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Psychic Spies. Cold War Science and the Military-Occult Complex

Mind warfare is the great battlefield of the Cold War, and we have to do whatever it takes to win.

CIA Director Allen Dulles (1953)

The concept of “thought reading” was first proposed by William F. Barrett in a paper presented at the 1876 meeting of the British Association for the Advancement of Science (BAAS), which claimed that under hypnosis thoughts could be communicated “without the intervention of recognized organs of sensation.”¹ This was an extremely controversial claim at the time, and William B. Carpenter even requested that Barrett’s lecture be cancelled.² Alfred Russel Wallace overruled this objection and allowed Barrett to present his lecture as planned, although the BAAS still refused to publish his paper in the conference proceedings. Barrett’s paper was later published by the Society for Psychical Research (SPR), an organization founded in 1882 with the declared intention of investigating psychic phenomena in a serious and scientific manner. Barrett also helped to compile the SPR’s “First Report on Thought-Reading” that same year, which concluded that “further advances along the lines of research here indicated may, and we believe will, necessitate a modification of that general view of the relation of mind to matter to which modern science has long been gravitating.”³ While psychical research soon spread to the United States, where it was embraced by psychologists like William James (who also served as president of the SPR from 1894–1895),⁴ such a “modification” never took place, as it remained a marginalized practice within the scientific establishment.

From today’s perspective, it is difficult to explain why some scientists maintained their belief in psychic phenomena despite the condemnation of their colleagues and the damage it caused to their careers and reputations. One explanation was proposed by Thomas Kuhn, who famously argued that “extraordinary” sciences often appear during periods of crisis when dominant scientific paradigms are challenged. As these paradigms collapse scientists are forced to

1 Barrett: *On Some Phenomena Associated with Abnormal Conditions of Mind*, 244.

2 Carpenter was an outspoken critic of psychical research and published a book the following year, in which he argued that psychic phenomena could be explained by psychological factors. See Carpenter: *Mesmerism, Spiritualism, Etc.*

3 Barrett, Gurney, and Myers: *First Report on Thought-Reading*, 34.

4 See James: *Essays in Psychical Research*.

entertain speculative theories that would have previously been considered unscientific, and over time they gradually construct new paradigms that take into account the anomalous evidence.⁵ Roger Luckhurst similarly argued that psychical research first emerged in the late nineteenth century due to a paradigm shift in Victorian physics, as scientists turned from questions of matter (mechanistic science) to questions of force (science of energy). This “counter-hegemonic conception of the physical universe” led to a state of epistemological confusion, which allowed mechanistic models to be replaced by spiritualist theories,⁶ and this shows that “extraordinary” sciences appear at “vanishing points . . . where confident demarcations between truth and error, science and pseudoscience, could not at the time be determined.”⁷ “Extraordinary” sciences thus mark the boundary limit of orthodox science, and the debates provoked by these speculative theories illustrate how such boundaries are established, policed, and transgressed.

This explanation is certainly compelling, as psychical research was condemned by many of the psychologists who followed James, including James M. Cattell,⁸ Edward B. Titchener,⁹ and John E. Coover,¹⁰ yet it fails to account for the institutional support that researchers continued to receive after the new paradigm was firmly established. In the 1920s, for example, Gardner Murphy and George H. Estabrooks conducted psychical research experiments at Harvard University, and they concluded from a statistical analysis of the results that the phenomenon was real, although they were unable to publish their findings in scientific journals.¹¹ In the 1930s William McDougall and Joseph B. Rhine conducted similar experiments at Duke University, and they similarly sought to make psychical research appear more scientific (and therefore more credible) by working under laboratory conditions and employing a statistical model that facilitated quantitative analysis. Rhine even claimed that this research represented a paradigm shift comparable to Albert Einstein’s theory of relativity,¹² and he predicted that it would eventually be accepted as “a proper branch of science.”¹³ Like the members of the SPR, therefore, Rhine and his

5 Kuhn: *The Structure of Scientific Revolutions*, 84.

6 Luckhurst: *The Invention of Telepathy*, 84.

7 *Ibid.*, 2.

8 Cattell: *Mrs. Piper*.

9 Titchener: *The Feeling of Being Stared At*.

10 Coover: *Experiments in Psychical Research*.

11 See Murphy: *Telepathy as an Experimental Problem*; Estabrooks: *A Contribution to Experimental Telepathy*.

12 Rhine: *New Frontiers of the Mind*, 290.

13 Rhine: *Extra-Sensory Perception*, xxxiii.

colleagues were convinced that it was only a matter of time before the accumulated evidence would become so overwhelming that the scientific community would be forced to revise their outdated theories of the mind.

Despite the fact that the scientific community never accepted this paradigm shift, psychical research also received support from the U.S. government. Government officials had sought advice from the scientific community since the nineteenth century, but the Second World War marked a major turning point in their relations, as the development of radar, sonar, and the atomic bomb clearly demonstrated the potential military applications of modern science, and scientists were subsequently seen as essential to national defense. In 1946, for example, the Pentagon established the policy that civilian science would become an integral part of military research and development,¹⁴ and *Business Week* reported that “federal support of pure science is today almost completely under military control” and “the odds are getting better all the time that pure scientific research will become, permanently, a branch of the military establishment.”¹⁵ In 1950 the National Security Council also released a policy document titled “United States Objectives and Programs for National Security,” which stated that “it is mandatory that in building up our strength, we enlarge upon our technical superiority by an accelerated exploitation of the scientific potential of the United States.”¹⁶ These initiatives resulted in an immediate increase in federal support for scientific research, and scientists soon became dependent on defense initiatives, as their interests, objectives, and budgets were inextricably linked. This interdependence also extended to “extraordinary” sciences like psychical research. In 1947, for example, Rhine emphasized the potential military applications of extrasensory perception: “War plans and crafty designs of any kind, anywhere in the world, could be watched and revealed Every secret weapon and scheming strategy would be subject to exposure.”¹⁷ In 1952 he also submitted a proposal to the CIA, in which he requested an annual budget of \$30,000 for three years to conduct psychical research experiments. Although this application was ultimately rejected, Rhine did receive a grant from the U.S. Office of Naval Research to determine whether animals possess a form of extrasensory perception.¹⁸

It is impossible to conclude, therefore, that the increase in institutional support for psychical research during the postwar period reflected a larger

¹⁴ See Foerstel: *Secret Science*.

¹⁵ Science Dons a Uniform, 19.

¹⁶ Gleason and Aandahl: *Foreign Relations of the United States*, 1: 283.

¹⁷ Rhine: *The Reach of the Mind*, 195–196.

¹⁸ Pratt: *Research on Animal Orientation*.

epistemological crisis or paradigm shift that resulted in a loosening of the rules for normal research. Rather, it appears that these policy decisions actually reflected the social, political, and economic conditions placed on scientific research during the Cold War period. Instead of defending or debunking the claims of psychical researchers, this chapter will thus attempt to examine the conditions that made their research possible. In particular, it will address the following questions:

- Why did the U.S. government support psychical research despite the fact that it was not accepted by the scientific establishment?
- How was this research evaluated in order to determine both its reliability and its potential usefulness as a means of gathering intelligence?
- Why did psychical research continue to receive government support despite the fact that the underlying phenomenon was never understood or even investigated?
- Why was this research program abruptly cancelled and denounced by the same agencies that had supported it for more than two decades?

As this chapter will show, funding for psychical research was largely motivated by fears of a “psi gap” with the Soviet Union, which forced researchers to emphasize the military applications of psychic phenomena. The continued survival of the program also relied on secrecy and security, as the combined strategies of compartmentalization and classification allowed policy decisions to be made without public scrutiny or the oversight of scientific advisers. The abrupt defunding of psychical research in the mid 1990s also illustrates how rapidly these conditions changed after the Cold War, as policy decisions became more transparent and the program was suddenly perceived as a source of shame and ridicule due to the fact that it challenged the norms of orthodox science. A closer examination of the rise and fall of the so-called “military-occult complex” thus raises fundamental questions about the factors that influence scientific research more generally, as it shows that this research is often driven by social, political, and economic factors that have little to do with established scientific facts, theories, and methods.

Soviet Parapsychology and the “Psi Gap”

U.S. government involvement in psychical research began as early as 1952, when Andrija Puharich presented a paper titled “On the Possible Usefulness of

Extrasensory Perception in Psychological Warfare” at a seminar organized by the Department of Defense.¹⁹ For the next two years he worked at the U.S. Army’s Chemical and Biological Warfare Center at Fort Detrick in Maryland, where he studied whether hallucinogenic drugs could stimulate psychic abilities. This project was apparently unsuccessful, but in December 1959 a French journal claimed that the U.S. Navy had conducted a series of psychical research experiments on board the U.S.S. Nautilus – the world’s first nuclear-powered submarine.²⁰ These experiments were said to have taken place over a 16-day period between 25 July and 10 August 1958, while the Nautilus was sailing under the polar ice cap, and they followed the model established by Rhine, as the sender (who was reportedly located at the Westinghouse Laboratory in Maryland) concentrated on a series of cards, while the receiver (who was located in a private cabin aboard the Nautilus) recorded his visual impressions. This report was then followed three months later by a more detailed article, which claimed that the RAND Corporation had recommended the possibility of communicating with nuclear submarines using telepathy, as radio communication was only possible when submarines surfaced and nuclear-powered submarines could stay submerged for months at a time. Rhine was also identified as the civilian scientist assigned to the project, and it was reported that roughly 75% of the experiments were successful.²¹ The second article concluded with a series of provocative questions: “Is telepathy a new secret weapon? Will ESP be a deciding factor in future warfare? Has the American military learned the secret of mind power?”²²

U.S. Navy press officers denied that these experiments ever took place, and one of the journalists later admitted that he had been the victim of a hoax. However, a number of researchers in the Soviet Union cited these articles as evidence that the Americans were gaining the upper hand in the field of psychical research. The study of psychic phenomena had previously been prohibited in the Soviet Union, as “Communist dogma required a strong ‘materialistic’ base” and “violating this concept would be considered nearly treasonous.”²³ In a lecture given at a symposium in April 1960, however, Soviet physiologist Leonid L. Vasiliev reported that “the American navy is testing telepathy on their atomic submarines,” and he urged Soviet researchers to “plunge into the exploration of this vital field.”²⁴ In order to stress the importance of this

¹⁹ Wilhelm: *Psychic Spying?*, B5.

²⁰ Bergier: *La transmission de pensée*, 99.

²¹ Messadié: *Étrange expérience a bord du Nautilus*, 30–35.

²² *Ibid.*, 35.

²³ May, Rubel, and Auerbach: *ESP Wars*, 155.

²⁴ Ostrander and Schroeder: *Psychic Discoveries*, 6–7.

research, he even claimed that “the discovery of the energy underlying ESP will be equivalent to the discovery of atomic energy.”²⁵ Vasiliev’s statements evidently had their desired effect, as he was subsequently given a special laboratory at Leningrad University that was devoted to the study of psychical research, and in 1963 he claimed to have conducted successful long-distance telepathy experiments between Leningrad and Sevastopol.²⁶ In 1965 the Scientific and Technical Society of Radio Engineering and Telecommunications also established a Department of Bioinformation at the Popov Institute in Moscow, which was directed by I. M. Kogan. In an effort to replicate the Nautilus experiments, test subjects were hypnotized and placed in a Faraday cage, which excluded all radio waves except extremely-low-frequency (ELF) waves. The hypnotized subjects were then awoken at an arbitrary time by a “mental order” from a sender, who remained in a separate room. Based on these experiments, Kogan concluded that telepathic communication with submarines was possible, as there was a radio system built into the human brain that allowed for communication via ELF waves in the 10 Hz region (the “alpha” brain wave frequency).²⁷

Between 1965 and 1967 another group of researchers led by Vitali P. Perov conducted a series of experiments on rabbits with electrodes implanted in their brains. Some of these experiments also involved submarines, which was first reported by Pavel Naumov in 1968:

Scientists placed the baby rabbits aboard the submarine. They kept the mother rabbit in a laboratory on shore where they implanted electrodes deep in her brain. When the sub was deep below the surface of the ocean, assistants killed the young rabbits one by one. The mother rabbit obviously didn’t know what was happening. Even if she could have understood the test, she had no way of knowing at what moment her children died. Yet, at each synchronized instant of death, her brain reacted. There was communication.²⁸

This report revealed for the first time that Soviet parapsychology was being funded by the military. In 1970 a Soviet film studio also captured footage of an experiment conducted at the Ukhtomskii Military Institute in Leningrad involving a psychic named Nina Kulagina, who was reported to have remotely stopped the beating heart of a frog and to have induced an abnormally rapid heart rate in a human test

²⁵ *Ibid.*, 7.

²⁶ See Vasiliev: *Experiments in Mental Suggestion*; Targ: *Limitless Mind*, 131; Kernbach: *Unconventional Research in U.S.S.R. and Russia*, 41.

²⁷ See Kogan: *Is Telepathy Possible?*; Kogan: *Information Theory Analysis of Telepathic Communication Experiments*.

²⁸ Ostrander and Schroeder: *Psychic Discoveries*, 32–33.

subject.²⁹ These reports seemed to indicate that the ultimate goal of Soviet parapsychology was the weaponization of psychic abilities.

The U.S. government first became aware of these experiments through Sheila Ostrander and Lynn Schroeder's 1970 book *Psychic Discoveries Behind the Iron Curtain*, which claimed that Soviet intelligence agencies were conducting a nationwide search for the most talented psychics and that they had already established "twenty or more centers for the study of the paranormal with an annual budget estimated in 1967 at over 12 million rubles (\$13 million)."³⁰ Ostrander and Schroeder also urged the U.S. government to develop its own psychical research program, and they argued that this "mind race" was as urgent as the "space race": "If Westerners had bothered to read Soviet publications in the 1950s, we would have seen that much data on the development of Sputnik was published long before it shot into space and astounded the world. Today we are still not keeping up with material readily available in Soviet publications and scientific papers, particularly in the field of parapsychology."³¹ In other words, they implied that psychical research could potentially determine the outcome of the Cold War and that the U.S. was already falling behind the Soviets.

Ostrander and Schroeder's book had a tremendous impact on the U.S. intelligence community. In July 1972, for example, the Defense Intelligence Agency (DIA) commissioned a report, which noted that "the major impetus behind the Soviet drive to harness the possible capabilities of telepathic communication, telekinetics, and bionics are said to come from the Soviet military."³² The report went on to describe the potential consequences of Soviet psychic superiority:

Soviet efforts in the field of psi research. . . might enable them to do some of the following: (a) know the contents of top secret U.S. documents, the movements of our troops and ships and the location and nature of our military installations, (b) mold the thoughts of key U.S. military and civilian leaders at a distance, (c) cause the instant death of any U.S. official at a distance, (d) disable, at a distance, U.S. military equipment of all types.³³

The report thus argued that the intelligence community should be aware of the latest developments in Soviet parapsychology, and it cited a number of scientists and experts who were convinced that there was an urgent need to create a similar program in the U.S. Oliver J. Caldwell, who had previously served from

²⁹ Schnabel: Remote Viewers, 188; Jacobsen: Phenomena, 78–79.

³⁰ Ostrander and Schroeder: *Psychic Discoveries*, 7.

³¹ *Ibid.*, 249.

³² LaMothe: *Controlled Offensive Behavior*, 24.

³³ *Ibid.*, 39–40.

captain to major in the U.S. Army's Office of Strategic Services, was even reported to have said that "if the United States does not make a serious effort to move forward on this new frontier, in another ten years it may be too late."³⁴ A report prepared by the RAND Corporation in 1973 similarly noted that Soviet researchers were receiving extensive government funding, that their work was oriented towards military applications, and that "there remains a serious need for detailed analytical studies of some of these phenomena by specialists in various scientific disciplines to determine their plausibility, their amenability to experimental investigation, and their potential for application."³⁵ While the U.S. government was already worried about the possibility of a "missile gap," it now faced the additional possibility of a "psi gap."

As a result, U.S. intelligence agencies immediately began to monitor the progress of Soviet parapsychology. In April 1972, for example, several officers from the CIA's Office of Strategic Intelligence (OSI) met with a member of the Stanford Research Institute (SRI) named Russell Targ, who was in contact with Soviet researchers studying Kulagina's abilities and was able to provide several films.³⁶ Targ also suggested that similar experiments could be conducted at SRI with the help of his colleague, Hal Puthoff, who was a former Naval Intelligence officer. In June 1972 Puthoff submitted a report to OSI on a recent experiment conducted with Ingo Swann, a psychic who allegedly drew a "reasonable facsimile" of a magnetometer in the Physics Department at Stanford University, even though this device was "located in a vault below the floor of the building and shielded by μ -metal shielding, an aluminum container, copper shielding and a superconducting shield."³⁷ OSI contacted the Office of Research and Development (ORD), and several ORD officers visited SRI in August 1972. They explained that there was "increasing concern in the intelligence community about . . . Soviet parapsychology being funded by the Soviet security services" and that "they had been on the lookout for a research laboratory outside of academia that could handle a quiet, low-profile classified investigation."³⁸ Puthoff agreed to organize a demonstration with Swann, who provided descriptions of various hidden objects, and the officers were evidently impressed, as their report to the Office of Technical Services (OTS)

³⁴ Ibid., 40.

³⁵ Van Dyke and Juncosa: *Paranormal Phenomena*, 27.

³⁶ Kress: *Parapsychology in Intelligence*, 70; Mandelbaum: *Psychic Battlefield*, 255.

³⁷ Puthoff: *CIA-Initiated Remote Viewing Program*, 65.

³⁸ Ibid.

recommended that SRI's research should be continued and expanded. In October 1972 OTS contracted SRI for an eight-month pilot study on "Biofield Measurements," and Kenneth Kress was assigned to monitor their progress.³⁹

U.S. intelligence agencies thus began to fund psychical research experiments in the 1970s due to a growing sense of paranoia with regard to the military applications of psychic phenomena and the advancements that had reportedly been made by Soviet researchers. It was feared not only that psychic abilities were more effective than conventional espionage techniques but also that they could make these conventional techniques obsolete, as Soviet psychics had the potential to uncover virtually any secret and even assassinate key political figures from a distance. As a result, the CIA sought to gather more intelligence on Soviet espionage programs and to create a similar program that could be used to verify, counteract, and perhaps even surpass the abilities of Soviet psychics. The rise of this program was thus a direct result of the new conditions placed on scientific research during the Cold War, as government funding was primarily dependent on the potential military applications of research projects and policy decisions were being made without the oversight of established scientific organizations. Psychical researchers may have even taken advantage of this situation by exaggerating the perceived threat posed by Soviet parapsychology and emphasizing the potential military applications of their own experiments. Indeed, Kress later confirmed that the decision to fund SRI was largely driven by fears of a "psi gap," as it "was known that the Soviet government was supporting the evaluation and development of paranormal phenomena,"⁴⁰ and Edwin C. May, who later served as director of the program, noted that the same process also occurred on the other side of the Iron Curtain: "From the start, the Russians were pointing at research by the U.S. government, and we were pointing at the Russians' work. Due to the milieu of the Cold War, they were using us to get money and we were using them to provide justification for funding."⁴¹ Serge Kernbach similarly concluded that "both countries have used each other in the arguments in favor of such studies and the struggle for funding," as "research on the one side stimulated equivalent studies on the other side."⁴²

³⁹ Ibid., 66. See also Richelson, *Wizards of Langley*, 178.

⁴⁰ Kress: *Parapsychology in Intelligence*, 83.

⁴¹ May, Rubel, and Auerbach: *ESP Wars*, 286.

⁴² Kernbach: *Unconventional Research in U.S.S.R. and Russia*, 46.

SRI Experiments with “Remote Viewing”

Swann had joined SRI to develop a technique known as “remote viewing,” which involved visualizing the locations of human targets.⁴³ He had conducted his first experiments the previous year at the American Society for Psychical Research (ASPR) in New York, and Puthoff had invited him to SRI to conduct similar experiments.⁴⁴ These experiments became more urgent after OTS contracted SRI, as Puthoff and Targ were asked to identify “opportunities for operational use” and they immediately recognized that remote viewing could provide an ideal method of intelligence gathering. They thus decided to use the CIA funding to conduct a series of remote viewing experiments in the San Francisco Bay Area, in which nine human targets were sent to randomly selected locations and nine viewers attempted to describe them. According to Puthoff and Targ, the number of matches was statistically significant, and many of the individual descriptions were surprisingly accurate. Swann, for example, reportedly described the Palo Alto City Hall, including details like the shape of the windows, the number of trees, the designs on the pavement, and the fact that the fountain was not running.⁴⁵ Another viewer named Pat Price also provided accurate descriptions of the Hoover Tower at Stanford University and a swimming pool complex in Palo Alto.⁴⁶ ORD officers reviewed these results in February 1973, and they were so convinced that they transferred additional funds and “requested an increase in the scope of the effort.”⁴⁷

In April 1973 Swann attempted to satisfy this request by proposing a new technique called “coordinate remote viewing,” which employed geographical coordinates to identify target sites. The preliminary results were evidently encouraging, as Swann reportedly described a joint French-Soviet meteorological station on Kerguelen Island in the southern Indian Ocean.⁴⁸ The coordinates had been provided by a contact at OSI, and it was considered a military target because the Soviets were rumored to be using the station to track missiles.⁴⁹ In May 1973 Puthoff arranged an informal demonstration of this new technique,

⁴³ It was initially called “travelling clairvoyance,” but the term “remote viewing” was gradually adopted in order to separate this practice from the history of spiritualism and the occult. Swann: On Remote-Viewing, 78.

⁴⁴ See Mitchell: Out-of-the-Body Vision, 155.

⁴⁵ Puthoff and Targ: Mind-Reach, 37.

⁴⁶ *Ibid.*, 52.

⁴⁷ Kress: Parapsychology in Intelligence, 72.

⁴⁸ Puthoff and Targ: Mind-Reach, 33.

⁴⁹ Schnabel: Remote Viewers, 120.

and Christopher “Kit” Green provided coordinates for a vacation cabin in West Virginia that belonged to one of his colleagues. Instead of seeing a cabin, however, Swann produced a map that featured “a cluster of buildings and an underground bunker.” Several days later, the same coordinates were given to Price, who provided even more details: “Price . . . offered to ‘go inside’ the bunker, where he found a file cabinet with names on the drawers. He read off the names, and gave us the code name (‘Hay Stack’) of the facility.”⁵⁰ Green initially believed that the experiment was a failure, but he was surprised to discover that an underground NSA facility was located only a few miles from his colleague’s cabin.⁵¹ Puthoff concluded that “not only was Swann’s description correct in every detail, but even the relative distances on his map were to scale.”⁵² Kress also noted that Price provided the actual codename and a “list of project titles associated with current and past activities, including one of extreme sensitivity,” although the results were inconclusive, as “some information, such as the names of the people at the site, proved incorrect.” Nevertheless, OTS was “favorably impressed by the data,” and SRI was asked to propose a new project in the spring of 1974. Kress explained that this new project would proceed “on the premise that the phenomena existed” and that its primary objective would be to determine how best “to develop and utilize them,” as “we were confident applications would be found.”⁵³

This led to the first active intelligence collection operation using psychical research. In August 1974 Deputy Director for Intelligence John McMahon provided coordinates for a “Soviet site of great interest” in the Kazakh Soviet Socialist Republic adjacent to the Semipalatinsk nuclear test area, which was known within the intelligence community as “URDF-3” (Unidentified Research and Development Facility-3). Price described the layout of the complex, which included a giant gantry crane and a cluster of tall, silo-sized cylinders. Satellite reconnaissance photographs confirmed the presence of a gantry crane as well as several gas cylinders, and in their final report Puthoff and Targ concluded that this was “indicative of probable target acquisition,” which showed that remote viewing could be “utilized in the future . . . for operational needs.”⁵⁴ Targ later claimed that Price’s performance “was so outstanding that it alone

⁵⁰ Targ: *Limitless Mind*, 36.

⁵¹ Schnabel: *Remote Viewers*, 110.

⁵² Puthoff and Targ: *Mind-Reach*, 4.

⁵³ Kress: *Parapsychology in Intelligence*, 72–73. See also Smith: *Reading the Enemy’s Mind*, 65.

⁵⁴ Puthoff and Targ: *Perceptual Augmentation Techniques*, 6, 16. See also Richelson: *Wizards of Langley*, 179.

assured our funding for the next several years,”⁵⁵ yet this is highly unlikely. While Kress agreed that Price had produced “some amazing descriptions, like buildings then under construction, spherical tank sections, and the crane,” he also noted that “most of Price’s data were wrong or could not be evaluated” and “since there was so much bad information mixed with the good, the overall result was not considered useful.”⁵⁶

This difference of opinion led Kress to hire an independent consultant named Joseph A. Ball to evaluate the program. After reviewing the available data, Ball concluded that “a large body of reliable experimental evidence points to the inescapable conclusion that extrasensory perception does exist as a real phenomenon,” and despite its apparent “lack of reliability” this phenomenon was “sufficiently sharp and clear-cut to justify serious considerations of possible applications.”⁵⁷ The following year the CIA also contracted the AiResearch Manufacturing Company to evaluate the program, and their consultants similarly concluded that “it is worthwhile for the United States government to initiate and support systematic research in this area.”⁵⁸ These evaluations convinced OTS to continue funding psychical research experiments, and SRI was strongly encouraged to “do something of genuine operational significance.”⁵⁹

In July 1975 SRI organized another experiment, in which Price was given the coordinates of two foreign embassies whose interiors were already known. He was instructed to view the embassies remotely, locate the code rooms, and describe any distinguishing features. According to Kress, most of Price’s information was “vague and incorrect,” yet the operations officer concluded that “this technique – whatever it is – offers definite operational possibilities.”⁶⁰ Price was also given coordinates for a site in Libya, and he produced a map of the installation as well as an underwater sabotage training facility several hundred miles away. According to Kress, this information was submitted to the Libyan Desk, and “the underwater training facility description was similar to a collateral agent’s report.”⁶¹ Additional information was requested, although Price died of a heart attack several days later. ORD reportedly became disillusioned with the program at this point, as they believed that “the research was

55 Targ: *Remote Viewing at Stanford Research Institute*, 77.

56 Kress: *Parapsychology in Intelligence*, 75–78.

57 Ball: *An Overview of Extrasensory Perception*, 1, 3. See also McRae: *Mind Wars*, 102.

58 Wortz, Blackwelder, Eerkens, and Saur: *Novel Biological Information Transfer Mechanisms*, 10–11.

59 Kress: *Parapsychology in Intelligence*, 78.

60 *Ibid.*

61 *Ibid.*, 79.

not productive or even competent,” and the director argued that their “charter would not support [psychical] research.”⁶² All CIA funding was subsequently cancelled, although Puthoff and Targ were able to meet with CIA director George H. W. Bush, who “requested and received a briefing on CIA’s investigations into parapsychology” in November 1976.⁶³ Bush left the agency before making any funding recommendations, but he reportedly told them that “his hands were tied because the Agency was in too much [trouble] with Congress” and that they would need military sponsors to continue their research.⁶⁴

The Military Assumes Command

Puthoff and Targ first approached the U.S. Navy as a potential client, and the Naval Electronics Systems Command awarded them an \$87,000 contract for “an investigation of the ability of certain individuals to perceive remote faint electromagnetic stimuli at a non-cognitive level of awareness.”⁶⁵ This project was immediately exposed by the *Washington Post*, which reported that Samuel Koslov, scientific assistant to the Secretary of the Navy, had cancelled the contract.⁶⁶ Dale Graff, a civilian scientist working in the U.S. Air Force Foreign Technology Division (FTD) at Wright-Patterson Air Force Base in Ohio, subsequently recommended that the U.S. Air Force fund a classified program with SRI that would focus on remote viewing (with a special emphasis on locating lost airplanes), and FTD agreed to fund SRI on an exploratory basis several months later. In October 1978 Lt. F. Holmes “Skip” Atwater also proposed that the U.S. Army’s Intelligence and Security Command (INSCOM) create their own “in-house” remote viewing team at Fort Meade in Maryland, as he was becoming increasingly concerned about the potential dangers posed by Soviet parapsychology. Atwater’s proposal was approved by Major General Edmund R. Thompson, assistant chief of staff for Army Intelligence, and Puthoff and Targ were appointed as lead scientists in the new program, which became known as “Gondola Wish.”⁶⁷ By the end of the 1970s, SRI was thus conducting

⁶² Ibid.

⁶³ Ibid., 80.

⁶⁴ Jacobsen: Phenomena, 200.

⁶⁵ McRae: Mind Wars, 5.

⁶⁶ Wilhelm: Psychic Spying?, B5.

⁶⁷ Schnabel: Remote Viewers, 13–20.

military-funded remote viewing experiments at both Wright-Patterson Air Force Base and Fort Meade.

In March 1979 these two groups were tasked with locating a Soviet Tupolev-22 “Blinder” bomber that had crashed in Zaire after its crew bailed out. The bomber had been refitted as a reconnaissance platform, and U.S. forces were hoping to retrieve its contents before the Soviets, but the jungle proved to be extremely dense and search teams eventually concluded that they were unlikely to find it. A remote viewer at Wright-Patterson Air Force Base named Gary Langford reportedly gave a detailed description of the wreckage’s setting, and a remote viewer at Fort Meade named Rosemary Smith identified the location of the wreckage on a map. Smith’s coordinates were then sent to the CIA station chief in Zaire, and they proved to be accurate within three miles.⁶⁸ This was the first time that President Jimmy Carter was briefed on the program, and he was so impressed that he soon became a supporter.⁶⁹

As the existence of the program became more widely known in the Department of Defense, the White House, and various congressional intelligence committees, it also became a source of controversy. William Perry, the undersecretary of defense for research and engineering, argued that the program should be cancelled, while Senator Claiborne Pell, a member of the Senate Foreign Relations Committee, and Lieutenant Commander Jake Stewart, a member of the National Security Council (NSC), supported the program. Following a congressional investigation, Representative Charles Rose, chairman of the Permanent Select Committee on Intelligence Evaluation and Oversight, also became a vocal supporter. In a July 1979 interview Rose not only expressed his belief in psychical research but also stressed the importance of competing with the Soviet Union in this area: “[T]he Russians are very interested in psychic phenomena They have a national screening program to detect . . . psychic abilities in schoolchildren. The CIA, on the other hand, spends next to nothing in this area But it seems to me that . . . if the Russians have it and we don’t, we are in serious trouble.”⁷⁰ Rose also urged Congress to fund what he called a “psychic Manhattan project,” as he was convinced that psychical research was as important as the development of the atomic bomb.⁷¹

INSCOM sought to expand the program later that year, and SRI was contracted to screen potential new viewers. One of these new recruits was Joseph

68 Puthoff: CIA-Initiated Remote Viewing Program, 75; Smith: *Reading the Enemy’s Mind*, 97–98; Schnabel: *Remote Viewers*, 215–219.

69 Puthoff: CIA-Initiated Remote Viewing Program, 75.

70 Stuckey: *Psi on Capitol Hill*, 24.

71 MacRae: *Mind Wars*, 47–49.

McMoneagle, who was reportedly able to provide a detailed diagram of a new XM-1 prototype tank.⁷² In another experiment, McMoneagle was asked to observe a building at a naval base in Severodvinsk where analysts suspected the Soviets were constructing their first aircraft carrier. Instead, he described the construction of an enormous submarine, which he described as “bigger by a significant factor than any other submarine known to man” and as “having a bulbous nose and an unusually broad and flattened stern.”⁷³ Four months later, analysts confirmed that the Soviets had constructed a new class of submarine known as the “Typhoon,” which was 560 feet long and had a flat stern. The National Security Agency (NSA) then asked McMoneagle to target a U.S. consulate where Soviets were extracting information, and he correctly described the location of the electronic bug and the Soviet listening post opposite the consulate.⁷⁴

In November 1979 the DIA’s Scientific and Technical Intelligence Directorate, headed by Jack Vorona, was chosen to coordinate all remote viewing efforts. The two groups were then consolidated, and the program was redesignated “Grill Flame.”⁷⁵ During the Iranian hostage crisis these viewers were asked to locate the American hostages, and McMoneagle was reportedly able to “describe the location where three of the hostages had been taken.”⁷⁶ In his evaluation of this mission, Lieutenant Colonel Roderick Lenahan concluded that “Grill Flame data has value,” as remote viewers “provide insights that would not be readily available through other sources, particularly when working against a target in a denied or hostile environment.”⁷⁷ In 1981 viewers were also asked to locate General James Dozier after he was kidnapped by the Italian Red Brigades, and McMoneagle reportedly described a circular park and a cathedral in Padua, where Dozier was eventually rescued.⁷⁸ Dozier was so impressed that he suggested that government officials, military officers, and politicians be instructed in what to “think” if they were kidnapped so that psychic spies would be able to locate them more easily.⁷⁹ McMoneagle subsequently received a Legion of Merit Award – the highest honor an intelligence officer can receive – for “producing crucial and vital intelligence

⁷² Schnabel: *Remote Viewers*, 51.

⁷³ Schnabel: *Remote Viewers*, 71–72; Smith: *Reading the Enemy’s Mind*, 132; McMoneagle: *Stargate Chronicles*, 121–124.

⁷⁴ Schnabel: *Remote Viewers*, 48–50.

⁷⁵ *Ibid.*, 23–25.

⁷⁶ Adams: *Day of the Pentagon Mindbenders*, 21.

⁷⁷ Lenahan: *Interim Evaluation*, 1.

⁷⁸ Schnabel: *Remote Viewers*, 285; McMoneagle: *Stargate Chronicles*, 116–120.

⁷⁹ May, Rubel, and Auerbach: *ESP Wars*, 80.

unavailable from any other source.”⁸⁰ According to May, this award clearly demonstrated the intelligence community’s “support and satisfaction with the applied aspect of the program.”⁸¹

Major General Albert Stubblebine, commander of INSCOM, assumed responsibility for the program in 1982, and it was then redesignated “Center Lane.”⁸² When Stubblebine retired in 1984, however, the program was cancelled by INSCOM’s new commander, Brigadier General Harry Soyster. It was later determined that Soyster did not have the authority to cancel the program, as it could only be cancelled by the secretary of the Army, and another review of the program was then conducted by W. Ross Adey, chief of staff of the Research Division of the Veterans Hospital in Loma Linda, California, and Fred Zachariasen, a professor of physics at the California Institute of Technology and a member of the Department of Defense’s scientific advisory committee. They concluded that “the evidence . . . is too impressive to dismiss as mere coincidence” and “the potential impact of this phenomenon is clearly profound,” so the program should continue to receive funding for “the next five to ten years.”⁸³ As a result, the program was reinstated, and in 1986 it was transferred back to the DIA, where it was redesignated “Sun Streak.”⁸⁴

At this time the program began to focus on the development of a training program, as it was believed that remote viewing was a learnable skill that could be acquired through instruction and practice. Swann developed the first training protocol, which was divided into six stages that were designed to expand the viewer’s psychic abilities.⁸⁵ It was later revealed that this protocol had been requested by the Department of Defense, as it was thought that a training program would help to address the concerns of critics. In other words, the emphasis on training was an attempt to distance psychical research from its supernatural or occult origins, just as the term “remote viewing” was an attempt to distance psychical research from earlier practices like “clairvoyance” and “astral projection.” It was also driven by financial incentives, as researchers hoped that these training methods could be used to justify future funding requests. As McMoneagle explained: “The higher-ups wanted training methods, and they wanted it right then and there.”⁸⁶

⁸⁰ Ibid., 96.

⁸¹ Ibid., 249.

⁸² Schnabel: *Remote Viewers*, 280.

⁸³ Adey and Zachariasen: *SRI Studies in Remote Viewing*, 1, 4.

⁸⁴ Schnabel: *Remote Viewers*, 319.

⁸⁵ McNear: *Coordinate Remote Viewing*.

⁸⁶ McMoneagle: *Stargate Chronicles*, 172–173.

In December 1988 viewers were also asked to determine how Libyan leader Muammar el-Qaddafi was moving a stockpile of chemical weapons from a facility called Rabta, which was about to be destroyed by U.S. airstrikes. A viewer named Angela Dellaflora, who worked as a civilian analyst for INSCOM, determined that the weapons were being transported on a ship named “Potato” or “Patuta.” The actual named turned out to be “Batato,” and several days later the *New York Times* reported that the ship had been identified by U.S. intelligence, although “officials declined to specify the source of their information.”⁸⁷ In April 1989 Dellaflora also played a key role in the apprehension of a Drug Enforcement Agency operative named Charles Jordan, who was accused of taking bribes from drug traffickers. Jordan was believed to be hiding in the Caribbean or South America, but Dellaflora determined that he was actually living “in Indian Territory” near “Lovell, Wyoming.”⁸⁸ Graff and Vorona arranged to have Jordan’s photograph sent to federal employees at post offices and parks in the surrounding area, and a ranger at Yellowstone National Park reportedly found him at a campground near an old Indian burial ground roughly fifty miles from Lovell.⁸⁹

In October 1990 Graff became the new head of the program, which was redesignated “Star Gate.” At the time the Department of Defense was shifting resources from the war on drugs to the Gulf War, so viewers were asked to locate Iraqi army units and mobile Scud missile launchers.⁹⁰ In November 1991 the *Associated Press* reported that U.S. Army Major Karen Jansen had received “sketches of two sites where the Iraqi leader has supposedly stashed biological weapons.” These sketches had been provided by a company named PSI Tech, which had been founded by a group of viewers who were selling their services to private clients, and the company’s president publicly revealed that “various techniques of psychic or extrasensory viewing . . . have been researched in secret by military intelligence since the 1950s.”⁹¹ Following the publication of this article, DIA Director James Clapper “could not go anywhere without being hounded about the psychic spying program,”⁹² and May notes that this exposure had a disastrous effect on the program: “For the next four years DIA did everything they could to create road blocks to make it as difficult as possible

⁸⁷ Engelberg: U.S. Says Libya Moves Chemicals for Poison Gas Away from Plant, A6.

⁸⁸ Sun Streak Interim Report, 2–3.

⁸⁹ May, Rubel, and Auerbach: ESP Wars, 136.

⁹⁰ Schnabel: Remote Viewers, 380; Morehouse: Psychic Warrior, 167–168.

⁹¹ Sinai: ESP Used in Effort to Ferret Out Iraqi Weapons Sites.

⁹² Jacobsen: Phenomena, 366.

for the program to flourish or for that matter even survive The word had come down from the top: Make the program vanish.”⁹³

When Graff retired in 1993, the Senate Select Committee for Intelligence asked the CIA to conduct another review of the program and to report their findings to Congress. The CIA contracted the American Institutes for Research (AIR) to conduct this review, and they recruited two experts: Jessica Utts, a professor of statistics at the University of California at Davis who had previously worked as a consultant at SRI, and Ray Hyman, a psychology professor at the University of Oregon who was a noted skeptic. Utts and Hyman were asked to evaluate forty remote viewing sessions conducted between 1994 and 1995 in terms of both their accuracy and their operational value. Utts concluded that “psychic functioning has been well established,” as “the statistical results . . . are far beyond what is expected by chance.”⁹⁴ Hyman agreed that “something beyond odd statistical hiccups is taking place,” but he added that “even if remote viewing is a real ability possessed by some individuals, its usefulness in intelligence gathering is questionable.”⁹⁵ The AIR consultants ultimately supported Hyman’s position, as they concluded that “in no case had the information provided ever been used to guide intelligence operations” and that remote viewing had therefore “failed to produce actionable intelligence.”⁹⁶ Based on their recommendation, the program was finally cancelled in June 1995, although this decision was extremely controversial within the intelligence community. May argued that it was politically motivated, as “some of the DIA management had previous negative experiences with senior military officers who had become uncritical fanatics, oversold the program’s capability, and were known as ‘loose cannons’ in the community.”⁹⁷ May also claimed that “the long-term existence *and successful functioning* of the military ESP programs,” “the stature of the scientists involved in them,” and the “extensive high-level, and enduring support they received” were themselves evidence of operational effectiveness: “If these programs were ineffective, they would have shut down at the very beginning.”⁹⁸ Former intelligence officer and practicing psychic W. Adam Mandelbaum similarly characterized the AIR report as a “lie” because the experiments “proved that remote viewing could be operationally

93 May, Rubel, and Auerbach: ESP Wars, 245.

94 Utts: An Assessment of the Evidence for Psychic Functioning, 289.

95 Hyman: Evaluation of the Program on Anomalous Mental Phenomena, 334, 345.

96 Mumford, Rose, and Goslin: An Evaluation of Remote Viewing, E-4.

97 May: The American Institutes for Research Review of the Department of Defense’s Star Gate Program, 105.

98 May, Rubel, and Auerbach: ESP Wars, 6.

useful in areas where the presence or undetected insertion of an agent was impracticable or outright impossible.”⁹⁹ This debate thus focused not on the question of the existence of psychic phenomena – an issue that had apparently been settled – but rather on the question of its operational value, which remained subject to interpretation.

While the underlying reason for the program’s cancellation remains unknown, it is clear that the CIA knew that the files related to psychical research would soon be declassified. In March 1995, for example, the CIA issued a memorandum indicating its intent to declassify the SRI and “Star Gate” reports. In November 1995, four months after the program was cancelled, 12,000 files including roughly 90,000 pages of previously classified material were released to the public. That same month former CIA Director Robert Gates appeared on the ABC television show *Nightline* to discuss the “Star Gate” program. While the show featured some positive testimonials, science correspondent Michael Guillen presented a scathing critique of the program, arguing that it was “time to take the ESP out of espionage.” In order to mitigate the negative feedback from the press, Gates emphasized that psychical research had never been “critical to national interests” and that there had never been “a single instance . . . where this kind of activity contributed in any significant way to a policy decision or even informing policymakers about important information.”¹⁰⁰ This claim obviously contradicted the reports of numerous researchers, consultants, and intelligence officers, as May pointed out: “This statement is either blatantly false or . . . a conveniently faulty memory,” as “Gates . . . had been briefed on specific examples” in which “ESP provided a stream of actionable intelligence for a number of applications, from military situations to law enforcement opportunities to political issues.”¹⁰¹ According to May, therefore, Gates’ comments showed that the CIA no longer wished to be associated with psychical research due to its negative reputation, and he was greatly disappointed by the “bias, ignorance, and mismanagement of what could have been a valuable asset in the arsenal of intelligence collection tools.”¹⁰² It thus appears that the cancellation of the program may have been due to its impending declassification rather than its lack of operational value, as fears of a “psi-gap” were gradually replaced by fears of public transparency.

⁹⁹ Mandelbaum: *Psychic Battlefield*, 135.

¹⁰⁰ *Nightline*, ABC, 28 November 1995.

¹⁰¹ May, Rubel, and Auerbach: *ESP Wars*, 147.

¹⁰² *Ibid.*, 147–148.

Epistemological and Geopolitical Crisis

The proponents of this psychical research program often acknowledged that its successes were unexplainable according to the rules of orthodox science, yet they also claimed that the scientific community's rejection of psychic phenomena was fundamentally unscientific, as scientists should always be prepared to investigate anomalies that challenge their basic assumptions. May argued, for example, that the "analysis of [psychical] research and conclusions and criticism based on such analysis is scientific," while the "dismissal of or bias against doing the research is not."¹⁰³ Puthoff and Targ were similarly convinced that their experiments represented incontrovertible evidence of a paradigm shift that the scientific community refused to accept:

When an anomalous but important phenomenon has been repeatedly demonstrated. . . scientists ordinarily turn increasing attention to it until it is either thoroughly understood and integrated into the current scientific framework or until it initiates a revision in that framework. . . . What happened instead was that the scientific community essentially repressed psi phenomena. . . . The general scientific community was clearly not ready to consider either the evidence for psi or its implications, and the personal and emotional attachment of scientists to their current world views was not going to be disturbed by the evidence. Psychologically, this sort of response is a common human reaction, and it is understandable, but it is bad science.¹⁰⁴

While the scientific community generally dismissed psychical research as "bad" science because it contradicted established facts, it did not follow strict laboratory protocols, and it could not be reproduced on a consistent basis, Puthoff and Targ thus characterized orthodox science as "bad" because it had failed to revise the dominant paradigm in light of their work.

While Kuhn's theory of scientific revolutions would seem to offer a convincing explanation as to why psychical research was not seen as a legitimate field of study at this time, it is unable to explain why this "extraordinary" science received such extensive funding from the government and why this funding suddenly vanished following the end of the Cold War. Instead of representing a paradigm shift, as researchers claim, this history actually illustrates how funding and policy decisions were driven by the following conditions:

- Scientific research was seen as providing an essential military advantage, which made scientists increasingly dependent on government funding.

103 Ibid., 289–290.

104 Tart, Puthoff, and Targ: Introduction, xxv–xxvi.

- Fears of Soviet military superiority also increased pressure on the U.S. government to mirror Soviet scientific research programs.
- Psychical researchers exploited this situation by exaggerating the potential dangers posed by Soviet parapsychology in order to secure funding.
- To justify their funding requests, psychical researchers also emphasized the potential military applications of their experiments and developed new techniques and training procedures that were specifically tailored to the needs of the intelligence community.
- The emphasis on military applications prevented psychical researchers from studying the underlying cause of psychic phenomena, which precluded any possibility of reality testing.
- The emphasis on military applications also required increased security, and the combined strategies of compartmentalization and classification allowed the program to continue for the duration of the Cold War with minimal oversight from the scientific community.

As soon as these conditions were no longer in place, the program was immediately cancelled, and representatives of the intelligence community even went so far as to deny that it had ever been considered operationally effective despite the fact that numerous researchers, consultants, and intelligence officers had consistently made the opposite argument for more than two decades. The fact that these denunciations followed soon after the declassification of the program also suggests that the decision to cancel it may have been motivated by a fear of public transparency rather than a lack of operational value. The history of this program thus shows that “extraordinary” sciences can proliferate during periods of epistemological as well as geopolitical crisis, as social, political, and economic factors also have the potential to challenge established scientific facts, theories, and methods by excluding the scientific community from policy decisions.

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