Hyman, “An Evaluation of the Remote Viewing Program,” 4-5.

³⁹⁰ Monroe Institute of Applied Sciences, “Monroe Institute of Applied Sciences Summary.”

³⁹¹ Monroe Institute.org.

embarrassing to the intelligence community, it was legitimizing to MIAS researchers.³⁹² MIAS maintains an archive of STAR GATE involvement hosted on Internet Archive, in addition to their website history of STAR GATE officials' involvement, and emphasizes the intelligence officials' ranks and the practical nature of their interest.³⁹³ They did not want to unlock the secrets of the universe; they wanted to unlock the secrets of Soviet activities.³⁹⁴ This would have been a serious application of Gateway techniques by serious, and official, U.S. intelligence leaders. MIAS uses their interest alone as evidence for the legitimacy of the Gateway program.³⁹⁵

Conclusion

STAR GATE researchers had to justify their research to observers and overseers, and shaped their research practices to suit their different audiences. Basic and applied research offered psychic researchers two ways to demonstrate the validity of psychic phenomena: basic research provided funding to conduct experiments that could turn into published papers, while applied research meant that psychic researchers could pursue non-scientific proof.³⁹⁶ They received millions of dollars funding their research for two decades, despite their apparent lack of progress.

U.S. intelligence agencies investigated many different methods of improving intelligence operations, and STAR GATE program funding was not a particularly large line item in their budgets. The STAR GATE program employed small numbers of researchers and operatives,

³⁹² Utts and Hyman, "An Evaluation of the Remote Viewing Program"; Monroe Institute.org; Targ, *Do You See What I See*, 108.

³⁹³ Internet Archive, Monroe Institute Collections; Monroe Institute.org.

³⁹⁴ LaBerge, Davis, Tighe, Thompson, Brown, and Shapiro, "Proceedings of GRILL FLAME Meeting."

³⁹⁵ Monroe Institute.org.

³⁹⁶ Targ, *Do You See What I See*, 138; Department of Defense, "Gale Committee Report."

generally around a dozen people, and did not require expensive equipment such as satellites.³⁹⁷ In total, the STAR GATE program cost U.S. intelligence agencies close to twenty million dollars over twenty years. This raised eyebrows among skeptics—STAR GATE officials were worried of receiving the “Golden Fleece Award” for most wasteful government spending program—but was a small amount of money compared to other intelligence programs.³⁹⁸ Since it was a small investment that could produce potentially very useful results, U.S. intelligence officials were not motivated to focus on the repeatedly negative findings of the program evaluations. However, this would not last forever. In the 1970s and 1980s, STAR GATE researchers had to demonstrate their validity to U.S. politicians, but not the public; this changed in 1992 after the end of the Cold War.³⁹⁹ Once intelligence agencies’ involvement was made public in 1992, the embarrassment caused officials to review the program with newly critical eyes.⁴⁰⁰ Three years later, after the report by the American Institute of Research in 1995, the CIA officially terminated the STAR GATE program.⁴⁰¹

Defense intelligence agencies wanted to use psychic abilities, and psychic researchers were able to make use of their interest through both funding and legitimization. If intelligence agencies used psychic abilities, then those abilities must exist, and be powerful enough to be used. Defense intelligence involvement not only gave researchers money to find evidence, it also gave them direct evidence.⁴⁰² In his autobiography, Targ says that the CIA would not waste 20

³⁹⁷ Steven Aftergood, “Secrecy & Government Bulletin -- Issue 49,” *Federation of American Scientists*, accessed April 24, 2025.

³⁹⁸ LaBerge, Davis, Tighe, Thompson, Brown, and Shapiro, “Proceedings of GRILL FLAME Meeting”; Aftergood, “Secrecy & Government Bulletin.”

³⁹⁹ McCarthy, *Selling the CIA*, 77-81.

⁴⁰⁰ May and Marwaha, *The Star Gate Archives*, 17.

⁴⁰¹ May and Marwaha, *The Star Gate Archives*, 17; Utts and Hyman, “An Evaluation of the Remote Viewing Program,” 2-5.

⁴⁰² May and Marwaha, *The Star Gate Archives*, 11-17.

million dollars on a phenomenon that was not real.⁴⁰³ The funding and program development by defense intelligence agencies becomes proof, regardless of results.⁴⁰⁴ The STAR GATE program was constantly under scrutiny for a lack of utility, but the program existed for decades, and psychic researchers claim that they did successfully locate some intelligence targets by remote viewing.⁴⁰⁵ Classification of applied remote viewing efforts makes scientific validation impossible, but it also means that scientific debunking is impossible.⁴⁰⁶ However, while psychic researchers use intelligence agency involvement as evidence of the utility of psychic abilities, and therefore their existence, the intelligence agencies did not share the same view when they evaluated the STAR GATE program. Intelligence agencies publicly concluded that parapsychological researchers had demonstrated the existence of psychic abilities, but they had also demonstrated that such abilities were too weak to be of use.⁴⁰⁷ Like MK-ULTRA, the STAR GATE program was officially ended because it failed to produce practical applications.⁴⁰⁸

However, unlike MK-ULTRA, the STAR GATE program was subject to congressional and military oversight, and officials were concerned with the rights of human participants. The STAR GATE program began in 1972, and three years later the Church Committee revealed that the MK-ULTRA program had experimented on American citizens without their knowledge or consent, scandalizing the public.⁴⁰⁹ High-ranking military and political officials scrutinized the STAR GATE program, which tested the psychic abilities of human participants.⁴¹⁰ The Surgeon

⁴⁰³ Targ, *Do You See What I See*, 162.

⁴⁰⁴ Targ, *Do You See What I See*, 162; Monroe Institute.org.

⁴⁰⁵ May and Marwaha, *The Star Gate Archives*, 11-17; Targ, *Do You See What I See*, 162.

⁴⁰⁶ Reber and Alcock, "Searching for the Impossible," 391-395.

⁴⁰⁷ Utts and Hyman, "An Evaluation of the Remote Viewing Program," 4-5.

⁴⁰⁸ Utts and Hyman, "An Evaluation of the Remote Viewing Program," 7-15.

⁴⁰⁹ May and Marwaha, *The Star Gate Archives*, 1-11; United States Senate, "Church Committee Reports," 1975-1976.

⁴¹⁰ Buzby, "CENTER LANE information papers," 12.

General's Human Research Review board evaluated the STAR GATE program, and in November 1979 determined that STAR GATE research qualified as "human use."⁴¹¹ Since STAR GATE research was "human use," the U.S. Army Intelligence and Security Command directed researchers to submit their research to their Human Technology Review Board for oversight.⁴¹² Although STAR GATE researchers wanted to recruit human participants and were concerned with their well-being, the review board prevented possible abuses such as MK-ULTRA's tests on unwitting Americans and unwilling blacksite prisoners.⁴¹³ It also meant that the DIA could avoid the scandal of the MK-ULTRA program, and armed them with evidence that they acted within accepted ethical standards if anyone would decide to launch a future lawsuit.⁴¹⁴ The STAR GATE program demonstrates the importance of critical oversight to ensuring that scientific standards, including standards governing the ethical treatment of human participants, are followed.

⁴¹¹ Buzby, "CENTER LANE information papers," 30.

⁴¹² Buzby, "CENTER LANE information papers," 12.

⁴¹³ Buzby, "CENTER LANE information papers," 12; Kinzer, *Poisoner in Chief*, 64.

⁴¹⁴ Stark, *Behind Closed Doors*, 75-77.

Conclusion

The U.S. government oversaw the STAR GATE research program more critically than they did the secret MK-ULTRA program, due in part to how scientifically controversial psychic phenomenon were compared to brainwashing, which resulted in more orthodox scientific methodology and greater concern for the well-being of human subjects in the STAR GATE program.⁴¹⁵ Both programs were secret, run by U.S. intelligence agencies with the justification of closing a scientific gap with the Soviet Union, and researched abilities of the mind that few mainstream scientists had studied.⁴¹⁶ The revelation of both programs were shocking, but the MK-ULTRA program was far more scandalous, and contributed to a growing movement in the U.S. government to increase oversight of intelligence operations. Without the need to explain themselves to a critical outside observer, MK-ULTRA researchers conducted studies unconcerned with ethics or scientific method.⁴¹⁷ The public perceived the MK-ULTRA studies as far more bizarre than STAR GATE studies; the subject matter of STAR GATE research was scandalous, but the studies were not.⁴¹⁸ The stories of George White luring people into a safehouse with prostitutes and dosing them with LSD is more attention-grabbing than Targ and Puthoff running statistical analyses on people's drawings.⁴¹⁹ The secrecy of MK-ULTRA led to the program becoming better known than the less-classified STAR GATE program.

The MK-ULTRA program has had more of a cultural impact than the STAR GATE program. The lack of oversight meant it was discussed in CIA senate hearings and the lack of

⁴¹⁵ Marks, *The Search for the "Manchurian Candidate,"* xiv; Buzby, "CENTER LANE information papers," 11-12.

⁴¹⁶ Marks, *The Search for the "Manchurian Candidate,"* 61; May and Marwaha, *The Star Gate Archives,* 1-11.

⁴¹⁷ Marks, *The Search for the "Manchurian Candidate,"* 61-65, 196-197.

⁴¹⁸ Evans, "The Time the CIA Tried to Destroy Free Will"; May and Marwaha, *The Star Gate Archives,* 1-24.

⁴¹⁹ White; Marks, *The Search for the "Manchurian Candidate,"* 103-107; Puthoff and Targ, "Perceptual Augmentation Techniques– Technical Proposal," 67-80.

ethical concerns led to it being the subject of multiple lawsuits; it featured prominently in U.S. news in the 1970s and 1980s.⁴²⁰ Authors have written numerous books and articles about MK-ULTRA research, filmmakers have produced documentaries, and online content creators have made many videos and podcasts.⁴²¹ The stories of MK-ULTRA experiments have been the inspiration for fictional stories, such as the TV show *Stranger Things*, which features a character who underwent treatment similar to Ewen Cameron’s depatterning treatment.⁴²² Most Americans have at least heard the name MK-ULTRA, but fewer are aware of the STAR GATE program.⁴²³ STAR GATE research was not the subject of senate hearings or court cases, and was not as scandalous a news story as MK-ULTRA.⁴²⁴ The knowledge that U.S. intelligence agencies were trying to create “psychic spies” does generate interest—several authors have written articles about STAR GATE— but it is less discussed than MK-ULTRA.⁴²⁵ MK-ULTRA researchers such as Sidney Gottlieb shunned the spotlight, destroyed as many documents as they could, and worked to hide the details of their research from the public, but this suggests there was something worth hiding— and therefore worth discovering.⁴²⁶ Journalists investigated, and continue to investigate, their experiments.⁴²⁷ STAR GATE researchers want the public to know

⁴²⁰ United States Senate, “Senate Select Committee on Intelligence,” 1977; United States Senate, “Church Committee Reports”; Scott v. Casey; Orlikow v. United States; Bradley, *60 Minutes*; Marks, *The Search for the “Manchurian Candidate,”* 61.

⁴²¹ Marks, *The Search for the “Manchurian Candidate”*; Kinzer, *Poisoner in Chief; Wormwood*, dir. Errol Morris, Netflix, 2017; *American Mind Control* dir. Philip Gardner, AppleTV, 2014; Evans, “The Time the CIA Tried to Destroy Free Will”; WatchMojo, “Mind Control: Project MK-Ultra Explained,” 2024.

⁴²² *Stranger Things*, created by Matt Duffer and Ross Duffer, Netflix, 2016–2025.

⁴²³ They may recognize the name from unrelated sources. Stargate is the title of a fictional science fiction TV show, and the “Stargate Project” is the name of a current AI research program. This means that a google search for “STAR GATE” turns up other search results. *Stargate SG-1*, created by Dean Devlin and Roland Emmerich, Amazon MGM Studios, 1994-2018; OpenAI, “Announcing The Stargate Project,” January 21, 2025.

⁴²⁴ United States Senate, “Church Committee Reports”; Bradley, *60 Minutes*.

⁴²⁵ One of the main characters was raised to be a psychic spy. *Stranger Things*.

⁴²⁶ Kinzer, *Poisoner in Chief*, 227-242.

⁴²⁷ Marks, *The Search for the “Manchurian Candidate”*; Kinzer, *Poisoner in Chief*.

about their research. Edwin May and Sonali Marwaha compiled documents in the *STAR GATE Archives*, and the Monroe Institute hosts digitized documents on Internet Archive.⁴²⁸ However, fewer journalists have written articles about the program; its claims to legitimacy means that it does not make as “sexy” a news story as MK-ULTRA and remains relatively unknown.⁴²⁹

STAR GATE’s claims to legitimacy mean that the general public is less aware of it, but it also means that it supports claims of psychic phenomenon better than MK-ULTRA research supports the idea of brainwashing.⁴³⁰ Many people doubt that psychic phenomena exist, calling psychic research “pseudoscience,” and outside of accepted scientific procedures.⁴³¹ STAR GATE researchers such as Targ and Puthoff attempted to adhere to the accepted scientific procedures of their time, but this has not convinced skeptics, supporting historian Michael Gordin’s assessment of pseudoscience as a label without a specific definition; the scientific community uses “pseudoscience” to place a subject of research outside of the bounds of valid science.⁴³² However, some people believe in psychic abilities, and are aware of STAR GATE. Russell Targ published details of his involvement in the program in his memoirs, and the Monroe Institute promotes its involvement on its website.⁴³³ People who believe and search for more information about psychic phenomena such as astral projection are likely to find mentions of the STAR GATE program in their research. Online communities will spread news of U.S. intelligence agency research in forum posts, and share tips based on STAR GATE research.⁴³⁴ For example, there is an online community of astral projection believers on TikTok, and content creators share

⁴²⁸ May and Marwaha, *The Star Gate Archives*; Internet Archive, “Monroe Institute Collections.”

⁴²⁹ Targ, *Do You See What I See*, xiv.

⁴³⁰ May and Marwaha, *The Star Gate Archives*, 1-11; Kinzer, *Poisoner in Chief*, 25-30, 237.

⁴³¹ Gordin, *Pseudoscience*, 1-7.

⁴³² May and Marwaha, *The Star Gate Archives*, 11-17; Gordin, *Pseudoscience*, 73-77.

⁴³³ Targ, *Do You See What I See*; Monroe Institute.com.

⁴³⁴ Remote Viewing Subreddit, accessed March 25, 2025; Gateway Tapes Subreddit, accessed March 25, 2025; TikTok Astral Projection Tag, accessed March 25, 2025.

guides based on the MIAS Gateway Program.⁴³⁵ A common refrain in believers' comments is the idea that there must be something to psychic abilities, if the U.S. government invested money into researching it.⁴³⁶

MK-ULTRA research, on the other hand, does not feature in arguments for the validity of brainwashing. Some scholars still argue that brainwashing is a real phenomenon, psychological or sociological, distinct from other forms of persuasion.⁴³⁷ I argue that this misses the historical context of the origins of the term “brainwashing” and the nature of early brainwashing research—MK-ULTRA researchers did not feel the need to scientifically prove the existence of brainwashing because of its roots. Hunter could explain why people might adopt an ideology that most 1950s Americans found unthinkable.⁴³⁸ Brainwashing serves, as it did in the 1950s, as a strong rhetorical device for delegitimizing people's beliefs. Republicans accuse universities of brainwashing students to be liberals, liberals and moderate conservatives accused QAnon of brainwashing people after the January 6th insurrection, and people outside of cults describe cult recruitment methods as brainwashing.⁴³⁹ During the Cold War, many Americans could not understand why people would legitimately believe in Communism and blamed brainwashing; this allowed anti-Communists to say that most Communists were not true believers and attribute their thoughts to a sinister plot.⁴⁴⁰ Accusations of brainwashing serve the same purpose today, and as a result, there are stakes to the question of whether or not brainwashing is real.⁴⁴¹

⁴³⁵ TikTok Astral Projection Tag, accessed March 25, 2025.

⁴³⁶ TongueTiedTyrant, reddit comment, 2024, accessed March 25, 2025.

⁴³⁷ Dimsdale, *Dark Persuasion*, viii-xii; Kathleen Taylor, *Brainwashing: The Science of Thought Control*, Oxford Scholarship Online (Oxford: University Press, 2023), <https://doi.org/10.1093/oso/9780192804969.001.0001>; Introvigne, *Brainwashing*, 37-39.

⁴³⁸ Hunter, *Brain-Washing in Red China*, 58; Introvigne, *Brainwashing*, 9-10.

⁴³⁹ Introvigne, *Brainwashing*, 1.

⁴⁴⁰ Hunter, *Brain-Washing in Red China*, 58; Introvigne, *Brainwashing*, 9-10.

⁴⁴¹ Introvigne, *Brainwashing*, 37-39.

However, those who attempt to convince skeptics that brainwashing is indeed a real phenomenon rarely cite MK-ULTRA research.⁴⁴² Many MK-ULTRA studies, done without standard scientific methodology and with ambiguous results, will not convince skeptics that brainwashing exists.⁴⁴³ Instead, they provide skeptics with ammunition to label brainwashing as “pseudoscience.” Many of MK-ULTRA’s most infamous studies, such as “Operation Midnight Climax,” do not follow accepted scientific standards of any time.⁴⁴⁴ And despite MK-ULTRA researchers’ best efforts, they failed to produce brainwashing.⁴⁴⁵ To skeptics, this is evidence that brainwashing is pseudoscience; however, as Gordin notes, there is no single coherent definition of pseudoscience.⁴⁴⁶ MK-ULTRA research meets some criteria, such as the failure to follow accepted scientific procedures and the refusal to admit that a hypothesis is wrong, but MK-ULTRA research does not constitute the whole of brainwashing research.⁴⁴⁷ Labelling brainwashing as pseudoscience remains controversial today, as some psychologists attempt to rehabilitate the subject.⁴⁴⁸ However, proponents of brainwashing as a valid subject do not appeal to MK-ULTRA research to support their argument, but criticize MK-ULTRA research as poor science that has tarnished the reputation of brainwashing research.⁴⁴⁹ Both believers and skeptics dismiss MK-ULTRA research as pseudoscience, which aligns with Gordin’s claim that scientists use the label of “pseudoscience” to draw boundaries around accepted science and denigrate

⁴⁴² Some scholars, such as Dimsdale, will use MK-ULTRA as an example of brainwashing in scholarship that accepts its existence without critical discussion, but they do not use MK-ULTRA to argue for the validity of brainwashing. Dimsdale, *Dark Persuasion*, viii-xii; Taylor, *Brainwashing*, 13-35.

⁴⁴³ Marks, *The Search for the “Manchurian Candidate,”* 105-107; Introvigne, *Brainwashing*, 13-15; Taylor, 142-150.

⁴⁴⁴ Introvigne, *Brainwashing*, 13-15.

⁴⁴⁵ Marks, *The Search for the “Manchurian Candidate,”* 105-107.

⁴⁴⁶ Gordin, *Pseudoscience*, 1-25.

⁴⁴⁷ Marks, *The Search for the “Manchurian Candidate,”* 61-70; Gordin, *Pseudoscience*, 6-25.

⁴⁴⁸ Introvigne, *Brainwashing*, 13-15; Taylor, *Brainwashing*, 1-20.

⁴⁴⁹ Taylor, *Brainwashing*, 3-15.

research outside of scientific consensus.⁴⁵⁰ It also shows that the form of research can be as important as the subject of research in scientists' judgement of whether research is pseudoscience.⁴⁵¹ Unlike the STAR GATE program— which also officially ended after failing to produce practical results— proponents of the validity of brainwashing do not argue that the involvement of U.S. intelligence agencies is evidence of the existence of brainwashing.⁴⁵²

However, what people do not know about the MK-ULTRA and STAR GATE programs can be almost as persuasive as what people do know. Both programs were secret and highly classified; the public is unlikely to ever know all of the details.⁴⁵³ The leaders of the MK-ULTRA program— the only people who knew the extent of the research— are dead. Before they left the program, the leaders— most notably Sidney Gottlieb— destroyed the majority of MK-ULTRA records.⁴⁵⁴ They are irretrievable. The names of all scientists who received funding, the precise nature of all subprojects, in addition to the information on who researchers experimented on and what the impacts were, will remain a mystery.⁴⁵⁵ This mystery invites people to come up with their own theories. Some people believe that the U.S. government is still researching mind control methods with new technologies such as 5G towers.⁴⁵⁶ Similarly, many of the applications of STAR GATE research remain classified.⁴⁵⁷ This allows people to argue that STAR GATE researchers did find evidence that psychic phenomena exist, but kept it secret so that U.S.

⁴⁵⁰ Gordin, *Pseudoscience*, 1-20; Introvigne, *Brainwashing*, 1, 13-15; Taylor, *Brainwashing*, 1-20.

⁴⁵¹ Gordin, *Pseudoscience*, 1-7.

⁴⁵² Targ, *Do You See What I See*, 108; Taylor, *Brainwashing*, 1-20.

⁴⁵³ Marks, *The Search for the "Manchurian Candidate,"* xiv; Targ, *Do You See What I See*, 108.

⁴⁵⁴ Marks, *The Search for the "Manchurian Candidate,"* xiv; Donald F. Chamberlain, "Memorandum from Donald F. Chamberlain, Inspector General, U.S. Central Intelligence Agency to Director of Central Intelligence, 'Destruction of Records on Drugs and Toxins,' Classification Unknown, Missing Tabs," October 20, 1975.

⁴⁵⁵ Marks, *The Search for the "Manchurian Candidate,"* xiv.

⁴⁵⁶ Welcome-Putrid, "5G Mind Control Tower," reddit post, 2024, accessed March 25, 2025.

⁴⁵⁷ Targ, *Do You See What I See*, 162-165.

intelligence agencies could gain a tactical advantage and psychically spy on the Soviet Union.⁴⁵⁸ The research programs' secrecy was characteristic of their Cold War origins, shaped by U.S. interest in avoiding direct conflict with the Soviet Union and achieving technoscientific superiority.⁴⁵⁹

The Cold War has ended, but was soon replaced with the “war on terror,” and the MK-ULTRA and STAR GATE programs continue to be relevant.⁴⁶⁰ While the MK-ULTRA program failed to establish mind control, applied brainwashing studies— with the goal of extracting information— led to researchers developing “enhanced interrogation” techniques. “Enhanced interrogation” is the U.S. military’s internal code word for interrogation with torture methods such as sleep deprivation, solitary confinement, artificially induced drug addictions, and unrelenting audio recordings.⁴⁶¹ At Guantanamo Bay, U.S. intelligence agencies used “enhanced interrogation” techniques on prisoners as part of the “war on terror.”⁴⁶² External evaluations found that, like the MK-ULTRA brainwashing methods that predated them, “enhanced interrogation” techniques “do not work” and do not produce meaningful intelligence information.⁴⁶³ The U.S. military uses the intelligence-gathering methods developed during the Cold War in an attempt to gain information on terrorist activities, and some outside observers believe that psychic abilities could be a powerful tool in this war.⁴⁶⁴ Some believe that U.S. army

⁴⁵⁸ Targ, *Do You See What I See*, 108, 157-165.

⁴⁵⁹ Oreskes, *Science on a Mission*, 242-244; Wolfe, *Freedom's Laboratory*, 2-3, 62-63.

⁴⁶⁰ McCoy, “Science in Dachau's Shadow,” 401.

⁴⁶¹ McCoy, “Science in Dachau's Shadow,” 401.

⁴⁶² Ed Pilkington, “‘The Forever Prisoner’: Abu Zubaydah’s Drawings Expose the US’s Depraved Torture Policy,” *The Guardian*, May 11, 2023.

⁴⁶³ McCoy, “Science in Dachau's Shadow,” 401; Pilkington, “The Forever Prisoner.”

⁴⁶⁴ Targ, *Do You See What I See*, xxix.

officers and intelligence operatives are interested in remote viewing to this day, although the program has officially ended.⁴⁶⁵

⁴⁶⁵ Personal communication with Library of Congress library technician, Eva Gahn, February 22, 2025.

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