

Electromagnetic Spirituality

1. Welcome to our next video lecture on Religion and Technology. In this lecture we will explore nineteenth century religious speculations on electricity and magnetism, two forces of nature that resisted scientific efforts at mechanical explanation. Was this because they were not material forces at all but rather more elemental spiritual forces underlying the observable material world? This lecture shall also track how new electronic communication technologies, first the telegraph and then the telephone and the radio inspired new forms of spiritual rituals outside institutional religion. Mystical seances conducted by human mediums offered the grief stricken the opportunity to communicate with their beloved dead and provided the curious messages from historical individuals of the distant past.
2. As Enlightenment science found natural laws that could explain more and more of the world, the medieval model of creation as a second scripture pointing to its divine author gave way to the modern model of creation as a wondrous machine pointing to a divine designer. But if the world is a machine, what powers the mechanism? For Descartes motion was an immediate expression of divine creative activity. Creation and the conservation of both matter and motion were but two aspects of the same divine *energeia*: literally, the enactment of logical possibility into existential actuality. Since God was immutable and transcended time, his creative activity must be identical over time ensuring that both matter and motion were always conserved in any physical change.
3. For later Deists the world became more autonomous. God designed the world and imparted to it its original motion, but then his machine could run autonomously on its own. After initially winding up the cosmic clock, God's work was done. But as scientific research continued, some forms of energy resisted the mechanistic model. (1) Life, for example, vital energy, was an organic, inherently reflexive, teleological process where not only does activity of the organs account for the behavior of the whole but the whole accounts for the activity of its organs. So too only life can beget life. Romantics argued that life must be an immaterial, inner power of which matter and motion were only its corporeal expression. Now if life can only come from life, than the terrestrial life could only come from the divine life. Nature is less a second Bible authored by God, than God's very body.

4. One could thus reconnect to the divine life not only by reading God in nature but also by communing with the divine vitality manifested in nature, including one's own human nature. As Jesus had said long ago: I am the Life, he who lives in me will live forever.
5. In addition to life, magnetism and electricity were two other forms of energy that could not be fitted into a mechanical model of reality. Both appeared to involve action at a distance. Both seemed to operate more like waves in a fluid than particles in collision. Since they could not be explained mechanistically, they too, must be elemental powers in their own right, not material but immaterial or spiritual powers, emanating from a divine "cosmic magnet" or "electrical fire"
6. Magnetism was the elemental power of attraction and repulsion that both bound everything together while keeping everything from collapsing in on one another. The seventeenth century Jesuit polymath, Athanasius Kircher, who was both a scientist and a priest, (1) published a three volume study of magnetism in which he argued that all material bodies had an inner magnetic energy ultimately influencing to a greater or lesser degree, in proportion to its distance, all other bodies in the cosmos.
7. The cosmos as a whole was held together by such magnetic energy, itself an expression of God whom he would refer to as the "ultimate magnet."
8. It was another scientist a century later though who really put magnetism on the cultural map. Anton Mesmer was himself Jesuit educated. He had almost certainly read Kircher. However he stripped magnetism of its religious connotations and explained it as an objective cosmic force, not material, but not divine either.(1) He applied Kircher's magnetic theory to personal relationships and used it therapeutically to heal complaints both mental and sometimes even corporeal. He argued that like any two objects people too emitted a more or less intense magnetic aura and were drawn to one another by this inner "animal magnetism" (2) A skilled physician, particularly one endowed with a strong "magnetic" personality could "mesmerize" others, inducing a liminal trance where the subject was neither asleep nor awake.
9. Characteristics of this trance state were suitably uncanny. While in a mesmeric trance subjects spoke in a slow monotone as if their speech were not coming from their own conscious thought. (1) So too they would obey automatically and somewhat robotically whatever commands they were given, as if they had no conscious will of their own either.

10. Group sessions were sometimes accompanied by the ethereal tones of Benjamin Franklin's recently invented "glass harmonica." Mesmer used magnetic trances for mental healing. Later in the nineteenth century spiritual connotations were further secularized through renaming animal magnetism as charisma and personal rapport, and the magnetic trance, as a "hypnotic" trance.
11. Both Kircher and Mesmer noticed affinities between magnetism and another elusive energy that resisted mechanistic explanation, electricity. In fact, initially Mesmer was unsure whether to call this strange new force magnetism or electricity.
12. Unsurprisingly then, some religiously minded thinkers turned to electricity as the most elemental expression of divine energy, God's ongoing creative activity. Friederich Christoph Oetinger, developed a spiritual ontology centered on electricity as the inner soul of the world and lightning as veritable sparks of the divine, indeed flashes of God's wrath.
13. Another early scientist-theologian researching electricity, Prokop Divishes identified the light by which God began creation as the primal "electrical fire" preceding as it did the creation of the sun, moon and stars. He also interpreted the "tongues of fire" that descended upon the apostles at Pentecost as a "spiritual electrization" that transformed those meeting in secret for fear of the Jews into fearless prophets.
14. Electricity was also the force of life. Two late eighteenth century pioneers in electricity, Alessandro Volta and Luigi Galvani, demonstrated how electricity could make a dissected frog's legs twitch. Beginning with what was arguably the first work of science fiction, Mary Shelly's Frankenstein in 1818, monsters and corpses have been re-animated in labs through electric shocks in literature ever since. Even the living when roused to action are still said to be "galvanized." The spark of life as no longer fire, it was electric.
15. In the nineteenth century as magnetism and especially electricity were brought under technological control, their sacred connotations faded. What had been powerfully evocative symbols of God's imminent ongoing creative activity upon which the cosmos was existentially dependent, dropped out of religious language altogether once they could no longer be literally attributable to the divine. God might still be called our rock and refuge, but no longer the cosmic magnet or an electrical fire.

16. However new electronic communication technologies, the telegraph and the telephone, were blended with Mesmerism to create a new spiritual form of communication with the spirits of the dead.
17. With the cultivation of romantic love and the transformation of childhood into a pure state of nature, innocent of industrial civilization, the death of loved ones and cherished children emerged as a powerful spiritual affliction. Despite promising advances in medical research, in the nineteenth century half of all children died before reaching adulthood.
18. And as more and more peasants left the countryside to become factory workers in the exploding urban centers, scourges such as typhoid, dysentery, cholera, smallpox and tuberculosis kept life expectancy in the thirties. Everyone was afflicted by the tragic death of loved ones. Tombstones in cemeteries became sacred parks in which the dearly departed could be memorialized and regularly visited.
19. Within years of William Morse's invention of the telegraph, a new communication technology that used electricity to transmit messages instantly across vast distances, two teenage sisters created a sensation by demonstrating the ability to summon spirits of the dead who would communicate with them by eerie knocks. Skeptical scientists sought to expose the Fox sisters as frauds but to no avail. Popular belief quickly held that the sisters were themselves communication mediums, spiritual telegraphs, through which the grieving could reconnect with their beloved deceased.
20. Mesmeric trances morphed into spiritual séances, where an oracle, often a woman, would become a medium for communication between the living and the dead. Telegraphic knocking soon gave way to speech, the medium's sonorous, monotone voice like "the sound of a long distance phone call" --another wondrous new use of electricity to communicate at a distance.
21. The appeal of spiritualism went beyond an evocative, mimetic ritual that could engender a felt connection with past loved ones. Many claimed it provided empirical scientific evidence for the objective reality of a parallel spiritual world. Sir Arthur Conan Doyle wrote defenses of Spiritualism. He argued forcefully of its religious importance:

"It (spiritualism) founds our belief in life after death and in the existence of spiritual worlds not upon ancient tradition or upon vague intuitions, but upon

proven facts, so that a science of religion might be built up and man given a sure pathway amid the quagmire of the creeds.”

22. At one's own death one could look forward, not simply in faith, but with scientific certitude, to being greeted and embraced by one's own deceased children and relatives, as if one were stepping off a train after a long journey home. The medieval Beatific Vision in which the dead beheld God lovingly gazing upon them face to face, eye to eye in a recapitulation of that original primal gaze between a newborn babe and its mother, was now imagined as a reunion with family and friends magnetically gathered together by bonds of mutual affection, bathed in celestial, electric light.

23. If earlier generations had imagined Eden was an idyllic garden, the spirit world was now depicted as an urban utopia. Doyle quotes one spirit testifying through its medium:

“I have a home of my own, delightful in the extreme, complete with a library filled with books of reference... and every type of literature. I have a music room containing every mode of sound expression, pictures of rare beauty and furnishings of exquisite design. I am living here alone at present, but friends frequently visit me as I do them in their homes, and if a faint sadness at times take possession of me, I visit those I loved most on earth.”

Life in the celestial spirit world was both stimulating and fulfilling:

“Each person finds that work to do which he is best fitted for and which gives him the greatest satisfaction in doing”

It was the dream of any industrial factory worker.

Another part of the appeal of spiritualism is that it transcended literate but lifeless institutional religion. Again, Doyle argues,

“The churches ...have themselves become to the last degree formal and worldly and material. They have lost all contact with the living facts of the spirit and are content to refer everything back to ancient days... (273-4).

Spiritualism transcended institutional church boundaries and divisions. It could not only “turn an agnostic into a believer in God” but “should make a Jew a better Jew, a Mohammedan, a better Mohammedan, a Christian a better Christian.” (284).

24. As the popularity of Spiritualism rose, however it became swamped with hucksters and swindlers. Even the Fox sisters who had ignited the movement later confessed the knocking to be a prank that got quickly out of hand creating such a sensation that they felt they could only go along and run with it. Many self-professed mediums would similarly fool the unsuspecting. They would surreptitiously learn details of the summoned deceased to bring compelling verisimilitude to their channelings. They would use new technologies with which people were not yet familiar, such as pawning off double exposures as spirit pictures, or slides from projectors as apparitions.
25. Does this mean that Spiritualism was all a hoax? (1) Disillusioned and outraged after a séance failed to truly reconnect him as promised with his departed mother, Houdini would devote much of the rest of his life to debunking so called scientific spiritualist phenomena as “parlor” tricks to fleece the gullible.
26. But from a religious perspective one could argue that spiritualism need be no more a hoax than transubstantiation at Mass. Indeed the word “hoax” actually comes from the Latin “hocus” taken from Protestant reformers condemnation of the traditional Christian Mass as so much “hocus pocus”—a phrase drawn from the very words of Eucharistic consecration “Hoc est corpus meum” “This is my body”. The priest, in the person of Christ, recites these words while elevating the host and thereby transforms the bread into the Body of Christ. But a scientific analysis of a consecrated host will not yield human cellular tissue or any strands of Jesus DNA. Its having become the body of Christ is not a scientific fact, but a religious reality. The bread becomes the body of Christ within the context of the religious ritual. Its religious meaning has changed. It is no longer simply a symbol of Christ, the Bread of Life; it now *is* the Body of Christ, broken and shared, just as those gathered for this ritual are the Body of Christ, to be sent forth at the ritual’s end to be Christ’s hands and feet in today’s world. Christ may not be physically present in the host but Christ is really present under the physical appearance of bread and wine.
27. Similarly in a séance, the spirits of the deceased were really present to those left behind. Spiritualist mediums, in the person of the deceased, were able to relieve and console mourners. In particular they were able to bring closure to those whose children had died or whose husbands, fathers and sons had perished in battle far from home, and whose bodies were never returned. It may not have been scientifically verifiable but it was no

hoax for them. Nor was it necessarily for the mediums who effectively brought such consolation and closure, as well as spiritual counselling to those who came to them.

28. In this respect spiritualism is of a piece with Marian apparitions and miraculous healings that started occurring all over Europe at this same time. Katherine Laburé and Bernadette Soubirous did not lie about what they experienced, and the last thing they wanted was to be the center of attention for millions of troubled souls. But the report of adolescent peasant girls, innocent of industrial secularism being visited by the Mother of God and being given a saving message for the world was compelling to millions who felt alienated and estranged by industrial society and abandoned by a medical community whose illnesses were still beyond scientific capabilities to cure.
29. Nevertheless part of the appeal of Spiritualism, as well as the Marian apparitions and miracle cures were precisely that they *were* taken to constitute scientific evidence that doctors and researchers could not explain. A number took up the challenge, some hired by the Church itself to verify or falsify miraculous claims. Other academics looked to mental illness and mass psychology for explanations. For unsurprisingly medical claims could remain at most inexplicable so far and spiritualist phenomena could not be reliably reproduced in the lab with the lights on and the mood music off.
30. William James is a poignant illustration of the contemporary conflation of religion and science. James was an avid researcher into spiritualism not because of compelling scientific evidence, but rather because he longed to believe. He was hardly a detached inquirer. But for James to accept spiritualist phenomena, he needed to replicate it, disembedded from its ritual setting, and while suspending the very faith that enabled the ritual to do its work in the first place. Hence the Center for Psychic Research which he organized to gather scientifically rigorous evidence for spiritualist communication with the dead, as well as other alleged spiritual phenomena such as clairvoyance (seeing into the future) , telepathy, (immediate spirit to spirit communication) and telekinesis (action at a distance). All experiments would inevitably ultimately came up empty. Without a will to believe, the data was simply inaccessible. But with the invention of electronic communication at a distance, in the telegraph, radio and telephone, rituals that purported to communicate with the spiritual world invisibly, from a distance, was something many could believe *in*.