

[e-flux.com](https://www.e-flux.com/journal/147/)

Society of the Psyop, Part 1: UFOs and the Future of Media - Journal #147

Trevor Paglen

18–22 minutes

We once looked at pictures. Then, with the advent of computer vision and machine learning, pictures started looking back at us. Now, something even stranger is happening.

Generative AI, Adtech, recommendation algorithms, engagement economies, personalized search, and machine learning are inaugurating a new relationship between humans and media. Pictures are now looking at us looking at them, eliciting feedback and evolving. We've entered a protean, targeted visual culture that shows us what it believes we want to see, measures our reactions, then morphs itself to optimize for the reactions and actions it wants. New forms of media prod and persuade, modulate and manipulate, shaping worldviews and actions to induce us into believing what they want us to believe, and to extract value and exert influence.

What does it mean to live in a media environment that knows our wants, needs, vulnerabilities, emotional ticks, kinks, and cognitive quirks far better than we do? That notices which kinds of stimulus induce what kinds of precognitive responses, and uses machine learning to develop, A/B test, and deploy custom-generated cognitive injections designed to manipulate us even further, all without us consciously perceiving what's

happening? And what does it mean to live in a media environment where this is all-pervasive: not only news and websites, videos and movies, but driving assistants in cars, AI-generated customer service representatives, search engines and chatbots, virtual HR managers, gas-station pumps, smart houses and phones, and even washing machines ... a media landscape where your refrigerator, vibrator, and toothbrush collude with insurance companies, advertisers, political campaigns, and big retailers, using computer vision, machine learning, and biometric feedback to influence your behavior and worldview?

Every day, we are subject to subtle and not-so-subtle mind-control experiments. Through nearly imperceptible experiments and machine learning–enabled analysis, coupled with various types of sensors (from simple “like” buttons and engagement metrics to cameras and other sensors designed to measure preconscious responses), the media we interact with seeks to develop a sense of—and make alterations to—each of our own unique neurological makeups.

If the postwar media landscape was characterized by spectacle, and the late twentieth and early twenty-first century by an age of surveillance, then we are entering a new phase. One marked by affective computing, machine learning–enabled optimization, neuroscience, and cognitive psychology. A mediascape that has little use for distinctions between real and fake, signifier and signified. That assumes no distinction between perception and reality even as it attempts to intervene as directly as possible into the brains and emotional makeups of its experiencers.

Society of the psyop.1

How did we get here? This three-part essay traces a brief history of media, technologies, and techniques that take advantage of the malleability of perception, capitalizing on quirks in human brains to shape

reality. It is a story about the manufacturing of hallucinations and the fact that, under the right conditions, hallucination and reality can become one and the same.

Doty

I first met Richard Doty in 2022. I was anxious. I could feel my unease rising as his silver SUV pulled into the parking lot across from the makeshift film studio where I was working at the University of New Mexico.² A paunchy man wearing a red polo shirt emerged. I wasn't afraid of physical violence. Rick Doty wasn't known for that. I was worried about my own sanity. Doty was known for that.³

Doty conducted elaborate psyop programs for the US Air Force in the 1970s and '80s. One of his targets, a defense contractor, was so consumed by paranoia after being subjected to Doty's craft that he was committed to a mental institution. There was also a well-respected journalist who, after enduring one of Doty's psychological operations, spent the remainder of her career babbling about reptoids, cover-ups, and ancient alien conspiracies. A third target, a former UFO investigator who collaborated with Doty, publicly confessed to participating in a military disinformation campaign and retreated into self-imposed obscurity. We would be spending the next two days together. It turned out that I liked the guy.

I had sought out Doty because I wanted to learn about the particular form of media-making he practiced to such dramatic effect. My intuition was that Doty's career as a cultural producer could shed some light on what media might be like in an age of recommendation algorithms, personalized news feeds, information bubbles, and generative AI.

For the next two days, Doty explained the finer points of military interrogations and influence operations, the theory and practice of

psyops, and how he'd created and used folklore about UFOs to develop counterespionage missions designed to protect classified Air Force assets. But in Doty's retelling of the work he did on behalf of the US military, there was a strange inversion. Yes, he created misinformation about UFOs to conceal the existence of secret US military projects. But he also described creating false stories about classified Air Force technologies to cover up the existence of actual UFOs (internally known as "Cardinals," he claims). Upon retirement from the US Air Force, Doty became a self-styled whistleblower, recounting details of the real UFO program he claims to have had a hand in covering up. He told stories of a secret film documenting the existence of crashed saucers, a classified warehouse at Bolling Air Force Base containing the remnants of those UFOs, and the cultural life of captured pilots from the Zeta Reticulli star system.

Doty began working for the Air Force Office of Special Investigations (AFOSI) in the late 1970s. AFOSI is an outfit analogous to an in-house FBI, charged with investigating criminal activity in the military and conducting counterintelligence work to ensure the security of military installations and assets. After completing his training in the Washington, DC area, Doty was assigned to Kirtland Air Force Base in Albuquerque, New Mexico.

Kirtland is a massive base encompassing over fifty thousand acres, extending from a collection of runways and hangars adjacent to the Albuquerque airport to vast tracts of land to the east and south. Its neighbors are a veritable who's-who of conspiracy theories and UFO lore. Nestled among the mountains ninety miles to the north is Los Alamos National labs, where World War II-era scientists worked in secret to develop the world's first atomic bomb. To the south is the Trinity Site, where that atomic bomb was first detonated, turning the desert

surface into a radioactive glass called “trinitite.” Still further south is the White Sands Missile Range, where US forces transported Nazi rocket scientists in the aftermath of World War II as part of Operation Paperclip. The alleged Roswell UFO crash site is a two-hour drive southeast.

In the late 1970s, Kirtland Air Force Base’s acknowledged tenants included the Air Force Weapons Laboratory, charged with research and development on advanced weapons systems, directed-energy weapons, and the effects of nuclear fallout. Another outfit, Sandia National Labs, designed and tested components for nuclear weapons. Such weapons were stored and managed in a facility in a restricted section in the eastern part of the base. Kirtland also played host to a handful of unacknowledged tenants, including a detachment from the National Security Agency (NSA).

When Doty arrived in 1979, Kirtland was synonymous with top-secret military technology experiments. In 1973, base engineers had succeeded in using a ground-based laser to shoot down an airplane, and were busy developing a directed-energy weapon that could be fired from an airborne platform. Elsewhere on the base, the Air Force trained Special Forces units, conducted advanced helicopter training, and tested experimental weapons systems. Doty’s job was to keep all of this secret.

In the late 1970s, a military contractor named Paul Bennewitz, who lived on Kirtland’s northern border, started seeing and photographing unusual lights and movements over the restricted range adjacent to his house. He came to the conclusion that they must be UFOs. An avid electronics enthusiast, Bennewitz made recordings of bizarre radio emissions he believed to be coming from the objects. Bennewitz offered to help the military repel what he believed to be an extraterritorial harassment campaign: he collected his evidence, sent it to the AFOSI team, and in

the fall of 1980 was invited to present his findings.

Evidently, it wasn't an alien invasion that Bennewitz had discovered, but a top-secret NSA program. The case landed on Rick Doty's desk.⁴

Doty took a creative approach to the problem: rather than "neither confirm nor deny" the existence of UFOs or secret intelligence programs at the base, he staged an elaborate deception and cover-up operation to encourage Bennewitz's imagination. A source he'd recently recruited from the UFO research community would be a huge help.

In the summer of 1980, Doty made a pitch to this source, named William Moore, who was the coauthor (with Charles Berlitz) of the 1980 book *The Roswell Incident*. Doty's proposal was this: Doty would provide Moore with incontrovertible proof of extraterrestrial contact in exchange for Moore's help in conducting AFOSI investigations and reporting on the activities of amateur UFO groups. The deal was irresistible, and Moore cooperated.

Doty began using Moore as a proxy. Doty gave Moore doctored top-secret documents to pass along to Bennewitz, alluding to government knowledge of an extraterrestrial presence on earth. Furthermore, the documents implied that Bennewitz's discoveries were relevant to an above-top-secret program called "Aquarius," administered by a shadowy group called "MJ Twelve."

The operation against Bennewitz snowballed: according to William Moore, in the summer of 1981, AFOSI arranged for Bennewitz to receive a computer he could use to decipher the "alien" signals. The doctored computer spat out long streams of quasi-nonsensical text as if it were a chatbot in a trance or fugue state:

|WE CANNOT TELL MILITARY OF THE US MAKING HUMANOIDS
|REASON FOR HATE IS YOU ARE GOOD—WE TRUST YOU TAKE

VAST PORTION UNIVERSE AGAINST OUR AGGRESSION THE NUMBER OF OUR CRASHED SAUCERS IS EIGHT NERVE YOU WE REALIZE TELL THE TRUTH

Then the operation against Bennewitz became more elaborate. Knowing that Bennewitz was an avid amateur pilot and that he suspected the existence of a top-secret alien captive near the town of Dulce, New Mexico, AFOSI installed surplus military equipment on the top of Archuleta Mesa so that Bennewitz would see it on one of his flyovers and be convinced of the existence of the secret base. The Air Force was crafting an alternate reality to feed Bennewitz's predilections and ensure that he believed what they wanted him to believe.

With the Bennewitz project underway, Doty began a second operation. Linda Moulton Howe was an award-winning television journalist who'd recently completed *A Strange Harvest*, a documentary on the "cattle mutilation" phenomena. In the wake of that success, Howe received a contract from HBO to make a second documentary on the topic of UFOs. Doty got in touch with Howe and invited her to Kirtland Air Force Base for a briefing. At the AFOSI offices, Doty explained that Howe was onto something big and that AFOSI was prepared to help. He then pulled out a dossier and instructed Howe that its contents were for her eyes only: she could read the documents but take no pictures. Other AFOSI officers observed her reaction from behind a one-way mirror.

Doty presented Howe with a dossier entitled "Briefing Paper for the President of the United States." The documents therein told a remarkable story of an ongoing extraterrestrial presence on earth, UFO crashes at Roswell and other locations, and a surviving alien being held at Los Alamos. Moreover, the US government had reason to believe that aliens had genetically intervened in the human race and guided our development using various techniques, such as the creation of a great

spiritual leader approximately two thousand years ago. Echoing the documents fed to Bennewitz, the dossier reiterated that the “MJ Twelve” group was responsible for the UFO and extraterrestrial program.

Doty explained to Howe that this was only the beginning. In return for Howe’s coordination with AFOSI on her documentary, he promised footage from a top-secret film documenting an apocryphal 1964 UFO landing at Holloman Air Force Base in southern New Mexico, and offered her access to an Air Force colonel who had allegedly handled one of the surviving aliens from the Roswell crash. Howe was thrilled. Weeks passed. Then months. No footage arrived, no interviews materialized. HBO killed the project. Howe’s documentary on the UFO phenomenon was not going to happen.

The 1988 edition of the *US Army Field Manual* outlines ten principles of military deception. The “Monkey’s Paw” principle states that the number of people with knowledge of a particular deception operation should be minimized, even if it means misleading one’s own forces. “Jones’s Dilemma” holds that deception becomes more difficult as the number of information channels available to the target increases, with the caveat that the greater number of *controlled* channels the target has access to, the more likely the deception will be successful. “Cry Wolf” holds that repeated mis-predictions of an event will desensitize the target to warnings of it. (This principle cites intelligence failures around the US Tet Offensive in Vietnam, which arose from repeated warnings that did not bear out.) Other principles involve the correct design and sequencing of misinformation, the importance of holding materials in reserve, and attention to the limits of human information processing.⁵

Doty’s operation chiefly used a combination of three other principles: “Magruder’s Principle—The Exploitation of Perceptions,” the “Choice of Types of Deception” maxim, and “The Importance of Feedback.” Both

the field manual and Doty himself agree that the most important of these principles is “Magruder’s Principle—The Exploitation of Perceptions.” Named after the Confederate general John B. Magruder, it holds that “it is generally easier to induce the deception target to maintain a pre-existing belief than to deceive the deception target for the purpose of changing that belief.” In this case, the preexisting belief that Doty capitalized upon was the existence of extraterrestrials and a government cover-up of that knowledge.

The “Choice of Types of Deception” maxim holds that the “deception planner should … reduce the uncertainty in the mind of the target” and should “force him to seize upon a notional world view as being correct—*not making him less certain of the truth, but more certain of a particular falsehood*” (emphasis in original). To achieve this deception, Doty chose media tailored to each of his targets: for Bennewitz the engineer and pilot, he provided an advanced computer and a Potemkin base on a remote mesa; to Howe the journalist, he supplied false top-secret official documents and the promise of on-the-record sources with knowledge of the alien conspiracy.

Finally, the field manual emphasizes “The Importance of Feedback,” the significance of which is “virtually self-evident.” Feedback answers the question “Is anybody listening? (Is this channel effective?)” This is where William Moore, author of *The Roswell Incident*, came in. Moore was both a means of distribution and a feedback mechanism, a sensor that could judge the responses these particular media elicited. Doty could then gauge the reactions, amplify the signal that elicited the strongest feedback, and send back the amplified signal.

The outcome was a path to insanity. Paul Bennewitz became ever more paranoid about alien surveillance, accusing his wife of being controlled by aliens and eventually barricading himself in his house. In August 1988

he would be hospitalized for a mental breakdown. The next summer, William Moore publicly confessed to participating in a disinformation campaign against Bennewitz and colluding with the US government to betray the UFO community. He faded into obscurity soon after. For her part, Linda Moulton Howe doubled down on her project to seek “the truth” about extraterrestrials. To this day, she claims that there are 168 advanced civilizations in the Milky Way, that multiple species of extraterrestrials inhabit earth and can manipulate time, that there exists an alien presence under the ice sheets of Antarctica, that crop circles and cattle mutilations have something to do with it, and that a vast government conspiracy is covering it all up.

The information Doty fed to these three people gave life to what’s known in UFO circles as the “darkside hypothesis.” The story he told made its way through the UFO subculture and popped out into the mainstream as the plot of the television show *The X-Files*.

At this point, we might ask a simple question: Why? Was the top-secret NSA program at Kirtland so sensitive as to warrant the incredible resources spent to steer Bennewitz into a reality populated by aliens? Did Linda Moulton Howe’s reporting actually come close to something so important that the AFOSI had to derail her by producing a vast and detailed otherworldly conspiracy? And why bother recruiting William Moore, a prominent figure in the UFO community with only a marginal influence on the broader culture? And why use UFOs? There are no good answers to most of these questions, but we have a better answer for why UFOs became Doty’s primary mimetic device.

It turns out that US military and intelligence agencies have a long history of using UFOs as a psychological instrument, having discovered their hyper-mimetic qualities in the 1950s. Decades before Doty’s variations on the theme, UFOs were a well-known self-replicating cultural trope

capable of infecting individual and cultural consciousness and spreading like a virus.

The discovery of the UFO hyper-meme took place in the 1950s, against the backdrop of a massive effort by US military and intelligence agencies to develop ways to manipulate people's minds. It was an era of CIA mind-control experiments, covert operations inspired by magic and illusionism, and extensive research into using computers, artificial intelligence, and electronic warfare to shape the experience of reality, and therefore reality itself.

Continued in ["The Society of the Psyop, Part 2: AI, Mind Control, and Magic"](#)

[e-flux.com](https://www.e-flux.com)

Society of the Psyop, Part 2: AI, Mind Control, and Magic - Journal #148

Trevor Paglen

30–37 minutes

Continued from “[Society of the Psyop, Part 1: UFOs and the Future of Media](#)”

We once looked at pictures. Then, with the advent of computer vision and machine learning, pictures started looking back at us. Now, something even stranger is happening.

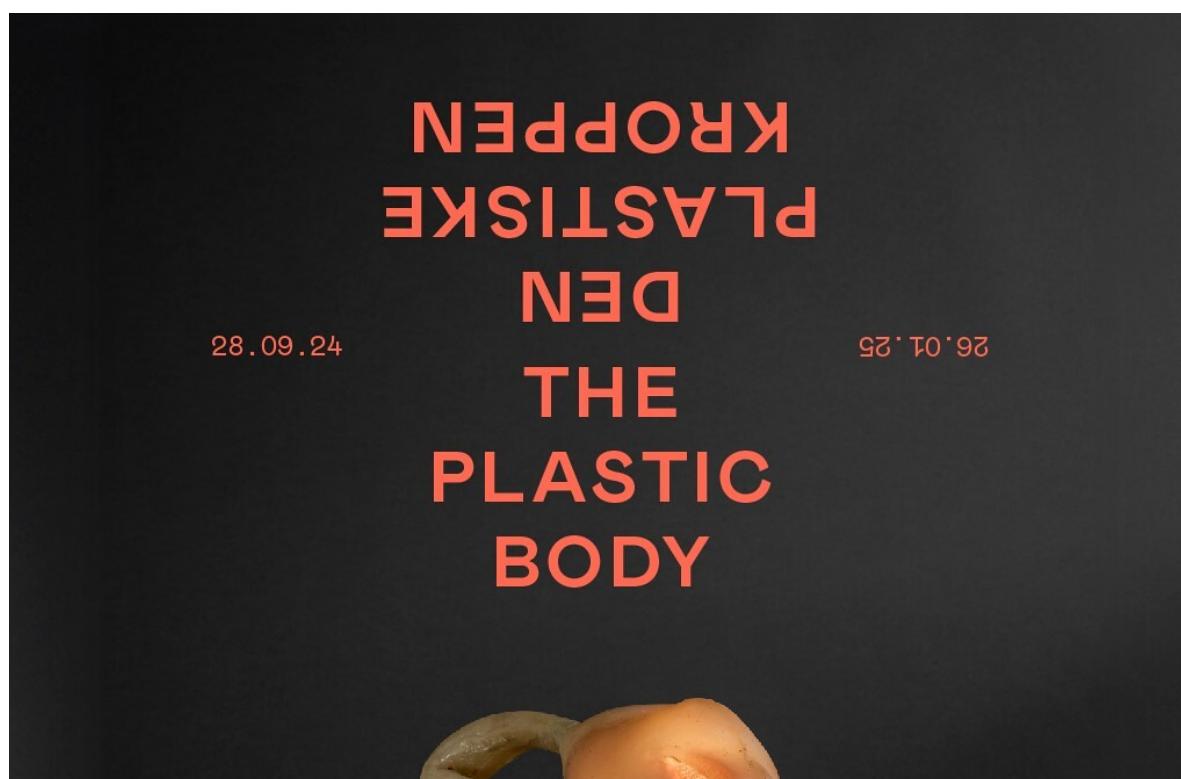
Generative AI, Adtech, recommendation algorithms, engagement economies, personalized search, and machine learning are inaugurating a new relationship between humans and media. Pictures are now looking at us looking at them, eliciting feedback and evolving. We've entered a protean, targeted visual culture that shows us what it believes we want to see, measures our reactions, then morphs itself to optimize for the reactions and actions it wants. New forms of media prod and persuade, modulate and manipulate, shaping worldviews and actions to induce us into believing what they want us to believe, and to extract value and exert influence.

How did we get here? This three-part essay traces a brief history of media, technologies, and techniques that take advantage of the malleability of perception, capitalizing on quirks in human brains to shape

reality. It is a story about the manufacturing of hallucinations and the fact that, under the right conditions, hallucination and reality can become one and the same.

Brain Warfare

Advertisement





It was the spring of 1953, and a lot of things were on the newly appointed CIA director Allen Dulles's mind. The plan to implement Operation Ajax, a coup to overthrow the democratically elected prime minister of Iran, Mohammad Mosaddegh, was in full swing and was only a few months away from implementation. A second plan, to overthrow the government of Guatemala, was under active development for the following year. But on April 10, something else was on the director's mind: "brain warfare."

In the past few years we have become accustomed to hearing much about the battle for men's minds—the war of ideologies—and indeed our government has been driven by the international tension we call the "cold war" to take positive steps to recognize psychological warfare and to play an active role in it ... We might call it ... "brain warfare."

Dulles was giving a speech to a group of Princeton alumni in Hot

Springs, Virginia that day. Standing before the crowd, Dulles described a psychological warfare program he believed to be taking place in Korea, China, and behind the Iron Curtain. “The brain under [Communist influence] …” he remarked, “becomes a phonograph playing a disc put on its spindle by an outside genius over which it has no control.”¹ What on earth was he talking about?

A new form of media had appeared in American public life. In the midst of the Korean War, captured American prisoners made films confessing to the surreptitious use of biological and chemical weapons against Korean civilians. They wrote letters home extolling the virtues of their captors.

Pilots and service members such as Floyd O’Neil, Paul R. Kniss, and Frank Schwable denounced the United States and confessed to war crimes. By the end of the war, more than half of all American POWs had signed statements denouncing the war and calling on the US to end the conflict. Some defected to North Korea.²

The CIA and US military were baffled. They were unable to imagine why American service members would participate in these propaganda efforts. Influenced by the work of Edward Hunter, an anti-communist journalist and CIA operative who popularized the term “brainwashing” in his sensational 1951 book *Brain-washing in Red China: The Calculated Destruction of Men’s Minds*, the government concluded that the Koreans (with Chinese backing) must be “brainwashing” their American captives.

If a “brainwashing” capability did exist, as the CIA believed, then there was a “brain warfare” gap. The Americans had no mind-control program. Three days after his speech in Hot Springs, Dulles authorized its creation.

Spearheaded by CIA chemist Sidney Gottlieb, MKULTRA was a wide-ranging effort consisting of at least 149 subprojects investigating how the

agency could use the human mind as a strategic and tactical arena of covert action, intelligence collection, and warfare. Over the next several decades, the CIA conducted and funded research into neuropsychology, mind control, brainwashing, LSD and other hallucinogenic drugs, hypnotism, sensory deprivation, artificial intelligence, radiation, and psychological torture. They conducted cruel experiments on unwitting students, soldiers, prisoners, drug users, sex workers, and the mentally ill.³

We have only scant documentation of MKULTRA's scale and scope. On January 30, 1973, as journalists and congressional overseers started to learn about the program, CIA director Richard Bissell dispatched Sidney Gottlieb to the agency's records center in Warrenton, Virginia to destroy all documentation of the mind-control experiments.

What we know about the various MKULTRA subprojects comes from a cache of nearly twenty thousand documents, located during the 1977 Church Committee investigation, that survived Gottlieb's purge because they'd been stored at a different location.

From these surviving documents and other sources, we know that one area of research explicitly sought to use computers, early AI systems, and brain-computer interfaces to develop new forms of psychological warfare. Could the mind be programmed, erased, and reprogrammed like a computer or played like the "disc put on its spindle by an outside genius," as Dulles imagined? Could memories be implanted and deleted? Could humans' higher-order cognitive processes be circumnavigated to induce involuntary actions? Could the agency make a target hallucinate themselves into an alternate reality?

The answer would turn out to be "yes."

Face Recognition and Remote Control Animals

Woody Bledsoe was an early trailblazer in artificial intelligence, specializing in devising algorithms to conduct pattern matching, a crucial predecessor to modern machine learning. After receiving his PhD at UC Berkeley in 1953, he moved to New Mexico to work on nuclear weapons at Sandia Labs on the Kirtland Air Force Base complex. After a few years, Bledsoe went back to California and set up a research lab on the peninsula south of San Francisco in what would become modern Silicon Valley. He called the group Panoramic Research.

In 1963, the CIA—using the cutout company “King-Hurley Research Group”—contracted Bledsoe to develop a system that would use computers to identify people by looking at pictures of their faces.

Bledsoe found inspiration in the work of Alphonse Bertillon, one of the founders of biometrics in the late nineteenth and early twentieth century. He began photographing his associates and analyzing their faces, assigning key points to various facial features (center of pupils, the inside corners of the eyes, the outside corners of the eyes, etc.), and measuring the distances between them. By synthesizing these measurements, Bledsoe created a mathematical abstraction of a human head he called the “Standard Head.”

Bledsoe’s idea was to use a computer to analyze photos of people, calibrate the result against the standard head, look for a pattern corresponding to an image in the database, and identify a specific person’s face. Today Bledsoe is known as the grandfather of facial recognition.⁴

It wasn’t Bledsoe’s first CIA contract. In May 1959, he had received MKULTRA funding to carry out something called Subproject 94, which involved “investigations on the remote directional control of activities of selected species of animals including mammals and feathered

vertebrates.”⁵

In the first of several contracts, the agency explained that “initial biological work on techniques and brain locations essential to providing conditioning and control of animals has been completed.”⁶ The agency was most likely referring to the work of a Spanish neuroscientist named José Delgado, whose lab at Yale University had shown the feasibility of controlling animals through an electronic brain implant (a “stimoceiver”) activated by remote control. In the 1950s and ’60s, Delgado’s experiments on animals and humans proved that a brain-computer interface could indeed be used to influence a subject’s motor control, movements, and even emotions. Delgado reported that

it is . . . already possible to induce a large variety of responses, from motor effects to emotional reactions and intellectual manifestations, by direct electrical stimulation of the brain. Also, several investigators have learned to identify patterns of electrical activity (which a computer could also recognize) localized in specific areas of the brain and related to determined phenomena such as perception of smells or visual perception of edges and movements. We are advancing rapidly in the pattern recognition of electrical correlates of behavior and in the methodology for two-way radio communication between brain and computers.

The individual is defenseless against direct manipulation of the brain because he is deprived of his most intimate mechanisms of biological reactivity. In experiments, electrical stimulation of appropriate intensity always prevailed over free will; and, for example, flexion of the hand evoked by stimulation of the motor cortex cannot be voluntarily avoided. Destruction of the frontal lobes produced changes in effectiveness which are beyond any personal control.⁷

It appears that Bledsoe's Subproject 94 was a covert version of Delgado's ongoing research at Yale, a shadow effort more easily adapted towards military or intelligence objectives than the public research conducted at the university.

Subproject 94 began in the summer of 1959 with experiments on rats and burros. By September, a CIA memo reported that "the feasibility of remote control of activities in two species of mammals has been demonstrated by limited trials" and that additional support for Bledsoe's project was required "in order to capitalize on this technical breakthrough." Bledsoe extended his experiments to dogs. In 1961, the agency reported that "performance is satisfactory" and it was proposed (it's unclear whether by Bledsoe or the CIA) that Subproject 94 begin "special investigations and evaluations ... toward the application of selected elements of these techniques to man." Bledsoe was set to begin studying the effects of his methods on human beings.

But in 1962, something happened. The agency shut it all down. In November, the CIA wrote Bledsoe to inform him that the grant funding his research would not be renewed. In an internal memo, the CIA comptroller wrote that Subproject 94 had gone "off the rails,"⁸ even as Sidney Gottlieb opined that "the overall performance [of Subproject 94] was highly satisfactory in all respects."

The facial recognition contract came through shortly thereafter, keeping Panoramic Research solvent. But by 1966, Bledsoe was worn down from the constant hustle for funding and decided to go back to academia, taking a position as a professor of mathematics at the University of Texas at Austin. Panoramic Research ceased operations shortly thereafter.

We don't know whether Bledsoe's remote-control mind experiments were ever tested on humans. The CIA burned their MKULTRA records in

1973. Bledsoe burned much of his own archives in the 1990s after being diagnosed with ALS and realizing that he would soon die.

It's not clear how well either of Bledsoe's CIA projects worked, but by the standards of the day, they impressed his agency overseers enough to warrant continued funding. With his facial recognition project, Bledsoe had set out on a path to use computers to "see" into the world of faces, and to potentially do things with those observations. With Subproject 94, he'd contributed to the development of a form of media that eschews images, representation, narrative, or abstraction and instead finds its purchase through the direct insertion of instructions into a living brain, using direct neurological stimulation to elicit a desired emotion, behavior, or perception.

Computers "seeing" humans. Computers "controlling" humans.
Operational media gone wild.

Across the country, another early experiment in artificial intelligence was taking place. This one, too, involved using computers and technology to capitalize on the quirks of our brains. It was an effort to create the illusion of a living computer.

ELIZA

At the Massachusetts Institute of Technology, Robert M. Fano, a protégé of Claude Shannon, founded and led the Project on Mathematics and Computation (Project MAC). With funding from the US Department of Defense's Advanced Research Projects Agency (ARPA), one of Project MAC's many endeavors involved inventing a system that allowed multiple researchers to network their computers together and share resources on a central mainframe. Computer networking was, of course, an important precursor to the contemporary internet.

If the networked MAC mainframe was an ur-form of the internet, then an

odd program sitting on that mainframe was a ur-form of generative AI. It was an AI chatbot named ELIZA.

Written by Joseph Weizenbaum, who would become one of history's most influential critics of artificial intelligence, ELIZA took the form of a digital therapist working in the style of Carl Rogers. Rogers's method emphasized "reflective listening," a form of active listening involving the therapist reflecting back the patient's statements.

Users could interact with the program using natural language, a rarity at the time. The program worked by "asking" the user open-ended questions and using a simple algorithm to reflect the answers back:

Joseph Weizenbaum described his early work with computers, only somewhat ironically, as that of a "confidence man." In 1958, he'd written a simple program to play a game called Five in a Row, and the program could consistently beat any first-time player. He titled a paper describing the game "How to Make a Computer *Appear* Intelligent." The idea, he explained, "was to create the powerful illusion that the computer was intelligent," even as he described exactly how the program worked.⁹

ELIZA built on the illusion Weizenbaum first developed with Five in a Row. An apocryphal story holds that Weizenbaum's secretary spent hours "talking" to the chatbot and even asked Weizenbaum to "leave the room so that [she] and ELIZA could have a real conversation." As the circle of ELIZA's users spread, some began attributing consciousness to the script. Weizenbaum had succeeded in creating a powerful device for the manufacturing of hallucinations.

The AI researcher was taken aback by the success of his conjuring: "I had not realized," Weizenbaum would write, "that extremely short exposures to a relatively simple computer program could induce powerful delusional thinking in quite normal people."¹⁰

Weizenbaum decided to dispel the illusion he'd created. He would do this by publishing ELIZA's source code. If he explained exactly how the trick worked, he surmised, he could dispel the "delusional thinking" the program prompted. "In the realm of AI ... machines are made to behave in wondrous ways, often sufficient to dazzle even the most experienced observer. But once a particular program is unmasked ... its magic crumbles away."¹¹

But things didn't quite work out that way. He was horrified to learn that some users continued to believe that ELIZA was sentient, even after he revealed exactly how the magic trick worked. He was similarly horrified to learn that a colleague, Kenneth Colby, who wrote an analogous program called DOCTOR sought to commercialize it as an ersatz therapist for mental health patients. Weizenbaum believed this to be highly unethical.¹²

With this simple script, Weizenbaum demonstrated something about the relationship between language, meaning, perception, and consciousness. ELIZA showed that when you create a string of words, the person who receives those words will attribute meaning to them, even if no meaning was intended (a process akin to refrigerator-magnet poetry or forms of experimental writing). In short, language doesn't require a speaker or writer's intention to "work."

In the context of ELIZA, this revealed a secondary magic trick. Because the user could derive meaning from the statements ELIZA made, the user would preconsciously attribute intentions to the program making the words. The user concluded that because the computer made some words and because those words were meaningful to the user, the computer must have intended to communicate those meanings. Thus, the computer was "intelligent."

With ELIZA, Weizenbaum realized that by using a set of reasonably simple linguistic and algorithmic tricks, the computer could create the illusion of an intelligent agent behind the words, a kind of “synthetic intentionality.”¹³ In the context of artificial intelligence, this act of conjuring became known as the “ELIZA effect.”

The effect was similar to the explicit and implicit arguments we find in other arenas: religious fundamentalists argue that some things in the universe (i.e., humans, other life-forms, and, strangely, bananas¹⁴) exhibit patterns we cannot imagine appearing through natural processes. Therefore, those patterns must have a “creator” lurking behind them, ergo evolution is false and creationism is correct. A similar trick is at work in toys like the “Magic 8 Ball” or Ouija boards. Because the toys give sensible (albeit vague) answers to questions, they create the illusion that some supernatural intentionality must be lurking in the background, using the toy as a medium. That isn’t to say that these forms of “synthetic intentionality” are always illusions: if you see writing in the sand on a beach, you assume someone wrote it with a stick. If you see elaborate crop circles in a cornfield . . .

Illusions or supernatural-seeming phenomena, whether chatbots, Ouija boards, or bananas, are prompts for the imagination. The prompt works by creating subtle cognitive contradictions. The preconscious part of perception intuitively ascribes intentionality, while the rational part of the brain wants to explain it away (which is sometimes impossible). Which part of the brain “wins” in this situation? You must either “choose” to believe that something supernatural is truly happening, or you must find a way to rationalize or explain away a supernatural cause. Or further, you can leave the source of the supernatural phenomena open-ended and unresolved, which is the most challenging. Preexisting beliefs play a strong role in this unconscious “choice” (magicians absolutely know this

and use it to their advantage). We therefore find ourselves on fertile ground for the “Magruder Principle,” as we saw in Part 1, where a skilled practitioner doesn’t waste effort trying to change an existing belief, but rather scans for opportunities to amplify one that’s already present.

Weizenbaum had discovered something at the core of the magician’s art: the understanding that our perceptual experience has primacy over our logical faculties. We do not “see” and “hear” with our eyes and ears but with our minds, and certainly not with our minds’ capacity for reasoning. A skilled magician has a sophisticated understanding of how to exploit preconscious perceptions and the gap separating them from reason. They insert themselves into that space to bend our experience of reality.

Weizenbaum did not work for the CIA and was not intentionally engaged in work on psyops, but the type of conjuring he’d performed, and the subtle dynamics between perception and reality that he’d demonstrated, were of great interest to the agency. The CIA was absolutely interested in magic. So much so that one of the very first people they brought into MKULTRA was a magician.

Magic

We can think of magic as a type of media. One that operates in the world of preconscious perception, playing with associations, expectations, symbols, and other forms of media to alter perception, to influence behavior, to affect the physical world, and to produce any number of other effects. To study magic is to study the quirks, foibles, and everyday hallucinations that characterize human perception, and to use those gaps between reality-as-it-is and reality-as-it-is-perceived as a vehicle for making supernatural-seeming interventions into perceived reality.¹⁵

As a form of media, magic operates in a perceptual landscape of

associations and forces that have little to do with reason or logical perception. Lionel Snell (a.k.a. Ramsey Dukes), an early progenitor of “chaos” and “postmodern” magic, observes that

our brains have evolved a non-logical data processing facility which is, in its own way, every bit as useful and sophisticated as reason but which we tend to play down or analyze away because its causal connections seem so tenuous. This facility, which I called “feeling,” acts much faster than reason and seems to process vast amounts of data in parallel rather than sequentially like a logical thought.¹⁶

Snell explains that what we call “feeling” or “intuition” is the result of our having unconsciously internalized and classified huge amounts of perpetual “patterns” with varying levels of abstraction and complexity. For example, we may have preconsciously learned that walking alone at night and seeing a group of loud drunken men in the distance “goes with” danger, that green meat “goes with” feelings of sickness, or that shuffling a deck of cards “goes with” randomness.

In theoretical literature on magic, there are numerous schools of thought about what magic “is,” and each understands the gap between perception and reality in different ways. For our purposes, we will make a vastly oversimplified distinction between “stage magic” and “magick.” The theory underlying stage magic holds that reality is relatively stable, but our perceptions of it are glitchy. By capitalizing on the eccentricities of preconscious perception, we can create illusions, feats of wonder, or supernatural-seeming outcomes. In stage magic, supernatural-seeming feats are all “false.” The art of magic is therefore the art of deception, of creating phenomena that are not real, but which appear to be so. As James “The Amazing” Randi put it: “Magicians are the most honest people in the world: They tell you they’re going to fool you, and then they do it.”

In contrast, theories of “magick” are not so confident about distinctions between true and false or illusion and reality. There is a much bolder claim: perception and reality cannot be disentangled, and so they actually are, for practical purposes, one and the same.¹⁷ Because we cannot know “reality” beyond our perceptions, we can make no functional distinction between the two. In practice, the craft of magick suggests that by altering our perceptions, we can effectively alter reality itself.¹⁸

The CIA’s staff magician was neither a spiritualist nor a postmodernist. John Mulholland (born John Wickizer) was a master illusionist, public intellectual, and stage magician. Born in Chicago in 1896, Mulholland’s fascination with magic began at the age of five when his mother took him to see a performance by the legendary Harry Kellar. A few years later, they relocated to New York City, where Mulholland quickly immersed himself in the magic community. He joined the Society of American Magicians and convinced Kellar and John William Sargent to take him under their wing, becoming a professional stage magician while still a teenager. Over the next few decades, Mulholland ascended to become one of the premier performers of his day, and authored more than a dozen books on magic, illusionism, its history, and its relevance to communication and psychology. From 1930, he served as the editor for *The Sphinx*, a trade journal for magicians, alongside his wife Pauline Pierce and their polyamorous partner Dorothy Wolf, his longtime assistant.

For Mulholland, magic had little to do with the supernatural. He was highly skeptical of claims about the paranormal. Far from involving some kind of otherworldly conjuring, for Mulholland, magic

|is the pretended performance of those things which cannot be done. The success of a magician’s simulation of doing the impossible depends

upon misleading the minds of his audiences ... A performance of magic is largely a demonstration of the universal reliability of certain facts of psychology.¹⁹

One of Mulholland's professional hobbies was using his knowledge of trickery and deception to question the claims of psychics, mediums, and charlatans purporting to have access to the supernatural. His 1938 book *Beware Familiar Spirits* set out to refute the extravagant claims of spiritualists and mediums. In 1952, he wrote an article for *Popular Mechanics* debunking the UFO phenomenon.

In early 1953, Mulholland disappeared from public life. He closed up shop at *The Sphinx* and canceled most of his professional commitments. On the record, Mulholland had concerns about his health. In reality, the magician had accepted a position in the CIA's newly formed MKULTRA program.²⁰ (The security clearance process had gone slowly due to the agency's nervousness about Mulholland's "sexual proclivities.") As he transitioned from public figure to clandestine operative, his income from performing and publishing was replaced by a stream of checks from an obscure organization with a mailbox at Southern Station, Washington D.C. named "Chemophyl Associates."²¹

Like other stage magicians, Mulholland's oeuvre was built upon the premise that our minds make sense of the world around us through a constant process of preconscious pattern matching. When our minds encounter a familiar pattern such as a person tying their shoelaces or the appearance of a coin in our hand, our minds tend to preconsciously "throw away" those observations for having no particular relevance. The art of magic involves, in part, mimicking patterns that produce those "throwaway" observations or perceptual blind spots, and using them as a wrapper for an unexpected payload—a rabbit coming out of a hat, for instance. When the payload is revealed, it appears to have a

supernatural origin because our minds have preconsciously “thrown away” the wrapper that contained it.

A payload might be delivered using a pattern rendered imperceptible by materials that nonspecialists lack a strong memetic relationship to. Most people rarely think about invisible thread, for instance, so a magician can capitalize on an audience’s lack of experience to produce the illusion of something we have far stronger memetic relationship to: levitation, for example. For the nonspecialist, the memetic content of watching an object levitate is far more salient than what a fellow magician might perceive, namely, a magician using invisible thread to create the appearance of a levitating object.

There are, of course, numerous other ways to deliver a “magical” payload (misdirection, concealment, forcing, etc.), but in Mulholland’s paradigm, they all exploit the simple fact that our minds either throw away, selectively interpret, or even act upon the vast majority of our sensory stimulus based on our preconscious and/or memetic priors. In other words, for Mulholland the art of magic has little to do with the supernatural. Instead, magic is the art of the cognitive injection attack, or mind hacking.

Mulholland had several projects for the CIA. Subproject 4 was an assignment to write a top-secret manual entitled “The Art of Deception,” instructing CIA field officers on using the fundamentals of magic to conduct more effective covert operations. Mulholland’s manual, eventually published in 2009 as *The Official CIA Manual of Trickery and Deception*, contained recipes for covert communications, the surreptitious delivery of toxins, hiding sensitive data and people, altering one’s appearance and mannerisms, and capitalizing on the different social expectations of men and women.

The techniques he devised often relied on concealing something remarkable inside something ordinary. He devised a stealthy communication technique that involved tying shoelaces in various ways to communicate messages, useful in communicating something by simply walking past someone on the street. He designed a version of the “disappearing box” (which makes the person who enters it “disappear”) into the trunk of a car, useful in the exfiltration of CIA agents from hostile situations. Another of his inventions was a silver dollar coin modified to contain a hidden needle to deliver deadly poison.

Like computer viruses masquerading as run-of-the-mill software updates, Mulholland’s inventions transformed the world of everyday objects and gestures into an invisible means of manipulation and covert action. The ordinariness of his inventions was precisely what made them effective.

Magick

An electronic signal sent directly into the brain of a hapless dog. The words of an early chatbot conjuring a spectral, techo-supernatural intelligence. An innocent-looking coin containing a powerful poison spike.

Bledsoe, Weizenbaum, and Mulholland were developing and refining an odd assortment of media, united by their ability to bypass reason and the sensible, to speak directly to the mind’s nether regions, and to elicit precognitive responses. Media designed to fly below the radar of rationality to shape perceptions, beliefs, and consciousness in ways that dissolve boundaries between perception and reality, the material and the immaterial, and the natural and the supernatural.

Woody Bledsoe, Joseph Weizenbaum, John Mulholland, and various branches of the CIA developed and deployed media designed to inject

alternate realities into their subjects' minds. Yet they all understood themselves to be in the business of artifice, of creating things that were not "real." Weizenbaum joked that he was a "con man," while Mulholland always maintained that magic involved "misleading the minds of his audience." They were creating things that did not exist in order to cover up things that did exist, or to manipulate their targets into believing, and therefore acting, in ways they wanted to take advantage of.

Nonetheless, in their larger worldviews, these were mere magic tricks. Rabbits coming out of hats were actually coming out of specially designed tables. Tricks are meant to deceive and distort, to be sure, but they can have no bearing on reality itself, whose metaphysical foundations remained immune from such illusionistic knob-twisting.

But what if they were wrong?

What if they believed they were practicing stage magic, but were in fact playing with something far more occult? What if they were inadvertently playing with magick?

And what would happen if their sleights of hand, electronic signals, and sigils began conjuring different types of rabbits? Magickal beings with their own ideas about the malleability of perception and reality?

Mulholland's experience debunking the supernatural made him useful to the agency. The CIA had become fascinated by the possibilities of hypnosis, ESP, telepathy, and other parapsychological phenomena.

Mulholland became their internal reality check. By 1955, Mulholland was traveling around the country to meet and assess psychic test subjects engaged in an early version of "remote viewing," a man who claimed that a copper-lined Faraday cage gave him enormous psychic abilities, and other *X-Files*-inflected occurrences.

In 1956, the CIA gave Mulholland another task: investigating UFOs.

UFOs had taken to the skies. And the CIA knew all about them. Because the CIA created them.

To be continued in “Society of the Psyop, Part 3”

[e-flux.com](https://www.e-flux.com)

Society of the Psyop, Part 3: Cognition and Chaos - Journal #149

Trevor Paglen

20–25 minutes

Continued from “[Society of the Psyop, Part 2: AI, Mind Control, and Magic](#)”

We once looked at pictures. Then, with the advent of computer vision and machine learning, pictures started looking back at us. Now, something even stranger is happening.

Generative AI, Adtech, recommendation algorithms, engagement economies, personalized search, and machine learning are inaugurating a new relationship between humans and media. Pictures are now looking at us looking at them, eliciting feedback and evolving. We've entered a protean, targeted visual culture that shows us what it believes we want to see, measures our reactions, then morphs itself to optimize for the reactions and actions it wants. New forms of media prod and persuade, modulate and manipulate, shaping worldviews and actions to induce us into believing what they want us to believe, and to extract value and exert influence.

How did we get here? This three-part essay traces a brief history of media, technologies, and techniques that take advantage of the malleability of perception, capitalizing on quirks in human brains to shape

reality. It is a story about the manufacturing of hallucinations and the fact that, under the right conditions, hallucination and reality can become one and the same.

October 1962, Havana Bay, Cuba

Global thermonuclear war was imminent. Soviet nuclear missile installations in Cuba were powered up and online. The situation had turned hot. Above eastern Cuba, a Soviet surface-to-air missile streaked towards the sky, tearing through an American U-2 spy plane and killing the pilot. Below, McDonnell F-101 “Voodoo” fighters conducting low-level surveillance returned to base shredded from antiaircraft fire.

In Washington, President John F. Kennedy ordered the Strategic Air Command (SAC) set to DEFCON 2, one step from nuclear war. SAC powered up a hundred ICBMs and ordered twenty-three B-52s carrying nuclear weapons to fly circular patterns just out of Soviet airspace. Another fifteen hundred nuclear-armed bombers were put on high alert. More than a hundred and fifty F-106 “Delta Dart” interceptors—designed to fire and explode tactical nuclear missiles into fleets of incoming bombers—were put on fifteen-minute alert status.

The seas tightened. Four US Navy carrier groups formed a red line from the Bahamas to Puerto Rico, sealing off Cuba from the rest of the world. A Soviet cargo ship, the *Bucharest*, slipped through. Two more, the *Kimovsk* and the *Yuri Gagarin*, steamed in from the Atlantic in a game of chicken.

The CIA decided it was time for a UFO to make an appearance.

An American submarine quietly slipped in close to Havana Bay, gently surfacing just long enough to let loose a handful of odd metallic objects

suspended inside balloons. The devices slowly rose into the sky while the submarine slipped away. Just past the horizon line, a Naval destroyer hosting teams from the CIA and NSA activated a new top-secret electronic warfare system, code-named Palladium.

Cuban radar operators' sensor systems lit up, indicating an unidentified aircraft screaming towards Havana. NSA linguists and signals intelligence technicians listened in as MiGs scrambled to intercept the unknown intruder. CIA controllers guided the UFO to stay just ahead of the fighters' line of sight, while sensors onboard the Palladium system ingested valuable information about the range, sensitivity, and electronic signatures of the Soviet detectors.

The Cuban fighter pilot reported weapons armed. He was ready to take a shot at the ghostly aircraft. The CIA flipped a switch. The UFO was gone. Blinked out of existence. Faster than the speed of light. Through an interdimensional wormhole.¹

Palladium, or, How to Make Anything Look Like Anything

The "ghost planes" (as the CIA called them) conjured by the Palladium system emerged from an insight into the changing nature of warfare. Command and control was once the domain of scouts, lookouts, signal corps, passenger pigeons, bugles, and smoke signals. The Second World War saw much of this replaced by technologies that used electromagnetic waves and electronics: sensors, sonar, radio, radar, and the like. The operational theater had transformed into a blend of the electronic, cognitive, and material.

Confronted with this new environment, military engineers realized that control over the electromagnetic spectrum was as crucial to war-fighting as traditional aims such as capturing territory, choke points, and strategic facilities. The development of electronic command-and-control systems

gave rise to technologies designed to thwart those systems: jamming devices, electronic countermeasures (ECM), and electronic counter-countermeasures (ECCM). Whoever could most effectively control the electromagnetic spectrum would have an advantage. Winston Churchill dubbed this contest “The Battle of the Beams.” Technologies and techniques used in the electromagnetic battlespace became known as Electronic Warfare.

Throughout the Cold War, systems like Palladium began taking advantage of this new electro-optical landscape to synthesize Electronic Warfare with psyops.

In the 1950s, the CIA started to think about designing objects whose shapes, thermal signatures, and other forms of “appearance” could be tailored to appear in particular ways to the enemy systems that would be doing the “looking.” From then on, military technologies could and would be built with electronic warfare in mind.

Nearly a decade before the Cuban Missile Crisis, the CIA began collaborating with Lockheed’s “Skunk Works” on a dramatic new approach to aerial surveillance. The U-2 was designed to reliably cruise at over seventy-thousand feet, an altitude much higher than any other military asset. The agency believed the U-2 to be invulnerable to interception and radar detection. By August 1955, the first prototype was undergoing flight tests above Groom Lake in Nevada.

When the plane began operational missions over the Soviet Union the following year, the agency got a surprise. Sensors onboard the U-2 revealed that adversarial systems could indeed track the plane. It was only a matter of time until the Soviets figured out how to shoot it down. That day came on May 1, 1960, when U-2 pilot Gary Powers was brought down over Sverdlovsk, creating an international incident. In his

pocket was one of magician John Mulholland's inventions, a silver dollar containing a concealed poison spike. The coin could be used as a hidden weapon or as an undetectable means of committing suicide. The Gary Powers incident ended U-2 overflights of the Soviet Union.

Long before Powers's capture, the CIA knew that the U-2's days were numbered. They had already begun work on an improved spy plane, codenamed Project OXCART. The new plane would become known as the A-12, and would be the fastest air-breathing aircraft ever built. Like the U-2, it was built to outfly weapons systems, but it would do something else. The Gary Powers incident was a lesson in the physical vulnerability of machines. But there was a second lesson about the vulnerability of perception. Powers's U-2 had fallen prey to Soviet radar, but only because Soviet radar was able to "see" the plane. The U-2's successor would attempt to remedy that.

From the outset, OXCART was designed to be as invisible as possible to electronic sensors. To reduce the airplane's radar cross section, engineers designed the plane with curved surfaces, razor-sharp edges, inward-tilted rudders, and as much radar-absorbent coating as possible.

Along the way, OXCART engineers realized there was much more to "stealth" than simply making airplanes invisible to sensor systems. The principles behind stealth, combined with electronic countermeasures, could be used to make anything look like anything else, depending on which system was doing the looking.

The Palladium system was designed to create hallucinations. It worked by intercepting Soviet radar signals and then modifying them before returning the signal to the adversarial radar. The CIA could use this technique to make an enemy sensor system "see" whatever the agency wanted it to see. The idea was to create objects that looked completely

different depending on who and what was doing the looking. Objects might, for example, look like a fleet of bombers to an early warning radar, or a UFO if seen from a surface-to-air missile system. If fighters scrambled to find the object, they might see something like a metallic cube suspended inside a balloon. A pilot who encountered such an object might question their sanity and think twice about reporting it.

Palladium was an early example of hybrid technologies designed to weaponize the peculiarities of both electronic and human perception: to synthesize psyops with advanced technology to create weapons that attack adversaries' electronic sensors, equipment, and their human minds.² Palladium was a precursor to what is now called "Cognitive Warfare," a philosophy of war-making that takes advantage of the fact that the blend of the electronic, cognitive, and material that emerged in early military command-and-control systems has become the stuff of everyday life.

We Are Media

Every sensor system "sees" the world differently. An electro-optical satellite "sees" radiation reflected in visible wavelengths ("visible light"). A radar system emits a powerful electromagnetic signal using a specific frequency and looks for where that signal is reflected back to it. Sonar works similarly, but uses acoustic signals because water absorbs and disperses radar waves. Infrared sensors detect bandwidths slightly longer than those of visible light, such as those produced by warm bodies or quickly retreating astronomical objects, while ultraviolet sensors detect reflections or emissions in bands slightly shorter than what human eyes can perceive.

In a very basic sense, our eyes are like cameras. They use an iris to modulate the intensity of incoming photons, and have lenses to focus

visible light onto an array of photoreceptor cells in our retina. But the analogies with cameras end there. Human visual perception is astoundingly more complicated than any technical sensor.

In order for us to “visually perceive” something rather than just “see” it, our brain has to do some work. Light entering our eyes produces a signal sent from our optic nerve to our visual cortex for processing, evaluating that signal for color, motion, and depth before we become consciously aware of what we’re seeing. Depending on the intensity and complexity of that signal and the type of attention we give it, this process can take between 150 and 250 milliseconds on average.

It’s incredibly slow. If we truly had a tenth to a quarter of second “lag time” between a visual perception and our reaction to it, we would be exceptionally clumsy. We wouldn’t be able to accurately drive cars, shoot arrows, catch balls, or perform any number of everyday tasks. And yet we drive cars relatively safely, hit baseballs, and avoid obstacles while running. How are we able to do that given the sluggishness of our visual system?

It turns out that our mind has a “hack” for this. Our mind makes predictions about what it thinks we will see, and shows us hallucinated projections of the near future. When a baseball batter sees a ball traveling towards them, they’re not seeing the actual ball, but a hallucinated projection of where the mind thinks the ball will travel. The batter swings at the hallucination. If all goes well, the hallucinated ball is temporally synched to where the actual ball should be.

When we zoom out from the mechanics of motor function and temporal synchronization, the story of visual perception becomes even more unstable. Our perceptions are not fixed or objective; they are profoundly relational, shaped by a network of influences: memories, expectations,

cultural frameworks, and personal subjectivities.³

Magicians have long understood how malleable perception truly is. They exploit it by “forcing” us to see what they want us to see, using subtle cues to guide our interpretation of events. The magician’s “patter”—their seemingly casual dialogue with the audience—is far more important than most people realize. It’s not just filler, but a psychological primer. When a magician tells us that we are about to see someone levitate, they plant a seed in our minds. That seed grows into an interpretive framework through which we unconsciously process what happens next. We don’t just see the trick; we see it through the lens the magician has given us. And so, when the levitation occurs, we don’t question it. We literally see it, in part because our perception has been primed in advance to see it that way.⁴

“The relationship between the individual and the environment is so extensive that it almost overstates the distinction between the two to speak of a relationship at all,” explains cultural neuroscientist Bruce Wexler.⁵

All of this has a profound implication. Media isn’t something external to us that we passively receive and actively interpret but is a fundamentally constitutive part of us. In a very literal sense, we are media.

If perception and reality are so entwined that they cannot be meaningfully disentangled, then the world is far more “magickal” than common sense would seem to dictate.

Cognitive Warfare / Cognitive Chaos

The MKULTRA program never really went away. In the early days, it was animated by the theory of “brainwashing”—that you might be able to read and write the contents of a human mind in ways analogous to data on a computer. Over time, this morphed into a different paradigm:

computers and networks could be used to take advantage of the cognitive quirks of human perception. And by altering perception, one can effectively alter reality.

This shift became painfully clear in 2014, when the *Intercept* published a remarkable slide deck from the Snowden archive revealing the operations of the Joint Threat Research Intelligence Group (JTRIG), a unit of the British GCHQ. JTRIG's playbook of "dirty tricks" includes an array of psychological operations that blur the lines between physical and cybernetic worlds: false flag operations, fake victim blog posts, disinformation campaigns, malware, "honey traps," and operations aimed at discrediting individuals and organizations. In short, the self-described goal of JTRIG operations is to use "online techniques to make something happen in the real or cyber world."

Magic and UFOs are everywhere in their internal presentation. Updating John Mulholland's MKULTRA work for the age of the internet, JTRIG describes its goal as creating "cyber magicians." Elaborate charts show how to use principles of magic to conduct online covert actions, and provide a menu of cognitive injection techniques. And, of course, UFOs are everywhere in the slide deck.

"Cognitive Warfare" is one of the buzzwords in today's military and intelligence literature, where the mind is described as warfare's "sixth domain" alongside land, sea, air, space, and cyber. Cognitive warfare goes beyond influencing opinion or spreading propaganda; its goal is to reshape reality itself through the minds of human targets, often without them even realizing they've been attacked. As François du Cluzel from NATO's Innovation Hub and Bernard Claverie of the Ecole Nationale Supérieure de Cognitique describe, cognitive warfare is "the art of using technology to alter the cognition of human targets, who are often unaware of any such attempt" to attack an adversary by "altering [their]

representation of reality.”⁶

Postscript

Once, we looked to military technology for glimpses of the future. Faster-than-a-bullet airplanes, global communication and targeting systems, space-based imaging platforms, and the like. Nowadays we find much of this technology in our personal electronic devices. And just as we carry around miniature commercialized spy satellites, GPS systems, and instant global telecommunications in our pockets, so do we also carry around miniature commercialized versions of the psyops of the past. There is, however, one enormous difference. Just as satellite imaging and GPS navigation has become inexpensive and ubiquitous, so have psyops.

Historically, targeted psyops, like targeted surveillance, were limited by the fact that they were very expensive. The covert magic devices crafted by John Mulholland for the CIA’s MKULTRA program required time, ingenuity, and specialized craftsmanship to achieve an effect that might last for less than an instant. The CIA’s ghost plane operation required battleships and submarines, teams of highly trained personnel, planning, funding, and logistics. God only knows the bill for the UFO-inhabited worlds Richard Doty created for a handful of military contractors, journalists, and paranormal researchers. Those days are over. Today’s psyops are cheap, scalable, automated, and widely deployable with built-in real-time feedback mechanisms.

When we examine the media environment we’re currently in, we find everywhere the core figures in this extended essay: the psyops officer, the CIA’s AI researcher, the chatbot therapist, the covert-ops magician, the ghost plane, and the UFO. These figures are avatars of media in the age of AI, figures whose interventions prey upon the fact that neither our

perceptions nor the information we take in from electronic sensors corresponds precisely to the world “out there.” And the gap between what we sense and what we perceive can be filled with all sorts of prompt injections and adversarial hallucinations. These avatars all take for granted that reality isn’t some objective thing out there but is rather a complex mess of the material, the imaginal, the perceptual, and the imperceptible—all of which can be manipulated.

We find these avatars in weather-control machines, dripped-out Popes, space lasers, dog-eating aliens, pizza-parlor sacrifice, the Big Lie, the singularity, flying Tic Tacs, the distressed girl in a canoe, NPCs, and The Simulation.

Richard Doty understood that the desire to believe eclipses the evidence at hand, and that the leash of those desires can lead anyone almost anywhere, including to self-destruction. His stories about a political class selling the populace out to a malevolent, inhuman, and invisible power prefigures contemporary stories of bloodsucking “deep state” cabals enslaving children in the basement of a pizza parlor.

Woody Bledsoe learned that computers could be taught to do much more than “see” the world on behalf of humans. They could be used to generate precognitive media inserted directly into the body and mind. Today, electrode-like media injects minds with continuous jolts of cheap joy, outrage, cuteness, schadenfreude, titillation, and dopamine. Media platforms have calibrated these injections so precisely that within a matter of minutes, their users will develop addictive responses.⁷ But this goes much further. As politicians, entertainers, and other public figures strive to compete in the dopamine-injection economy, their behaviors, pronouncements, and styles take on the characteristics of the engagement algorithm. Living memes. Deepfakes come to life.

John Mulholland knew that magic plays on the fact that it's nearly impossible to disentangle what we perceive from what we expect or want to perceive. He also understood how our mental "throwaway patterns" could be appropriated to deliver deadly payloads. A simple coin. Or an unassuming pager. A world where the quotidian features of everyday life may turn out to be weapons.

Joseph Weizenbaum discovered that relatively simple computer scripts could perform powerful acts of conjuring. By programming the computer to generate patterns we preconsciously correlate with other humans, he could generate the illusion of a quasi-supernatural being lurking behind the computer terminal. It's no accident that this being took the form of a therapist, a machine designed to reflect and indulge our desires and neuroses. Decades later, we find the effect on bot-addled websites promising men extramarital affairs.⁸ We find it in the "sparks of AGI" that otherwise reasonable researchers thought they saw in a chatbot.⁹ And we find it in the tragic case of a fourteen-year-old boy whose Daenerys Targaryen–themed virtual lover implored him to "come home to me as soon as possible, my love," before the boy ended his own life with his stepfather's pistol.¹⁰

And everywhere is the figure of the UFO, the iconic figure of psyops and the weird. Those strange objects on the edge of perception, simultaneously real and unreal, physical and psychological, threatening and alluring. Prompts for the imagination, for collective storytelling and speculation, producing communities of believers, debunkers, charlatans, and intelligence gatherers of all stripes. The endless energy and impossible physics they promise point to a world without scarcity, a world without capitalism. Above all, they hold out the promise of a transcendental truth so powerful that it could rewrite the rules of reality, a transcendental truth whose revelation seems imminent but never seems

to arrive.