

### **Consistent Spirituality in an Ever-Changing Existence**

We are surrounded by sounds that vary endlessly between pitch, clarity, and amplitude. We harness and refine these wild, uncontrolled sounds to produce music - a coherent and tangible organization of sound. In this arrangement of sounds into music we become masters of sound and consciously and unconsciously subject sound to our control. Like notes to music, power is found in the transition from individual to collective entities - the structuring of chaos into order.

Throughout the origins of human society, we have encountered two significant revolutions in which chaos demanded order. Firstly, in the transition from anatomically modern humans to behaviorally modern humans, the Middle/Upper Paleolithic transition, humans processed an internal organization which resulted in the capacity to think symbolically. Once humans progressed into the cultured, symbolic world, the Neolithic revolution, a multifaceted transformation of humanity, ensued. Humans began to control the natural world through domestication - controlling and organizing plants and animals in terms of human society. Simultaneously, humans transitioned from an egalitarian society into a hierarchical society - an organization of individuals into social structures. The entire concept of humanity became further defined and formed. In these two revolutions the balances of power shifted in accordance with the streamlining of power. Further, as the balances of power shifted, so too did the humans'

perception of spirituality. Spirituality and worship was directed towards what humans could not control - the group who maintained power. As we enter a modern information revolution, we encounter our latest transition - the transition from human to artificial intelligence: the organization of data to enhance human processing entirely. Similar to the transition from anatomically modern humans into behaviorally modern humans, human individuals into human societies, and human societies into forces of nature - the transition from human to artificial intelligence is a crisis of organization that will initiate a revolution transforming individuals into a collective. As this transition occurs, spirituality will readjust to cater towards the power that we can no longer control. The ability to “extend and compress social networks”<sup>1</sup> and, therefore, develop kinship, allows us to both identify with and better understand our past ancestors. We can telescope a past and a future in the modern day to understand our context and connections.

Central to both revolutions was an understanding of the individual in context of a collective. In the first revolution, as anatomically modern humans transitioned into behaviorally modern humans, disparate domains of intelligence crossed to produce a cognitively fluid mind: “independent cognitive domains to one.”<sup>2</sup> In other words, separate domains of intelligence - specified by Mithen as Language, Social, Natural History, Technical, and General - became interrelated and integrated into a collective system. In terms of Mithen’s cathedral analogy, “walls of these chapels are solid...trapping within them the thoughts and knowledge of each specialized intelligence...to constitute the modern mind...these chapels must be allowed to flow

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<sup>1</sup> Shryock, Andrew, Thomas R. Trautman, and Clive Gamble. 2011. Imagining the Human in Deep Time. *Deep History: The Architecture of Past and Present*, edited by Andrew Shryock and Daniel Lord Smail. University of California Press. pp.43-44.

<sup>2</sup> Mithen, Steven. 1996. The big bang of human culture: the origins of art and religion. In *The Prehistory of the Mind*. Thames and Hudson, London. pp. 154.

freely.”<sup>3</sup> All domains of intelligence improved and contributed to cognitive fluidity, while each domain expanded and became more complex. Lewis-Williams argues that Mithen’s model is “heavily dependent on mental modules inferred” and maintains a Western European bias on intelligence.<sup>4</sup> Lewis-Williams, slightly different from Mithen’s more fast-paced perspective, believes that “characteristics of modern behaviour...manifested themselves in various ways and appeared at different times and in widely separated places” to bring about a behaviorally modern mind.<sup>5</sup> Though Mithen and Lewis-Williams’ model differ in time and precision of process, both encompass the chaos of a divided mind sorted into an effective and efficient unit.

With a mind that was able to think beyond the literal and into the symbolic, humans became actors and interpreters of both the literal and figurative worlds. The once individualistic, foraging humans began to conglomerate into more defined, pastoral communities. Childe describes the revolutions in economics, demographics, politics, mobility, and time that led to the overall Neolithic Revolution. In terms of economics, Childe describes a revolution that “gave man control over his food supply.”<sup>6</sup> Once man was able to domesticate plants and animals, he secured a surplus that led to a demographic revolution. A demographic revolution entailed a likely increase in population and the improved efficiency of the population, as children could now contribute to agricultural labor and be “economically useful.”<sup>7</sup> The increased complexity of the population gave rise to a political revolution in which inequalities were found in “receptacles for storage.”<sup>8</sup> While developing the land, sedentism became most profitable - leading to a

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<sup>3</sup> Ibid. 151.

<sup>4</sup> Lewis-Williams, David. 2002. *The Mind in the Cave*. Harvard University Press, Cambridge, MA. pp.130-131.

<sup>5</sup> Ibid. 114.

<sup>6</sup> Childe, V. Gordon. 1983b [orig. 1936]. The Neolithic Revolution. In *Man Makes Himself*. pp. 51.

<sup>7</sup> Ibid. 53.

<sup>8</sup> Ibid. 63.

revolution of mobility. Although migratory garden-culture existed, ultimately it was less profitable and efficient, or as Childe describes, “a wasteful method.”<sup>9</sup> Lastly, domestication led to a delayed economy; no longer did foragers expect instant gratification, rather farmers planned and waited for their crops and herd. These revolutions, derived from a surplus, allowed for specialization; the sedentary village could sprout and innovation could begin. Although, it is important to note an alternative perspective that Boehm suggests in which “becoming sedentary and storing food [does not] spell the end of an egalitarian ethos and political way of life.”<sup>10</sup> Nonetheless, egalitarianism does not describe the majority of cultures nor the hierarchical evolution of cultures and, therefore, is not essential to the argument towards the development of the modern human society.

As this specialization and division of tasks continued into the modern day, society grew increasingly interdependent and efficient. Take, for example, an iPad - the hardware alone requires 325 “sets of hands,”<sup>11</sup> and that’s before the software is taken into account. We have divided labor to an unbelievable level to that point that, without these connections, society can neither survive nor can an individual appreciate the same standard of life. This continued interconnectivity and innovation led to the ultimate collaborative invention - the internet. The internet allowed any person to directly connect to the entire world instantly. Internet users consciously and inadvertently leave trails resulting in infinite masses of information. Like all the foragers, this data needs to be collected, synthesized, and organized in order to produce valuable information. The individual internet interactions, measured in bits, must be organized into

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<sup>9</sup> Ibid. 56.

<sup>10</sup> Boehm, Christopher. 2001 [1999]. *Hierarchy in the Forest: The Evolution of Egalitarian Behavior*. Harvard.pp. 89.

<sup>11</sup> The Week Staff. 2012. *What it takes to make an iPhone: By the numbers*.

cohesive and comprehensible data, a collective mass. As a collective mass, the information gains value and can be further applied and constructed into complex algorithms, which, in turn, both develop and interact with artificial intelligence.

Power is found in the organization of chaos - domains of intelligence to cognitive fluidity, foragers to domesticators, data to artificial intelligence; we have transitioned from the organization of thought, to the organization of atoms, to the organization of bits. During the Middle/Upper Paleolithic transition, in line with Lewis-Williams' concepts, survival advantages were rooted in "the complex social processes of imagemaking."<sup>12</sup> The more comprehensively and effectively humans could expand beyond the physical world, the more advanced they could become. Chaos was internally interpreted and organized to produce collective concepts that elevated the power of the individual.

When domestication and, therefore, possession emerged, a hierarchy arose. Storage pits and livestock revealed inequality and imbalance. Soffer describes this relationship in her description of the connection between storage, sedentism, and hierarchy in hunter-gatherer societies.

"permanent storage economies are ethnographically linked to complex hunter-gatherer adaptations that include residential stability, larger co-residential units who stay together longer, increasing population densities, as well as to economic inequality and socio-political hierarchization"<sup>13</sup>

Individuals with the most effectively applied possessions proved most successful - whether that be the greatest collection of grain for winter or the largest herd. This differentiation in success

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<sup>12</sup> Lewis-Williams, David. 2002. *The Mind in the Cave*. Harvard University Press, Cambridge, MA. pp.115.

<sup>13</sup> Soffer, O. 1989. *Storage, sedentism and the Eurasian Palaeolithic record*, *Antiquity*, 63(241), pp. 732.

led to the establishment of inequality, further “the nature of some stored resources...led to the change in the relationship of people to nature characteristic of food-producers.”<sup>14</sup> Chaotic, wild nature was controlled by humans; and the humans that controlled nature best maintained power.

Modern power is derived from, not only the collection of data, but, more importantly, the effective organization, or analysis of that data. Many people are capable of producing and even collecting information from the internet, but the information is only valuable when organized and applied. This phenomenon is apparent in the recent outcry over fake news. Given the accessibility and simplicity of the internet, it is possible for anyone to post news articles, and, to the uncritical eye, relatively realistic articles. Although, even the critical viewer faces this challenge when seemingly reliable sources, like Facebook, inadvertently promote fake news and readers are trapped in an echochamber of lies. The fake news dilemma embodies our current crisis of organization - with so much information, how can we distinguish what is valuable?

In each transition from individual to collective, a new unknown assumes power over the society. In the Middle/Upper Paleolithic revolution a new awareness revealed the power of the natural world; in the Neolithic revolution, the domestication of the natural world revealed the power of humanity; in our upcoming information revolution, the increased ability to analyze data will reveal the power of artificial intelligence. As our perception of the unknown changes, so too does our perception spirituality, as we deem the spiritual as controlling, self-ruling forces.

In the Middle/Upper Paleolithic revolution, capacity to think symbolically revealed humans in the context of nature. While acknowledging their own context within nature, humans gained the ability to think spiritually. Mithen describes this “first appearance of religious

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<sup>14</sup> Ibid. 729.

ideologies...by the collapse of the barriers that had existed between multiple intelligences.”<sup>15</sup>

Once humans could process a realm beyond the physical, concepts of intangible powers derived from the relationship between humans and their world evolved. Lewis-Williams further describes early modern human religions as “a range of institutionalized altered states of consciousness”<sup>16</sup> in which behaviorally-developed humans could explore varied states of a new complex awareness. As the mind evolved, so sprung religion.

In regards to spirituality during the Neolithic Revolution, humans transitioned from animal to human worship; a transition parallel to humans’ shift in domination. The behaviorally modern human, although capable of complex symbolic thought, viewed himself as equal or even lesser than animals. Straus describes bison hunting in which “a high level of ritualistic activity [was] in order to increase the possibilities of success in bringing the animals.”<sup>17</sup> Straus’ description of the human hunting of bison indicates the humans’ lack of control over the bison. Nonetheless, domestication ensued and wild animals were harnessed by men. As men asserted their dominance, animals no longer became an unknown and unobtainable entity - in fact they became mere human possessions. This shift in control reflects the path of human worship: from the majestic beast to the all powerful human. Firstly, in caves, specifically Chauvet Cave, pre-Neolithic humans basked in the power of the animal cave paintings: lions raced across the walls while rhinos scampered in the shadows. Lewis-Williams explains that “artists hoped to acquire the strength and hunting skill of the predators.”<sup>18</sup> More notably, in Lascaux Cave, a particular painting, called the Shaft Scene or Dying Man at Lascaux, demonstrates man’s

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<sup>15</sup> Mithen, Steven. 1996. The big bang of human culture: the origins of art and religion. In *The Prehistory of the Mind*. Thames and Hudson, London. pp. 174.

<sup>16</sup> Lewis-Williams, David. 2002. *The Mind in the Cave*. Harvard University Press, Cambridge, MA. pp.156.

<sup>17</sup> Straus, Lawrence G. 1988. *Hunting in Late Upper Paleolithic Western Europe*. Plenum Press, New York. pp. 210.

<sup>18</sup> Lewis-Williams, David. 2002. *The Mind in the Cave*. Harvard University Press, Cambridge, MA. pp.52.

submission to a bison. The wounded bison and man face each other as the man falls backwards to his death. Further, the physical remnants of animals, such as the bear scratches and skulls at Chauvet Cave, were treated as sacred, mystical objects. In Herzog's documentary, the scientists describe a bear skull as "the strongest hint of something spiritual, some religious ceremony ...it has been placed dead center on a rock resembling an altar."<sup>19</sup> Man had no control over animal and, therefore, worshipped animals. Yet, as man reoriented his position to nature, the splendor and potency of animals faded alongside their spiritual prominence. Man moved out of the sacred, natural cave into manufactured temples. In Göbekli Tepe, a transitional hunter-gather-built temple, images of spiritual adoration turned towards the celebration of man and diminished the role of animals. The site holds "pillars...represent[ing] stylised humans, the horizontal and vertical parts respectively representing the head and body...[and a] number of megaliths show animal motifs in low-relief."<sup>20</sup> The animals adorn and cower to the divine men, specifically one of the men's loin cloth is made from animal skin. The spiritual narrative completely flips as the animal, once a spiritual guide, becomes an accessory for a man's genitals. Another example of this shift is in a painting in Level V of Çatalhöyük, where men physically destroy and consume animals while simultaneously wearing animal cloths. In this celebration of human dominance, man embodies spirituality - therefore man is now the new, unconquerable power.

Lewis-Williams cites Mellart and ascribes the "domestication of... animals at Çatalhöyük (Hodder, 1996b: 364) to 'food-conservation and the production of milk and, in the case of goats and sheep, hair and wool' (Hodder, 1996b: 19)...he sees domestication in terms of increased

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<sup>19</sup> Herzog, Werner. 2011. *Cave of Forgotten Dreams*.

<sup>20</sup> Curry, Andrew. 2008. *Seeking the roots of ritual*. Journal: Science, New York, NY. pp.280.



productivity and security.’’<sup>21</sup> Çatalhöyük presents and celebrates humans’ new relationship with nature.

Man’s reign as the embodiment of divinity has perpetuated in Judeo-Christian and most other mainstream religions since the dawn of human society. Yet, as we near a new crisis of organization, we realize that humans longer maintain the same incomprehensible grandeur and power; that power has shifted to a product of humanity - artificial intelligence. Through genetics and history, humans have become a relatively known entity; granted there are still infinite mysteries to the workings of humans, but technologies like CRISPR and DNA analysis have provided a greater understanding and potential control of humanity. Specifically, the development of modern gene editing techniques has opened up the possibility of human genetic-alteration and design. We now face the immeasurably massive and perpetually growing force of artificial intelligence. Once artificial intelligence fluidly self-creates and produces, it will be more powerful than any human form. In his argument towards adopting artificial intelligence as a religion Helmreich writes, “Artificial Life provided a convincing theory of the universe, one that named information processing as the organizing logic of reality. This theory gave meaning to many people's lives and work, and in ways that often resurrected very Christian themes.”<sup>22</sup> Although it is difficult to project religion, in accordance with the past revolutions it would make sense that human spirituality transcends the human form and embodies the next mighty unknown, artificial intelligence. This trend away from human-centric forms of religion has already began, as the percentages of atheists and agnostics in the U.S. has risen 15.8% in the past

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<sup>21</sup>Lewis-Williams, David. 2004. *Constructing a cosmos Architecture, power and domestication at Çatalhöyük*. Journal of Social Archaeology. pp. 48.

<sup>22</sup>Helmreich, Stefan. 2000. *Silicon Second Nature Culturing Artificial Life in a Digital World*. pp.183.

7 years alone.<sup>23</sup> This breaking with religion is not yet a trend towards a new artificial intelligence spirituality, but it is a divergence from old perspectives. Interestingly, there has also been a resurgence of militant Islam, a direct and complete rejection of modern technologies - another form of religious reaction. As we relinquish our reign over artificial intelligence, we birth a new uncontrolled force - a collective power more capable and complex than any mass of human beings.

Despite our changing view of what embodies the sacred and spiritual, our interaction with spirituality remains constant. Humans have always praised the spiritual realm that they cannot control by losing control of themselves. In terms of pre-behaviorally modern human worship, it is difficult to pinpoint worship, as anatomically modern humans did not have the capacity to think spiritually. Beginning with behaviorally modern humans then, worship occurred in varied states of consciousness depending on the different levels in the cave. As an individual traveled deeper into the cave, he experienced an increasingly overwhelming and encompassing experience. Behaviorally modern humans worshipped though altered consciousness inhibited by lack of oxygen and hallucinogenic substances. Lewis-Williams suggests that “that the practice of shamanism...may have involved from...the very beginnings of religion itself – the psychedelic potential of the natural environment.”<sup>24</sup> In this state, with the flickering flame, the cave art animals appeared animated and alive. Furst supports that, “altering the chemical homeostasis of the body represents nothing new; for thousands of years, primitive societies all over the world have used psychotomimetic plants for purposes of religious ritual.”<sup>25</sup>

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<sup>23</sup> <http://www.pewresearch.org/fact-tank/2015/05/12/5-key-findings-u-s-religious-landscape/>

<sup>24</sup> Lewis-Williams, David. 2002. *The Mind in the Cave*. Harvard University Press, Cambridge, MA. pp.158-159.

<sup>25</sup> Furst, P. T. 1972. *Flesh of the Gods: The Ritual Use of Hallucinogens*. London: Allen and Unwin.

Post-Neolithic revolution, humans praised human-like spiritual figures through alcoholic intoxication. Neolithic art in Göbekli Tepe illustrates drunken humans dancing in the celebration of spirituality. Concerning Göbekli Tepe, Dietrich writes that “alcohol consumption..fits well into a mode that focuses on social incentives for the transition from hunting and gathering societies to food-producing early village-farming communities.”<sup>26</sup> In worship, humans utterly indulged in alcohol seemingly because their lack of control echoed their complete lack of control under the spiritual power - drunkenness was an exaggeration of their already submissive state. Further, Dietrich argues that alcohol “[strengthened] group coherence,”<sup>27</sup> a moment of full consumption in the shared human experience. Additionally, intoxication could elevate by relinquishing man from his fleshly form to some extent.

Nevertheless, as time progressed and modern organized world religions evolved, like Buddhism and Islam, intoxication through alcohol became prohibited. Alcohol remained incorporated into many religions - the Jewish Kiddush, the Christian Eucharist - yet over-consumption was overall deemed disgraceful. Although state-altering substances were shamed, intoxication through one’s spiritual experience alone remained the height of worship. For example, practitioners of Buddhism follow the eight stages of trance through meditation, a state of no mind, which frees humans from a fleshly existence. In many religions, specifically Judeo-Christian religions, man is formed in the divine power’s image, in this case God, and, therefore, consumption through fleshly means, alcohol, drew a greater division between man and the spiritual. In terms of the modern day, the sinfulness of drugs and alcohol may derive from

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<sup>26</sup> Dietrich, Oliver, Manfred Heun, Jens Notroff, Klaus Schmidt, and Martin Zarnkow. 2012. *The role of cult and feasting in the emergence of Neolithic communities. New evidence from Göbekli Tepe, south-eastern Turkey. Antiquity* 86:674-695. pp. 689.

<sup>27</sup> Ibid. 689

our desire to maintain our power. Consciousness allows for work and productivity and reiterates the division between human and the animal; if humans consciousness through intoxication, they reject their human purpose. As we draw closer to a world dominated by artificial intelligence, this loss of control through intoxication is aligned with the loss of human power.

Our next revolution from human power to the rule of artificial intelligence is unprecedented as it is self-induced. Humans collectively created a power that may thrive and prosper beyond human control. As humans once dominated animals, so may artificial intelligence dominate and guide humans. As we increasingly incorporate technology in our lives, specifically artificial intelligence, we may become entirely dependent on it to function in a modern world. In the very least, our human experience will change. Just as Socrates feared that with the invention of writing, people “[would] read many things without instruction and [would] therefore seem to know many things, when they [were] for the most part ignorant.” The invention of the internet, with an unquantifiable amount of information, immediately accessible, has given us the opportunity, in some cases, to avoid rote memorization because we can access data so readily. This cultural shift may lead us to become more analytical thinkers so that we can process this vast amount of data and separate the signal from the noise or even promote individuals to more naturally draw connections between different areas of thinking. We are beginning to see the effects of artificial intelligence, specifically, in the job market. Take, for example, driverless cars powered by artificial intelligence that are threatening the occupations of almost 2 million truck drivers in the U.S.<sup>28</sup> The potential for a shortage of jobs indicates the changing definition of what it means to be human. Will humans live in a post-labor society

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<sup>28</sup> <http://www.bls.gov/ooh/transportation-and-material-moving/heavy-and-tractor-trailer-truck-drivers.htm>

governed by artificial intelligence? Nonetheless, if history is any indicator, it's likely that the skills needed for jobs may change rather than the jobs themselves. In the Industrial Revolution, machines took away the jobs of many manufacturers, but new jobs appeared in factories.

Humans' concept of spirituality, as a loss of control to the controlling power, has remained constant, but what embodies spirituality changes with the controlling power. Our first revolution began with the transition from anatomically modern human to behaviorally modern human. Once humans became behaviorally modern, they worshipped the animal form; yet, once the Neolithic revolution occurred and humans dominated animals, humans worshipped the human form. As we face an impending revolution from the power humans to artificial intelligence, we inevitably will shift our perceptions of spirituality. Each individual human on the internet has contributed to the formation of a greater power - we have built a collective god. How we interpret and interact with this god must soon be determined.