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FROM PROVING GROUND TO BUMBLEHIVE

Touring Utah's Weird Information Landscape

ABSTRACT

The American state of Utah has emerged as an important infrastructural and experimental hub for large-scale information science and communication technology endeavors: both Meta (formerly Facebook) and the US intelligence community maintain massive data centers just south of Salt Lake City, each of which require over a million gallons of water per day to cool servers housing billions of gigabytes of personal data. Utah-based research services such as FamilySearch and Ancestry.com, both with roots in the Church of Jesus Christ of Latter-Day Saints (also known as the Mormons) play hugely important roles in the growing online genealogical and genetic research industry, which continues to re-shape how kinship relations are conceptualized and evaluated globally. Many of the state's municipal agencies were recently forced to cancel contracts with the AI-based software

company Banjo (since renamed SafeXai), which promised to consolidate diverse information streams into a “live-time” data surveillance service, following revelations the firm's CEO was a former member of the Ku Klux Klan. This article reads these unfolding projects through John Durham Peters' concepts of Mormon “media theology” and “celestial bookkeeping,” as well as the fiction of Utah-rooted authors W. H. Pugmire and Orson Scott Card. It sketches a tour of Utah as a weird information landscape, wherein unfathomable quantities of data find material embodiment and the secular-rational promises and practices of Big Data reveal latent cosmic aspects.

KEY WORDS: information landscape, big data, surveillance, the weird, Utah, LDS Church

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INTRODUCTION: POE AND SMITH,
LOVECRAFT AND YOUNG, MISKATONIC AND DESERET

Media theorist John Durham Peters has pointed out the remarkable resonances between the lives of Edgar Allan Poe and Church of Jesus Christ of Latter Day Saints (LDS) founder Joseph Smith.² Almost exact contemporaries of one another, Poe (1809-1849) and Smith (1805-1844) were both controversial and relatively marginal figures of antebellum America, whose idiosyncratic worldviews would nevertheless go on to be extremely influential. During his life, Poe made his name as a critic of Ralph Waldo Emerson and other transcendentalists, against whose optimistic didacticism he forged a darkly cryptographic romanticism obsessed with things buried and occulted. Smith's major work is touted as a divinely-inspired translation of ancient scriptures, translated with the aid of magical rocks called "seer stones," supposedly inscribed in ancient golden plates unearthed in Palmyra, New York in 1823. The resulting "Book of Mormon" recounts Christ's appearance to America's lost tribes of Israel. Though neither man lived past the age of 40, each had followers to take up and further cultivate their visions. Howard Philips Lovecraft, whom Lovecraft scholar S. T. Joshi deemed Poe's "greatest disciple," used Poe's work as his explicit model in crafting his Cthulhu Mythos and its constitutive fictional geographies: Arkham, Dunwich, Innsmouth, the Miskatonic River, Mu, Qu, K'n-yan, etc. Smith's most famous disciple, Brigham Young, led his prophet's followers West, founding Salt Lake City in 1847 on land long occupied by the Ute, Goshute, Paiute, Shoshone, and Navajo peoples. Young's settler colony quickly expanded into the proposed state of Deseret (an ancient Jaredite word for "honeybee," according to the Book of Mormon), ultimately becoming the state of Utah. The state has since earned a reputation for its strong commitment to a particular brand of traditional "family-values" conservatism, symbolized in part by its unusually high consumption of Jell-O (the official state snack).

These worlds collide in Megan James's satirical graphic novel *Innsmouth*, billed as "Book of Mormon meets H. P. Lovecraft."³ The book's protagonist, a nice young missionary for his local church, The Esoteric Order of Innsmouth, faces a moral quandary when he is tasked with bringing about the apocalypse. Here, the millenarian and communitarian aspects of American religious life are held in an uneasy and humorous tension. In a way not far removed from James's project, I want in this paper to tease out a mirror-image thematic configuration between these parallel projects of *world-building* and *world-destruction*—the Deseret and the Miskatonic. This thread can be thought of as rooted in the deployment of information and communications technologies (ICT), though in a peculiar way. Instead of the abstract and mathematized conception often attributed to Claude Shannon, wherein

² John Durham Peters, "Recording beyond the Grave: Joseph Smith's Celestial Bookkeeping," *Critical Inquiry*, no. 42 (2016): 842-64.

³ Megan James, *Innsmouth* (Richmond: Sink or Swim Press, 2019).

communication is synonymous with transmission and information is seen as a sort of universal solvent for all worldly matter and activity, I am interested in ICT as a site-specific practice of material-semiotic conjuring. I want to defamiliarize the banal phenomenon of ICT infrastructure, casting it instead as a pseudo-sentient crust of flesh and mineral/petro-chemical byproducts, secreted from tendrils of finance capital, backed by networks of military-industrial accumulation, and animated by such profane and esoteric texts as Initial Product Offerings, Application Programming Interfaces, and End User License Agreements. Utah, I argue, has become a key site upon which the sciences of information find increasingly powerful material and ideological embodiments, and these embodiments all but require a Lovecraftian vocabulary. To that end, this article offers an occasionally unwieldy virtual tour of the Beehive State's weird information landscape, suggesting that it represents a positive variation of Lovecraft's negative misanthropic "cosmicism:" an anthropocentric *cosmic* project of continued information-theological perfection.

While Lovecraft's Miskatonic geography is a fictionalized New England haunted by the squid-like titan Cthulhu and other dreadful "Old Ones," the Mormon Deseret is a new Promised Land populated by "Latter-Day Saints." These imaginary terrains and communities can be usefully understood as expressions of the lived and anticipatory tension between actual and possible worlds, which Marxist theorist Ernst Bloch theorized as the "principle of hope."⁴ Against understandings of hopeful utopian practices as teleological, asymptotic efforts toward a pre-determined endpoint, Bloch sought to understand hope as a constellation of open-ended poetic practices, an unruly process of worlds in the making. It is this hermeneutic that I wish to bring to Utah's information landscape, the weirdness of which is inseparable from its founding utopian impulse. Just as the Lovecraftian mythos and topoi offered fertile soil for the more sinister and experimental strands of later science fiction—particularly those informed by the technoscientific horrors of World Wars I and II—so has the New American Zion of Smith and Young become a hothouse for experimental and occasionally bizarre new forms of technoscientific reality.

As the sociologist Max Weber famously argued, Puritanical Protestantism—specifically the Calvinist doctrines of predestination and the elect—laid much of the conceptual groundwork for modern capitalist society. Matters of salvation or damnation, in this view, were beyond human influence, but were respectively expressed in material prosperity or poverty. The wealthy were the chosen. More recent scholarship has sought to explain the Lovecraftian ethos as an unorthodox interpretation of this theology as a "secularized, fatalistic, nihilist determinism."⁵ Mormon theology is rooted in a very different religious current: the extreme fringes of the Radical Reformation, particularly those which emerged during the English

⁴ Ernst Bloch, *The Principle of Hope Vol. 1* (Cambridge: MIT Press, 1986).

⁵ Scott Meyer, "Diabolists and Decadents: H. P. Lovecraft as Purveyor, Indulger, and Appraiser of Puritan Horror Fiction Psychohistory," *Lovecraft Annual* 13 (2019): 178.

Civil War.⁶ Abandoning the doctrine of original sin, this revolutionary theological current drew instead on a hermetic mystical tradition espousing the possibility of human divinity.⁷ This helps explain the key role of Calvinists such as Allen and John Foster Dulles in prosecuting the war against Communism, whereas the post-Soviet “end of history” has seen a rise in LDS representation in the American security state.⁸ If Calvinists presided over the sophisticated information warfare projects of the Cold War era—what Peter Galison terms the “Manichean Sciences” of cybernetics and operations research⁹—Latter-Day Saints have disproportionately contributed to the construction of 21st-century global capitalism. It makes sense, then, that Utah has become an increasingly important site for the centralization and projection of information. With this in mind, we proceed by first looking at Utah’s major sites of information accumulation and surveillance, where historical data is gathered, refined, and distilled into commercially and politically actionable material. We then turn to Utah’s sites of speculative production: proving grounds, testing sites, and imagined futures.

Much recent theorizing has drawn on themes and imagery of Lovecraftian weirdness in attempts to grapple with the socio-cultural roots and implications of modern science and technology: Graham Harman’s weird realism,¹⁰ Timothy Morton’s dark ecology,¹¹ Donna Haraway’s (somewhat paralectical¹²) Cthulucene,¹³ to name a few. Lovecraftian texts capture a specific aesthetic strain of political reaction directed against the technical and cultural transformations of the early 20th century, one too deranged to conceal the sorts of elitist racial chauvinism, and other social pathologies liberal technocratic discourse studiously elides. The opening paragraph of “The Call of Cthulhu” contains this sensibility’s most concise and well-known articulation: “The sciences, each straining in its own direction, have hitherto harmed us little; but some day the piecing together of dissociated knowledge will open up such terrifying vistas of reality, and of our frightful position therein, that we shall either go mad from the revelation or flee from the deadly light into the peace and safety of a new dark age.”¹⁴ What is posited here is not a chaotic or incomplete universe but one of fierce coherence, the existential danger of which is primarily a matter of scale. It is a finished book of nature that, once deciphered, inevitably drives the reader insane. Poe

⁶ John L. Brooke, *The Refiner’s Fire: The Making of Mormon Cosmology, 1644-1844* (Cambridge: Cambridge University Press, 2001), 16.

⁷ Brooke, 204.

⁸ James Crabtree, “The Rise of a New Generation of Mormons,” *Financial Times*, July 9, 2010, <https://www.ft.com/content/938ff454-8a32-11df-bd30-00144feab49a>.

⁹ Peter Galison, “The Ontology of the Enemy: Norbert Wiener and the Cybernetic Vision,” *Critical Inquiry* 21, no. 1 (1994): 228–66.

¹⁰ Graham Harman, *Weird Realism: Lovecraft and Philosophy* (Alresford: Zero Books, 2012).

¹¹ Timothy Morton, *Dark Ecology: For a Logic of Future Coexistence* (New York: Columbia University Press, 2016).

¹² Sophie Lewis, “Cthulhu Plays No Role for Me,” *Viewpoint Magazine*, May 8, 2017, <https://viewpointmag.com/2017/05/08/cthulhu-plays-no-role-for-me/>.

¹³ Donna Haraway, *Staying with the Trouble* (Durham: Duke University Press, 2016).

¹⁴ H. P. Lovecraft, “The Call of Cthulhu,” *Weird Tales* 11, no. 2 (February 1928).

had a similar cosmological vision, according to Peters, that of a “steady-state Laplacean universe.”¹⁵ Smith, by contrast, “envisioned a flawed and contingent heavenly books” which allowed him to posit a “dynamic cosmos, capable of being rewritten in radical ways by every act or birth that takes place in it.”¹⁶ As historically parallel forms of weirdness, the Deseret and the Miskatonic thus present metaphysical alternatives of each other, alternative but complementary weirdnesses deriving respectively from closure and open-endedness.

The through-the-looking-glass relation between Mormon and Lovecraftian worlds found its personification in the life of weird fiction author W. H. (AKA William Harry or Wilum Hopfrog) Pugmire (1951-2019): the most prominent Mormon Lovecraftian to date. Described by Lovecraft scholar S. T. Joshi as “perhaps the leading Lovecraftian author writing today,”¹⁷ Pugmire was born into the LDS church, the son of a “Utah Saint”¹⁸ father and a Jewish mother from Seattle, but was excommunicated at the age of 22 after coming out as gay. After 25 years in Seattle’s punk scene, Pugmire had a religious experience that “traumatized” his soul and compelled him to seek re-integration into the church’s ranks, still “queer to the core”, but celibate.¹⁹ In a 2010 YouTube video, he shows off his replica of a medallion found on Joseph Smith’s body after his death, an example of Pugmire’s love for “the weird early folk magic connections of the early history of our church.”²⁰ As with polygamy, the modern LDS church has largely downplayed or disowned such practices, transitioning to a less eccentrically charismatic and more rationally-accountable form of bureaucratic theology. As historian D. Michael Quinn has argued, however, such folk artifacts and practices were emblematic of a “magic world view” that was widely held in Smith’s sociohistorical milieu, and played an important role in Mormonism’s founding.²¹ Pugmire’s example illustrates how the intersection of magical and queer worldviews continue to offer a vital, if marginal, aspect of Mormon practice well into the 21st century. The Orem-based queer Mormon transhumanist philosopher Blair Ostler mines similar terrain as Pugmire, though in a more deeply theoretical vein. As media theorists Tamara Kneese and Benjamin Peters have shown, Ostler offers an alternative project of human divinity-through-technology, one which replaces “lone-male immortality worship” with “the messy soil of our bodies, our blue planet, and our communal commitments to one another.”²² In their essay-sermon “A Transhumanist

¹⁵ John Durham Peters, “Recording beyond the Grave: Joseph Smith’s Celestial Bookkeeping,” *Critical Inquiry*, no. 42 (2016): 842–64.

¹⁶ Peters, “Recording beyond the Grave: Joseph Smith’s Celestial Bookkeeping,” 860.

¹⁷ S. T. Joshi, *I Am Providence: The Life and Times of H.P. Lovecraft, Volume I* (New York, N.Y.: Hippocampus Press, 2010), 1043.

¹⁸ W. H. Pugmire, “Latter-Day Saint, Latter-Day Lovecraft: An Interview with W. H. Pugmire,” *A Motley Vision*, February 4, 2010, <https://motleyvision.org/2010/02/04/pugmire-interview/>.

¹⁹ Pugmire.

²⁰ Pugmire.

²¹ D. Michael Quinn, *Early Mormonism and the Magic World View* (Salt Lake City: Signature Books, 1998).

²² Tamara Kneese and Benjamin Peters, “Mormon Mommies Will Never Die,” *Logic*, no. 8, August 3, 2019, <https://logicmag.io/bodies/mormon-mommies-will-never-die/>.

God,” Ostler sketches her “material theist” view in terms of a dialectic of *theogeny* and *deicide*: “Neither the destruction of God nor the creation of new Gods is the enemy of human flourishing but is the manifestation of human flourishing.”²³ The making and unmaking of gods—a magical undertaking if there ever was one—merges in this view with the material problem of social reproduction, a domain in which the queer and the innovative often coincide.

BUMBLEHIVES: SITES OF DATA ACCUMULATION AND SURVEILLANCE

The speculative economies of rural America prior to the Civil War offer a useful point of comparison with modern experiments in technological value extraction (cryptocurrency and non-fungible tokens come immediately to mind). Smith’s use of magical objects such as seer stones, so outlandish by modern standards, was far from unusual in New York state during the early-19th-century religious movement known as the Second Great Awakening. During this period, such traditional divinatory practices were widely employed in an informal economy of treasure-digging. The use of divining rods, for example, was well-regarded ca. 1826 even by “men of the soundest judgment, of large information, and of the most exemplary lives.”²⁴ There was broad disagreement, however, as to whether the rod’s epistemological affordances were magical or scientific in nature. This question relied on a distinction, counterintuitive from a post-20th century perspective, between (natural) “matter” and (magical) “information.” Smith’s father Joseph Sr. and uncle Jesse Smith in fact had a falling out on just this topic. Jesse, a mainline Protestant who rejected his brother’s magical world view, was of the then-“scientific” opinion that the divining rod could plausibly be used to locate water, minerals, or other treasures, but he “ridicule[d] the idea of receiving *information* from the rod”, such as “the distance from India to Ethiopia” or predictions regarding life, death, or business matters.²⁵ Our present information order inverts Jesse’s critique. Modern divination technologies inundate us with information but pose obscure relations to matter. Siri or Alexa can tell you the distance from India to Ethiopia, but are of little help when it comes to deciding where to dig a well. This information is mined not from the earth (at least not directly), but from purpose-built sites of data gathering and storage.

While Silicon Valley has continued to dominate the mainstream information-scientific imaginary, the high-desert valley between the Great Salt Lake and the Wasatch mountain range (now re-branded as the “I-15 Tech Corridor” and “Silicon Slopes”) has become an experimental and infrastructural center of gravity for modern surveillance capitalism. Both the US Intelligence Community’s Comprehensive National Cybersecurity Initiative Data Center, codenamed “Bumblehive,” and the

²³ Blaire Ostler, “A Transhumanist God,” in *The Transhumanism Handbook*, 823-27, ed. Newton Lee (Los Angeles, CA: Springer Nature, 2019), 823.

²⁴ Quinn, *Early Mormonism and the Magic World View*, 29.

²⁵ Richard Llyd Anderson, “The Mature Joseph Smith and Treasure Searching,” *BYU Studies* 24, no. 4 (1984): 527.

Meta/Facebook Eagle Mountain Data Center have set up shop in largely identical twin facilities just west of Utah Lake. Each facility requires over a million gallons of water per day to cool its storage infrastructure, the capacities of which are measured in exabytes (i.e., billions of gigabytes). About an hour's drive northeast, carved into the granite of little cottonwood canyon is the records vault for the LDS church, housing information on every member of the fastest-growing religion in the country. For non-Mormons there is FamilySearch, a church-founded but publicly accessible non-profit research service that claims the title of largest genealogy organization in the world.

The world's largest *for-profit* genealogical service, Ancestry.com, is also headquartered in Utah. Founded in the 1980s by graduates of Brigham Young University, the company provides millions of paid subscribers with access to billions of historical records. Following a brief stint as a publicly traded corporation, Ancestry has been passed around by a series of private equity companies, which have extracted billions in "dividend recapitalizations" and profits from speculative secondary and tertiary "buyouts," saddling the company with increasingly massive amounts of debt. The latest buyer, Stephen Schwarzman's Blackstone Group, has been sued by the state of Kentucky for funneling the state's pension funds into opaque and risky "black boxes," hedge funds nested within hedge funds, while charging exorbitant fees—suggesting the kinds of corporate practices Ancestry's future users might be able to expect.²⁶ The company's unusually large ratio of debt to revenue, nearly seven to one, suggests that the actual business model is not provision of genealogical services, but the collection and sale of personal data (which now includes DNA and health information) to third parties, such as insurance companies.

These polymorphously public-private faces of Big Data have already produced fruitful collaborations both with the surveillance state and the prison-industrial complex. GEDmatch, a database connected to Ancestry.com and FamilySearch, among other services, was used to identify the Golden State killer Joseph James DeAngelo, who had never personally used any of these services, based on the DNA of his family members. Much of FamilySearch's record indexing, meanwhile, is carried out by unpaid prison laborers. In lieu of wages, according to one FamilySearch representative, inmates gain the opportunity to develop the valuable skill of "paleography"—the deciphering of illegible historical writing.²⁷ Paleographic skills are also employed at the US Postal Service Remote Encoding Center in Salt Lake City, the first such facility in the country and the only one still existing, where millions of damaged or poorly penned addresses on pieces of mail are deciphered daily. As these examples show, Utah has become a hub for a particular kind of information processing: the extraction of recalcitrant indexes of social identity.

²⁶ Mark Vandeveld and Billy Nauman, "Kentucky Sues Blackstone and KKR over Fund Performance," *Financial Times*, July 22, 2020, <https://www.ft.com/content/dcc74348-07a4-4757-a94b-77b9ea5ad23a>.

²⁷ Shane Bauer, "Your Family's Genealogical Records May Have Been Digitized by a Prisoner," *Mother Jones*, August 13, 2015, <https://www.motherjones.com/politics/2015/08/mormon-church-prison-geneology-family-search/>.

This geographically concentrated interest in the aggregation and bureaucratic perfection of diverse data sources was expressed most recently in a scandal regarding the surveillance software company Banjo, headquartered in Park City. Originally intended as a social media app through which users could track the locations of their friends in real time, Banjo evolved into an artificial intelligence-driven platform through which municipalities could consolidate multiple streams of information—traffic and other surveillance cameras, social media posts, etc.—in order to coordinate emergency responses. The company’s 20 million dollar contract with the state of Utah, initiated in 2020 by the Attorney General’s office, led to widespread concerns about privacy and the delegation of public surveillance to an unaccountable private company. These suspicions were confirmed when it emerged that Banjo’s CEO Damien Patton (apparently *not* a member of the LDS church, it should be emphasized) was a former member of the Ku Klux Klan, and in 1992 had been an accomplice in a drive-by shooting of a synagogue in Nashville.²⁸ Banjo’s contracts were cancelled following this revelation and Patton resigned as CEO. Arguably the most infamous public-private partnership in American history, the KKK often acted as an extrajudicial police force during reconstruction and the Jim Crow era. With their use of occult ritual and imagery, they shared both a cause and an aesthetic with Lovecraft.

Patton was soon replaced by Justin R. Lindsey, a self-described “signal finder” based in Salt Lake City, whose company Lavastorm had helped develop the online system for FamilySearch. After September 11th 2001, Lindsey served as the Federal Bureau of Investigation and Department of Justice’s Chief Technology Officer. According to his LinkedIn account, it was during this period that he “began to believe that encoded in the large, diverse, and dynamic data sources of our world were traces of reality or signals that could be decoded or revealed.”²⁹ Such signals, he continues,

could tell me how to act. In many ways it felt as though they allowed me to speed through and learn from the past, slow down the present, and simultaneously consider many futures. Signal finding was a rush and thread of meaningful impact that defined me. I could see signals. My quest is to find signals and encapsulate them into operational analytic systems to dramatically increase the impact of analytics on the world.³⁰

There is an uncanny resonance between Lindsey’s account of his initiation into the hidden world of signals with passages in Pugmire’s *The Strange Dark One*, a collection of stories involving the Lovecraftian deity Nyarlathotep. Pugmire’s narrator recounts having

²⁸ Matt Stroud, “CEO of Surveillance Firm Banjo Once Helped KKK Leader Shoot Up a Synagogue,” *OneZero*, April 28, 2020, <https://onezero.medium.com/ceo-of-surveillance-firm-banjo-once-helped-kkk-leader-shoot-up-synagogue-fdba4ad32829>.

²⁹ Justin R. Lindsey, LinkedIn, <https://www.linkedin.com/in/jrlindsey>.

³⁰ Lindsey.

sensed the wind behind me, never touching, and I sang to it in the language of the scroll, singing to the dread lord Nyarlathotep, whose chaotic multitude of images I had tried to pay homage to with signals that had been etched onto unholy scroll. I uttered his profane name, and the wind calmed and quieted.

Elsewhere Pugmire has a character speak of ancient books of lore as “records, of the dreaming of lunatics. Do you know what madness is? It is a piercing into the veil, through language, through signals of blood and bone.”³¹ Given the FBI’s involvement in prosecution of the post-2001 “Global War on Terror,” which led to the systematic torture and mass killing of Iraqi and Afghan civilians, it would seem accurate to say that Lindsey was indeed piercing through “signals of blood and bone” during his tenure in the US Federal Government.

Similarly, Banjo’s claim to “save lives and reduce human suffering” through continuous surveillance and rapid dispatching conspicuously elides the terror of police violence inflicted daily on racialized populations. As Ruha Benjamin has shown, the seemingly neutral techno-esotericisms of “big data” increasingly serve to both conceal and intensify structural violence by enshrining power relations in computational black boxes.³² Massive quantities of metadata, the dross of online and telecommunications traffic, is ritually transmuted through practices of algorithmic alchemy into juridico-politically actionable material. Thousands of potential “persons of interest” can be conjured in miniature from telephone records associated with a single “seed” number.³³ The neural networks and other forms of machine learning used to sift through these records ferment *ad hoc* and black-boxed rationales which occasionally recapitulate the most hallucinatory kinds of racist imagery, as when Google’s image recognition software infamously mistook African Americans for gorillas.³⁴

Another racist trope, the biblical “curse of Ham” underwrote the LDS Church’s prohibition on Black priesthood until 1978.³⁵ This is only the most obvious instance of a deeper tension between church doctrine and its emerging role in the world of secular and scientific genealogical research, however. As historian Donald Harmon Akenson has argued, LDS-produced genealogical databases impose a narrow framing of kinship structure, known as the “Standard Double genealogical grammar,” onto all of humanity, effectively “breaking apart historical realities and making all family

³¹ W. H. Pugmire, *The Strange Dark One* (Lakeland: Miskatonic River Press, LLC, 2012).

³² Ruha Benjamin, *Race After Technology: Abolitionist Tools for the New Jim Code* (Cambridge: Polity Press, 2019).

³³ Amy Nordrum, “NSA Can Legally Access Metadata of 25,000 Callers Based on a Single Suspect’s Phone,” *IEEE Spectrum*, May 16, 2016, <https://spectrum.ieee.org/tech-talk/telecom/security/nsa-can-legally-access-metadata-of-25000-callers-based-on-a-single-suspects-phone-analysis-suggests>.

³⁴ Jessica Guynn, “Google Photos Labeled Black People ‘Gorillas,’” *USA Today*, July 1, 2015, <https://eu.usatoday.com/story/tech/2015/07/01/google-apologizes-after-photos-identify-black-people-as-gorillas/29567465/>.

³⁵ Matthew L. Harris and Newell G. Bringhurst, *The Mormon Church and Blacks: A Documentary History* (Urbana, Chicago, and Springfield: University of Illinois Press, 2015), 125.

systems retrospectively fit with the Mormon model.”³⁶ The roots of this problem trace back to the 1930s, when the use of microfilm allowed the church to begin accumulating massive amounts of raw historical records in order to carry out “proxy baptisms” for the deceased relatives of the church members. In 1961, the church expanded its proxy baptism beyond the documentable ancestors of its members, seeking instead to posthumously baptize every recorded person in history. This practice drew criticism from non-Mormons, particularly the descendants of Jewish holocaust victims, who in 1995 successfully pressured the church to remove their relatives from the church’s genealogical index.³⁷ This episode notwithstanding, the practice of “name extraction” from historical records for baptismal purposes has continued for decades, funneling ever larger amounts of personal information into online databases.

PROVING GROUNDS: SITES OF TESTING, PROJECTION, AND SPECULATIVE PRODUCTION

Whereas Pugmire was considered the heir apparent of Lovecraft’s darkly antiquarian style, Lovecraft’s legacy as a genre fiction writer with reactionary political views finds a probable successor in the speculative fiction writer Orson Scott Card. A Utah-raised Latter-Day Saint, Card is best known for his 1985 young adult science fiction novel *Enders Game*, the story of a child soldier during a future war between humanity and an insectoid alien race. Card has long been criticized for his vocal opposition to gay marriage, and support for “laws against homosexual behavior,”³⁸ as well as a 2013 essay that imagined then-president Barack Obama deputizing urban street gangs. “Instead of doing drive-by shootings in their own neighborhoods,” he fantasized, “these young thugs will do beatings and murders of people ‘trying to escape’—people who all seem to be leaders and members of groups that oppose Obama.”³⁹ This fevered combination of fundamentalist values and futurist imagination, which for Card have proven both a blessing and a curse, finds its setting in a post-apocalyptic Utah in the 1989 story collection *The Folk of the Fringe*. Here the entire Salt Lake Valley, once a massive prehistoric lake bed, has once again been inundated. The area that, unbeknownst to Card, would come to host the I-15 Tech Corridor, has been rechristened the Jordan Strait, a narrow ferry crossing-point on the Mormon Sea.

Salvage, the book’s second chapter, follows Deaver Teague, a non-Mormon truck driver employed by an equipment salvaging operation. Teague’s young Mormon

³⁶ Donald Harmon Akenson, *Some Family: The Mormons and How Humanity Keeps Track of Itself* (Montreal: McGill-Queen’s University Press, 2007), 118.

³⁷ Akenson, 200.

³⁸ Orson Scott Card, “The Hypocrites of Homosexuality,” *Sunstone*, February 1990, <http://www.nauvoo.com/library/card-hypocrites.html>.

³⁹ Orson Scott Card, “Civilization Watch,” *The Ornerly American*, May 9, 2013, <http://www.ornery.org/essays/warwatch/2013-05-09-1.html>.

friend Lehi McKay works salvaging computers. Early on, Teague argues with McKay about the frivolousness of computing at the end of the world: “Dead and gone. All your computer things.” “We use computers more than they ever did in the old days,” McKay protests, “the computers kept everything going.”⁴⁰ Teague has heard rumors of gold hidden in the steeple of the Mormon Temple—the only part of the building still above water—and enlists McKay and another Mormon friend in a mission to retrieve it. They take a boat to the old city center, slipping between submerged office buildings, until they find the ruined temple slowly being consumed by water plants. Upon entering the steeple, Teague is excited to find piles of thin metal plates, which he carries back to the boat. Upon closer inspection, however, these turn out to be flattened pieces of aluminum cans, engraved with names and prayers. Learning the true nature of the temple’s treasure, Teague is overtaken with a feeling of disconnection between himself and his Mormon shipmates, for whom the plates represent a common heritage and faith. “They still lived in the drowned city,” he concludes, “they belonged down there.” Teague’s city, however, “was not even built yet.”⁴¹ Card gives us a future where humanity is forced to rediscover meaning through the ruins of a previous sociotechnical order. The Mormon media theology, born of buried golden plates and culminating in mass digital name extraction has been reduced to prayers etched into aluminum. Teague, as an heir of a secular information society, recognizes that his world is lost, even if some of its computers still work.

Outside of Card’s fictional depictions, Utah has a long material history of playing host to future catastrophes. The Dugway Proving Ground, a 90 minute drive West of the Bumblehive, was founded in 1942 by the US Army’s Chemical Warfare Service, which needed a place to test new weapons. In 1943, the Army enlisted the modernist architect Eric Mendelsohn, engineers from Standard Oil, production designers from *Citizen Kane*, and a work crew of prison inmates to construct mock German and Japanese villages for firebombing testing at Dugway. Each village was destroyed and rebuilt three times over the course of five months.⁴² In addition, Dugway has reportedly hosted over a thousand chemical weapons tests, hundreds of open-air biological weapons tests, dozens of “dirty bomb” explosions, and several intentional nuclear meltdowns. The most notorious germ warfare test at Dugway, part of a broader project called “Operation Whitecoat,” saw conscientious objectors—many of them Seventh-day Adventists—deliberately infected with aerosol-dispersed bacteria that cause a disease known as “Q fever.”⁴³ A 1968 test of nerve gas accidentally killed thousands of sheep on the Skull Valley Goshute Indian reservation to the North of Dugway, an incident that went unacknowledged by the government

⁴⁰ Orson Scott Card, *The Folk of the Fringe* (Huntington Woods: Phantasia Press, 1989), 88.

⁴¹ Card, 108.

⁴² Mike Davis, “Berlin’s Skeleton in Utah’s Closet,” *Grand Street*, no. 69 (1999): 94.

⁴³ Aaron Zitner, “Taking a Germ Bullet,” *Los Angeles Times*, November 26, 2001, <https://www.latimes.com/archives/la-xpm-2001-nov-26-mn-8447-tory.html>.

for thirty years.⁴⁴ The Goshute tribe, desperately seeking revenue, later sought to rent its land for nuclear waste disposal, an effort that was defeated by the state government on the grounds that the reservation's proposed disposal facility was situated dangerously close to Dugway and other bombing ranges.⁴⁵ One of these, the Wendover Airfield, was the training ground for air crews that would deliver the Little Boy and Fat Man atomic bombs to Japan. Hundreds of rehearsals of the bombing of Hiroshima and Nagasaki took place in Wendover prior to August 6, 1945.

To Dugway's East, not far from the data centers, are two proving grounds of a different kind. The Void, a franchise of "mixed reality" entertainment attractions, fits its guests with head-mounted displays and tactile feedback equipment, which place them in virtual environments, themed after media properties such as Ghostbusters and Star Wars. Less than a mile from The Void is Evermore, a live action theme park that immerses customers—referred to as "world walkers"—in an interactive European fantasy environment. These two virtual worlds emerged together, in fact, with the Void originally supposed to be part of Evermore but later splitting off into its own facility. Both attractions have been hailed as the future of theme park entertainment, creating deeply engaging entertainment experiences subject to thorough yet hidden regimes of monetization and technological control. The Void already has several locations worldwide, while Evermore's expansion has been halted for the moment by the COVID-19 pandemic. Whereas Dugway, Wendover, and Card's Jordan Strait all rehearsed realistic visions of future destruction, Evermore and The Void are engaged in the commercial production of nostalgia for pasts that never occurred.

Taken together, it is hard to avoid the conclusion advanced by Franco Berardi and echoed by Mark Fisher that the past half century has been marked by a "slow cancellation of the future" through the constriction of political horizons and the deflation of expectations of progress.⁴⁶ Still, there is something in the sheer weirdness of how information and its implications has been built-into and circulated in Utah in particular that seems to hold out the possibility of hope. Perhaps this is a product of my own nostalgia, having spent my teenage years as a non-Mormon in a Salt Lake City suburb. This experience was itself a world-class education in weirdness, the main lessons of which are, first, that *you* are weird, and second, that weirdness is relational. As relations are increasingly strained and dissolved by the accelerating circuits of information capital, however, weirdness as a form of relationality comes to appear increasingly valuable. Between the Miskatonic vision of cosmicist oblivion and the Deseret vision of bureaucratic cosmic salvation, there might be room for hope. ☐

⁴⁴ Brenda Norrell, "Skull Valley's Nerve Gas Neighbors," *Indian Country Today*, October 26, 2005, https://www.redorbit.com/news/science/285387/skull_valleys_nerve_gas_neighbors/.

⁴⁵ Judy Fahys, "Utah N-Waste Site Backers Call It Quits," *The Salt Lake Tribune*, December 21, 2012, <https://archive.slttrib.com/article.php?id=55513674&itype=cmsid>.

⁴⁶ Mark Fisher, *Ghosts of My Life: Writings on Depression, Hauntology, and Lost Futures* (Alresford: Zero Books, 2014), 17.

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