

Meaning beyond Molecules and Hubris: A Gross Case Supporting the General Religious Belief Package and Some Critical Perspectives

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Abstract

Any meaningful investigation into the potential validity of religious beliefs-including God-should prominently include their innate presence in children. That presence offers an enormous challenge to the scientific perspective and appears to be more relevant than established arguments. As an initial backdrop to discussions here, I begin with some quotes conveying the import of the contemporary scientific vision of life, as well as quotes conferring that vision's underlying DNA reliance. The article will then briefly argue that that confident vision-and in particular, its DNA reliance-is clearly flawed. The main discussions then consider the mysterious phenomenon of terminal lucidity before moving on to a focus on the plausibility of a DNA-based evolutionary explanation for the fact that "[t]he universal themes of religion are not learned" since they arrive as our natural religion. As an example of our increasingly secular era, the paper pauses to note Western Buddhism's divorce from religious and/or deeper perspectives. Subsequent closing discussions critically consider the questionable state of neuroscience and the limitations of the existing approaches to supporting religious perspectives. For those wondering about deeper aspects of life-with or without an affiliation to an official religion-then I suggest digging in for yourself. Hubris aside, the natural sciences do not have a monopoly on understanding life, and the contrary assumption has caused big problems.

Keywords

Science, Religions, Scientific Materialism, Natural Religion, Genetics, Terminal Lucidity, Western Buddhism, Schizophrenia

1. Introduction—Three Educated Perspectives on Materialism

Critical to our understanding and perspective is the contemporary scientific model of life—materialism. If accurate—as seemingly assumed by almost all scientists and most intellectually inclined individuals—that has profound implications, including of course the negating of religious/dualist hypotheses.

The psychologist Steven Pinker has provided many confident portrayals of this vision. But for a relatively uncompromising depiction of that vision, the work of one prominent biologist stands out. The depiction:

[A]ll of us, and scientists are no exception, are vulnerable to the existential shudder that leaves us wishing that the foundations of life were something other than just so much biochemistry and biophysics. The shudder, for me at least, is different from the encounters with nihilism that have beset my contemplation of the universe. There I can steep myself in cosmic Mystery. But the workings of life are not mysterious at all. They are obvious, explainable, and thermodynamically inevitable. And relentlessly mechanical. And bluntly deterministic. My body is some 10 trillion cells. Period. My thoughts are a lot of electricity flowing along a lot of membrane. My emotions are the result of neurotransmitters squirting on my brain cells. I look in the mirror and see the mortality and I find myself fearful, yearning for less knowledge, yearning to believe that I have a soul that will go to heaven and soar with the angels (Goodenough, 1998: pp. 46-47).

Notably, other than an appeal to "cosmic Mystery", this description is shorn of the feel-good-isms that commonly infiltrate descriptions by popular scientists. It is additionally noteworthy that this was found in Ursula Goodenough's neo-religious book, "The Sacred Depths of Nature".

An additional source of insight is the novelist Julian Barnes' very fine 2008 book, *Nothing to be frightened of* (Barnes, 2008). Barnes' book deals with his take on death and with it quite a bit of life. The book opens with the sentence, "I don't believe in God, but I miss Him" (Barnes, 2008: p. 3). The essential backdrop to the work is that Barnes has opted for the default intellectual understanding, which of course means science, and this is not surprisingly bleak. With this perspective, Barnes can still intellectualize and philosophize around a bit—including taking shots at atheists, philosophers (his brother is one), and more generally modern trends (although there he shortchanged what has become frenetic distraction-ism in favor of traditional "frenetic [commercial] materialism"), but to little end as he surmised. A relevant quote:

We discover, to our surprise, that as [Richard] Dawkins memorably puts it, we are "survival machines—robot vehicles blindly programmed to preserve the selfish molecules known as genes". The paradox is that individualism—the triumph of free-thinking artists and scientists has—led us to a state of self-awareness in which we can now view ourselves as units of genetic obedience. My adolescent notion of self-construction—that vaguely, Englishly, existentialist ego-hope of autonomy—could not have been further from the truth. I thought the burdensome process of growing up ended with a man standing by himself at last—*homo erectus* at full height, *sapiens* in full wisdom—a fellow now cracking the whip on his own full account. This image... must be replaced by the sense that, far from having a whip to crack, I am the very tip of the whip itself, and that what is cracking me is a long and inevitable plait of genetic material which cannot be shrugged or fought off. My "individuality" may still be felt, and genetically provable; but it may be the very opposite of the achievement I once took it for (Barnes, 2008: pp. 93-94).

Further, "[n]ow, alone, we must consider what our Godless wonder might be for" (Barnes, 2008: p. 93); Christianity is a "beautiful lie" (Barnes, 2008: p. 53); and modern alternative pursuits—the "secular modern heaven of self-fulfillment", and their purported realization of happiness is "our chosen myth" (Barnes, 2008: p. 59). And of course, "[t]he air has been let out of the tyres of free will" (Barnes, 2008: p. 181).

The final science-framing considered here comes from a *Scientific American* article by Caleb Scharf, "The Benevolence of Black Holes" (Scharf, 2012). In it, Scharf laid out some evidence of the apparent dynamic existing between the structure of a galaxy and its central black hole, and ultimately for the resulting potential to support the development of life. Scharf pointed out that:

The connection between the phenomenon of life and the size and activity of supermassive black holes is quite simple. A fertile and temperate galactic zone is far more likely to occur in the type of galaxy that contains a modestly large, regularly nibbling, black hole rather than a voracious but long since spent monster.

Scharf went on to report that our Milky Way galaxy happens to be "smack dab in the [life-habitable] sweet spot of supermassive black hole activity". Furthermore, Scharf went on to write:

[t]he entire chain of events leading to you and me would be different or even nonexistent without the coevolution of galaxies with supermassive black holes and the extraordinary [matter and energy] regulation they perform.

Thus details of the universe's galaxies appear to have been dependent on black hole dynamics and this can be viewed as adding to the already staggering evolution- and conception-based odds against the existence of "you and me". Scharf's article opened with the following:

[o]ur existence in this place, this microscopic corner of the cosmos, is fleeting. With utter disregard for our wants and needs, nature plays out its grand acts on scales of space and time that are truly hard to grasp. Perhaps all that we can look to for real solace is our endless capacity to ask questions and seek answers about the place we find ourselves in.

And it concluded with a reverential paragraph:

This fertile corner of the cosmos has been governed by all that has gone on around it, including the behavior of the black hole at our galactic center. The very places that have sealed themselves away from the rest of the universe have served as one of the most influential forces shaping it. We owe so much to them.

And thus, we are intellectually cleared to attempt to find meaning in following the speculative details of astronomy's investigations into unimaginably distant, lifeless phenomena. Notably, of course, is that "meaning" here might best be distinguished via patterns of neural firings.

2. DNA's Presumed Role as the Language of Life

Moving a bit closer to life, deoxyribonucleic acid (DNA) is of course essential to the natural sciences' confident vision. Steven Pinker in an essay introduced that vision by stating that:

In making sense of the world, there should be few occasions in which we are forced to concede "It just is", or "It's magic", or "Because I said so". The commitment to intelligibility is not a matter of brute faith, but gradually validates itself as more and more of the world becomes explicable in scientific terms. The processes of life, for example, used to be attributed to a mysterious elan vital; now we know they are powered by chemical and physical reactions among complex molecules (Pinker, 2013).

The presumed director of those molecules is, of course the big DNA molecule. Consistent with this, Pinker went on to add that science's "understanding consists not in a mere listing of facts, but in deep and elegant principles, like the insight that life depends on a molecule that carries information, directs metabolism, and replicates itself".

In fact, the pioneering geneticist Craig Venter answered the question "What is life?" with the expression, "DNA-driven biological machines" (Venter, 2014: p. 6). Also, Venter in his 2007 book, *A Life Decoded: My Genome. My Life*, extrapolated that vision in practical fashion to declare that the Human Genome Project:

Has charted a landscape in which we will discover the most intricate workings of our species, the particularities of our own individual genetic makeup, and the promise of novel approaches to health and medicine that will mark a new stage in human development, one in which inherited biology is no longer destiny (Venter, 2007: inside cover).

Continuing, Richard Dawkins has characterized our genomic nature as "DNA neither cares nor knows. DNA just is. And we dance to its music" (Venter, 2014:

p. 1). Additionally, the late prominent biologist Ernst Mayr pointed out, "[o]ne can never fully understand the process of evolution unless one has an understanding of the basic facts of inheritance, which explain variation" (Mayr, 2001:
p. 89). The modern assumption that DNA provides an organism's conception-beget blueprint is the everyday takeaway from those presumed "basic facts".

An additional practical perspective on this situation was suggested in statements by Nobel laureate James D. Watson. In a 2003 interview, *Scientific American* asked how much "is left for us to do" after having "largely worked out" the human genome (Watson, 2003)? Watson replied:

[relevant research] seems to be moving pretty fast. You don't really want to make a guess, but I'd guess that over these next 10 years, the field will be pretty played out. A lot of very good people are working on it. We have the tools.

Next, when *Scientific American* asked Watson, "[i]f you were starting out as a researcher now", Watson interjected, "I'd be working on something about connections between genes and behavior. You can find genes for behaviors...". The term "field" in the above quote which was to "play" itself out likely included both behavioral genetics and personal genomics. Those two fields are concerned with the presumed genetic blueprints responsible for our (innate) individual behavioral and health tendencies, respectively.

Additionally, a significant feature of the contemporary scientific mindset and as such questioned herein—was also suggested by Watson:

I was born curious. ... And so if you wanted an explanation for life, it had to be about the molecular basis for life. I never thought there was a spiritual basis for life; I was very lucky to be brought up by a father who had no religious beliefs.

And elsewhere in commenting on a promotional line used for the genetics-inspired movie *Gattaca*—"There is no gene for the human spirit"—Watson wrote, "[i]t remains a dangerous blind spot in our society that so many wish this were so" (Watson et al., 2017: p. 440). I will spare readers additional hubris anchored, materialist quotes. As will be shown henceforth, they are easy enough to question.

A basic reminder here is that "gene" denotes a subset of DNA which provides a template for the construction of a protein molecule which together form the body's building blocks. Furthermore, "genome" denotes the collection of such genes and sometimes effectively the entire DNA molecule.

3. Reality Checks on DNA's Role

A simple check of natural sciences' thinking is provided via a recent study which involved a large polygenic score effort trying to make DNA-sense out of the occurrences of homosexual sex. That study and its findings were described in a *New York Times* article by Pam Bullock (Bullock, 2019) and an accompanying article by two researchers, biologist Steven M. Phelps, and sociologist and geneticist Robbee Wedow (Phelps & Wedow, 2019).

The Bullock article mentioned that the study "was conducted by first-rate scientists". The researchers labored through the requisite scientific analyses (which entailed attempting to find statistical connections between individuals' DNA specifics and their homosexual experiences). Additionally, those researchers went to considerable lengths to put together a sensitive presentation of the findings. The investigation was billed as a success but contrary takes were expressed in the Readers' Picks comments for the Phelps and Wedow article. One read:

[t]his research clearly shows that there is no straight answer—pun unintended. If looking into the DNA of 500,000 people didn't help, what will?

Another reader got a bit animated:

[l]ess than 1% of variation!

I almost choked on my pork and beans when I read that.

Less than 1% of variation is risible, not even the beginning of understanding the phenomenon.

Dudes, get back to us if and when you have something to report.

I now let the findings as given in Bullock's article speak for themselves. After some generalities the article reported that:

[r]esearchers specifically identified five genetic variants present in people's genomes that appear to be involved. Those five comprise less than 1 percent of the [inferred] genetic influences, they said.

And when the scientists tried to use genetic markers to predict how people in unrelated data sets reported their sexual behavior, it turned out to be too little genetic information to allow prediction.

In fact, they really didn't find anything and this is representative of numerous efforts to confirm that we "can find genes for behaviors" and moreover "that life depends on a molecule that carries information, directs metabolism, and replicates itself". Even other far-reaching polygenic score efforts—including the over-trumpeted small successes in topics like educational attainment—were subsequently undermined in follow-up studies (Cepelewicz, 2019).

The relevant history of such genetic searches is not subtle, although it has been officially neglected. After the stunning failure of the initial "tour de force" search through the commonly occurring DNA/genetic variants (Wade, 2008), the subsequent decade plus of searches in personal genomics and behavioral genetics have essentially consisted of a sequence of pseudo successes. Every few years a geneticist will acknowledge this situation, but readers can perhaps get a better sense of this unfolding failure by juxtaposing the huge expectations that preceded these searches with the broad silence in their wake.

Perhaps much of the confidence driving these efforts is based on observations

of pre-existing DNA-determined conditions. In addition to some relatively common conditions such as sickle cell anemia, there are as James D. Watson et al. pointed out "vast numbers of single-gene disorders-the current genetic disease database lists several thousand—but the majority are extremely rare, each occurring in just a few families" (Watson et al., 2017: p. 337). Additional sources of confidence could be the gross consistency seen in the physical appearances of parents and offspring (and also between monozygotic twins) and of course furthermore bolstered by natural science's fixation on a physicalist explanation (i.e., materialism). On the other hand, given the apparent playing field, including the mysterious differences long observed between monozygotic twins; little variable DNA to consider and potentially differentiate us; very impressive and growing search capacities; and many clear innate differences between humans (and arguably you do not need elaborate twins studies to appreciate this)-the unexpected broad failure of genetic searches appears to be both a practical fiasco and a large wakeup call suggesting that science's molecular-only (or physicalist) vision of life is overbooked.

The historical backdrop here is that the DNA molecule is supposed to have provided a physical (blueprint-like) basis for the evolution of life. And thus a massive 814 page evolutionary text like *Evolutionary Analysis* is first and foremost an ode to DNA's presumed ability to transcribe the working of natural selection, and behavioral dynamics were supposed to be a key factor (Mayr, 2001: p. 137). In an interesting example, among the Hawaiian genus of crickets, Laupala, there appear to be 38 separate species and the distinguishing aspect is the males' mating song along with the corresponding females' song preference. Those songs consist of simple series of pulses and amazingly the species-distinguishing feature appears to simply be the pulse frequency! What is of particular note here is that this dynamic has "astonishing[ly]" evaded efforts to isolate its genetic basis (Herron & Freeman, 2014: pp. 625-626).

Continuing, stunning behavioral conundrums are not hard to find including that some birds have demonstrated an innate knowledge of their migration routes (Watson, 2003); a number of animals—including dung beetles—appear to utilize the positions of nighttime stars in order to navigate (Sokol, 2021); humans appear to come equipped with elaborate spiritual or religious beliefs (Barrett, 2012; Luhrmann, 2020); and emerald jewel wasps carry out "[e]pic, absurdly complex [an understatement]" attacks on American cockroaches (Catania, 2021). Are such elaborate behaviors and beliefs really plausible given the haphazard and ambiguous nature of genomes (as evident for example in the differences between monozygotic twins)? I suggest here that a number of these innate capacities have genomic demands on par with the out-of-this-world capabilities demonstrated by some prodigies (Treffert, 2010; Solomon, 2012; Christopher, 2020a). Demands which even given success in behavioral genetics' general searches would appear implausible.

For those interested in an introduction to some human behavioral enigmas readers might look at the latter half of (Christopher, 2020a). Such phenomena

might be rare but they certainly provide neglected challenges to materialism's reliance on DNA. And for a brief tour through some evolutionary enigmas readers could see (Sheldrake, 2012) or (Christopher, 2022a).

Finally, the surrounding intellectual context here is notable. How many secular individuals—even among those interested in paranormal research—are willing to question the foundational DNA-based model of life (in which we are presumed in "deterministic" fashion to be created by, and dance to, the music of our conception-beget DNA)? And without such questioning how much is really left to debate? I suggest here that if you suspect that there is more to life and its evolution than molecular dynamics, then you should be wading into the unfolding foundational impasse that is the missing heritability problem.

4. Two Religion-Relevant Conundrums

Next, moving on to direct challenges to the physicalist vision of life that also can provide daylight for religious perspectives. Initially, consider the simple challenge terminal (or paradoxical) lucidity. That phenomenon was discussed in a *Scientific American* blog piece by the psychologist Jesse Bering entitled, "One Last Goodbye/The Strange Case of Terminal Lucidity" (Bering, 2014). In his writeup, Bering considered something that was perhaps first officially characterized in an article by German biologist Michael Nahm (Nahm, 2009). Nahm described terminal lucidity as:

The (re-)emergence of normal or unusually enhanced mental abilities in dull, unconscious, or mentally ill patients shortly before death, including considerable elevation of mood and spiritual affectation, or the ability to speak in a previously unusual spiritualized and elated manner [ibid.].

In a subsequent survey article, Nahm along with Bruce Greyson, mentioned that in a study of 49 cases, 41 of them involved surprising verbalizations during the last week of life (Nahm & Greyson, 2009). In 21 of the cases the verbalizations came on the same day as death. Additionally, in some cases, severely mentally impaired individuals had gradually returned to near normal lucidity before dying. Bering mentioned a case involving a man who had been catatonic for nearly 2 decades before his reemergence to a near normal state.

Other cases are considered elsewhere including in an article in *The Guardian* (Godfrey, 2021) and an article in *Psychology Today* (Mendoza, 2019). As one doctor pointed out after reviewing surveys, "it is safe to say that this phenomenon exists, and likely exists more often than we expect" (Godfrey, 2021). In such articles, some poignant episodes recalled by relatives who witnessed miraculous rejuvenations of seemingly cognitively-lost people were given. In one such case a witness recalled her grandmother rejuvenation:

She was sitting up in bed, smiling as we walked in. For the next two hours she laughed and joked, completely cognitive, coherent ... lucid. A lifetime of memory had returned, and we took advantage of it as she regaled with episodes from her past. My mum [mother], who knew many of them, quietly verified them. Her funny, eloquent, vibrant mother had returned. "It all came back to her in one rush," remembers my mum. "It was like a bolt of lightning. The clouds cleared." After we left that afternoon, my grandma slipped back into a semi-conscious state, soon not knowing who my mother was, and died within days [ibid.].

But the most striking case involved a severely disabled young woman named Anna ("Kathe") Katherina Ehmer. Her case occurred in 1922 and it had substantial verification as Kathe was a patient in a mental hospital and her sudden lucidity episode was observed by the hospital's chief physician Wilhem Wittneben and also its director Friedrich Happich. The two men independently and consistently (reportedly "[o]ver the years") communicated Kathe's spontaneous event. Kathe had been severely disabled and Happich described her as having been from birth on:

Seriously retarded. She had never learned to speak a single word. She stared for hours on a particular spot, then fidgeted for hours without a break. She gorged her food, fouled herself day and night, uttered an animal-like sound, and slept ... never [taking] notice of her environment even for a second (Bering, 2014).

She also apparently had suffered several bouts of severe meningitis infections which were believed to have damaged her cortical brain tissue. Kathe also experienced a bout of tuberculosis which led to the amputation of one of her legs.

Shortly after that amputation Kathe was lying in bed approaching death. At this point a number of staff members, including Wittneben and Happich, gathered to observe her stunning rejuvenation. As Happich described it:

Kathe who had never spoken a single word, being entirely mentally disabled from birth on, sang dying songs to herself. Specifically, she sang over and over again, "*Where does the soul find its home, its peace*? *Peace, peace, heavenly peace*!" For half an hour she sang. Her face, up to then so stultified, was transfigured and spiritualized. Then she quietly passed away (Bering, 2014).

In another article, it was reported that those "present were rendered speechless themselves; some sobbed in bewilderment; others felt they had witnessed a miracle of the soul" (Burnett III, 2018).

Terminal lucidity suggests the existence of a soul and in general it poses a conundrum for science. To his credit, Jesse Bering (who at one point had a blog at *Scientific American* and a job in psychology) wrote in understated fashion that, "on face value, one has to admit that the story of Kathe Ehmer is something of a puzzle" (Bering, 2014). Bering had some personal connection with terminal lucidity since he had been with his dying mother who had managed "five minutes of perfect communion with me when, ostensibly, all her cognitive func-

tions were already lost".

Other observations that provide possible evidence for the existence of souls include those associated with near death experiences (Holden et al., 2009) and also medium-based investigations (Carter, 2012). I add a bit on the latter as Chris Carter's book, *Science and the Afterlife Experience*, contains truly remarkable—and amazingly corroborated—accounts of apparent medium-based communications with deceased individuals. The sustained accounts offer what appears to be a consensus on a life-after-life dynamic with strong moral underpinnings. Furthermore, the accounts appear to have been communicated without reference to any existing religions. What is striking given contemporary norms, was that such investigations used to be acceptable enough that they were drawing in some outside researchers.

The final and most significant conundrum to consider here is the existence of our natural religion. It turns out that humans appear to come equipped with some basic religious/spiritual beliefs. Justin L. Barrett's book, *Born Believers—The Science of Children's Religious Belief*, presented evidence that infants tend to possess an innate understanding of the existence of souls/God/gods, to be believers in what Barrett termed a "natural religion" (Barrett, 2012). The book contained a number of striking examples including ones in which the positions of atheists' had been rebutted by their young children. As Barrett expressed "[c]hildren are prone to believe in supernatural beings such as spirits, ghosts, angels, devils, and gods during the first four years of life" (Barrett, 2012: p. 3). He later added:

Exactly why believing in souls or spirits that survive death is so natural for children (and adults) is an area of active research and debate. A consensus has emerged that children are born believers in some kind of afterlife, but not why this is (Barrett, 2012: p. 120).

This framework was also discussed in an article at a popular news site where they stated:

Olivera Petrovich, an Oxford University psychologist, surveyed several international studies of children aged 4 to 7 and found that the belief in God as a "creator" is "hardwired" in children and that "*atheism* is definitely an acquired position."

Paul Bloom, a professor of psychology and director of the Mind and Development Lab at Yale University, writes, "The universal themes of religion are not learned... They are part of human nature... Creationism – and belief in God—is bred in the bone" (Wallace, 2021).

Barrett additionally included a chapter listing some basic features of that innate religion. These were gleaned from interviews with young children and they suggest that we are born inclined to hold a number of beliefs including:

1) That there are "[s]uperhuman beings with thoughts, wants, perspectives, and emotions."

2) That "[e]lements of the natural world such as rocks, trees, mountains, and animals are purposefully and intentionally designed by some kind of superhuman being(s), who must therefore have superhuman power."

3) That "[s]uperhuman beings generally know things that humans do not (they can be super-knowing or super-perceiving, or both), perhaps particularly things that are important for human relations."

4) That "[s]uperhuman beings may be invisible and immortal, but they are not outside space and time". They also "have character, good, or bad."

5) That "[l]ike humans, superhuman beings have free will and can and do interact with people, sometimes rewarding and sometimes punishing them."

6) That "[m]oral norms are unchangeable, even by superhumans."

7) That "[p]eople may continue to exist without their earthly bodies after death" (Barrett, 2012: pp. 138-139).

Together then this suggests that children are inclined to believe that there is sort of an unseen, parallel complementary living realm. That realm is also believed to somehow make design-oriented contributions to the natural realm. Additionally, for those wondering about possible permission slips from physics, it is worth remembering that roughly 95 percent of the inferable universe is unaccounted for—the so-called dark matter and dark energy mysteries (Hossenfelder & McGaugh, 2018; Battersby, 2016).

Barrett went on to qualify these findings. In particular, he emphasized that such beliefs are conceptually simple and that their agreement with more typical religious theology is crude. He suggested that young children (and adults too) might be religious in a basic way, but on the other hand they are not inclined in a theological sense.

Justin Barrett did not address the possible validity of these beliefs, including the belief in an afterlife which was at least nominally an "area of active research and debate". These striking findings appeared to have been reflexively placed within the materialist framework, as some kind of fallout from evolution and nurture or "biology plus ordinary environment". Barrett, in fact, went so far as to suggest that research into "systems of the human mind" "make belief in some kind of god almost inevitable" (Barrett, 2012: p. 20). This statement and Barrett's followup, as well as similar content in work like T. M. Luhrmann's How God Becomes Real (Luhrmann, 2020), appear to be excellent examples of intellectual hegemony of materialism, since confidently concluding that our innate religious beliefs were the "almost inevitable" outcomes of evolution is frankly absurd. For some additional context here Steven Pinker succinctly described our particular slog through evolution as having been akin to a "camping trip that never end[ed]" (Pinker, 1997: p. 207). And thus, natural selection supposedly drove the selection of a (questionable) subset of spiritual belief-forming DNA variants as a result of the historical challenges encountered by our full-time camping ancestors.

Researchers like Barrett apparently found some satisfaction, though, in rebutting the routine argument that with regards to religious beliefs, people simply parrot what they've been taught. Barrett did offer an alternative explanation that he heard from an Indian man who had explained to him (in Barrett's words):

[T]hat on death, we go to be with God and are later reincarnated. As children had been with God more recently, they could understand God better than adults can. They had not yet forgotten or grown confused and distracted by the world. In a real sense, he explained, children came into this world knowing God more purely and accurately than adults do (Barrett, 2012: p. 2).

These innate religious/spiritual beliefs along with their origins would seem to open an obvious door towards investigating the possible validity of religious beliefs (including the existence of God). Instead of being cajoled into looking for meaning in remote and speculative topics—including of course within physics, or for that matter the paranormal realm—you might start at square one. We come into our lives already on board with basic religious/dualistic beliefs and in fact no scientist really has a clue how this could have happened. The combined challenges surrounding the requisite selection pressure dynamics, underlying genetic feasibility, and infant brain realization appear to be enormous.

In a simple personal example, years ago while being involved with an adult discussion questioning the existence of God—a child of about 3 years old walked into and interrupted the conversation and simply said, "There is a God". The child then paused and repeated this. As far as I know that 3-year-old had no supporting religious background and even if he did I doubt it would have mattered. It was striking to have an obviously sincere child insist on the existence of God with a conviction seemingly on par with a declaration of "I need to go to the bathroom". I suggest that such an occurrence (which Barrett suggests are not uncommon) offers far more relevance to discussions on the possible existence of God than anything put forth by intellectuals. I also had an unprompted reincarnation dynamic suggested to me by a young child.

The resulting big dichotomy appears to be simple. If our natural religion/spiritual-orientation is truly stored in DNA (and then subsequently realized in young brains) this would appear to provide strong confirmation of the scientific (essentially null) take on religious beliefs. A feasible preliminary to this would be a serious argument on how this could have fallen out of natural selection and ultimately been stored in DNA. If on the other hand, they are not genetically-based or conceivably so then that could be consistent with the possible existence of God/gods/souls as commonly taught by religions. In connection with that possibility there could have been an earlier observation by the soul of those religious elements (analogous to before-life origins for prodigal abilities), or such beliefs could have somehow been shoehorned into us in non-material fashion. Thus these two explanations for our natural spiritual instincts would be that they reflect either some kind of empty evolutionary-genetic fallout (as currently assumed by science), or that they represent our crude take on something deeper, respectively. These two explanations offer very different perspectives on life and death.

In a brief sample of the contemporary trend towards secularization, consider my experiences with the religious detour that is for the most part Buddhism in the West (for more (Christopher, 2020b)). As part of some visits to a prominent local Buddhist center I decided to attend some of their non-meditational group sessions. The first session passed without touching on deeper issues; it was more akin to a group therapy session. The second session was dominated by an individual's concerns over their planned gender-changing agenda and how the center members might better relate with those challenges. At the end of this hour long-ish, gender-focused session someone raised the issue of death. The questioner was obviously distraught over the death of someone who previously had a prominent connection to the center. This person's stated concern was received with absolute (no pun intended) dead silence. No response at all. At the subsequent breakup of the meeting I talked with the unsettled individual and mentioned some of purported religious aspects of their chants and practices (which if you bother to notice are framed in a life-after-life perspective). They seemed pleased to hear this and in fact yelled out their window to me as I walked home that day.

The center happened to be the Rochester Zen Center and the sessions I attended were identified as those of the "Living and Dying" group. Much of what I witnessed I think was essentially par for the course including their stringent denial of the religious framework of traditional Buddhist practice (which in fact prominently includes funeral ceremonies). Also, as I have come to expect there was some pretentious filler with references made to quantum mechanics and a should-be-famous, non-quote by Albert Einstein (Lopez, 2012). Along these lines, in other works I have cited a Western Buddhist teacher's characterization of their own "profound embarrassment" over that religious framework, and on the other hand their satisfaction with Buddhism's apparent "resonance with quantum physics, cutting edge neuroscience, and modern rationality" (Spellmeyer, 2015). To put it politely, a thoroughly embarrassing pile of nonsense. Beyond this there is now a whole official atheistic modern Buddhist movement.

I suggest that currently among many educated people such science-ification has effectively derailed consideration for deeper aspects of life and death (and meaning). Science spokesperson's such as Steven Pinker and Sam Harris may relish this development, but I question its accuracy and also impact on the human spirit.

5. Discussions

5.1. The State of Neuroscience

The opening descriptions of the scientific vision of life appear to be matter-of-fact facts for many allied with science (including nominally religious ones like the biologist Goodenough). In fact in a *New York Times* review of Barnes' book Garrison Keillor simply commented, "[a]ll true so far as it goes, but so what" (Keillor, 2008). Perhaps excepting his deflation of the "modern secular heaven", isn't Barnes' take on life essentially the default for modern secular educational systems? On a more subtle point here, considerable effort seems to be made by the secular to minimize the stark implications associated with the scientific vision (and Barnes in his book made a noteworthy break from this).

Science is thoroughly fixated on a material-only explanation for life. Beyond the challenges to genetic assumptions considered here it is worth considering a little the somewhat parallel state of neuroscience too. Neuroscience' confidence in a materialist vision is not hard to find, even in a clinically-oriented friendly book like V. S. Ramachandran and S. Blakeslee's *Phantoms in the Brain* (Ramachandran & Blakeslee, 1998). In that book readers are informed that over the "last three decades" (circa 1998) neuroscientists "have learned a great deal about the laws of mental life and about how these laws emerge from the brain" [ibid., p.256]. Ramachandran wrote about the "exhilarating" progress that had been made but acknowledged that this process had left many "uncomfortable". As he wrote:

[i]t seems somehow disconcerting to be told that your life, all your hopes, triumphs and aspirations simply arise from the activity of neurons in your brain. But far from being humiliating, this idea is ennobling, I think. Science—cosmology, evolution and especially the brain sciences are telling us that we have no privileged position in the universe and that our sense of having a private nonmaterial soul "watching the world" is really an illusion (Ramachandran & Blakeslee, 1998: p. 256).

Ramachandran went on to offer an additional consolation that this selfless state was consistent with the intellectual take on "Eastern mystical traditions". Somehow we should feel "liberat[ed]" and "ennobl[ed]" that we can partake in this parade of intellectual certainty and simultaneously score some intellectualized "Eastern mystical" points. From such sentiments you can sense some of the continuity and popularity of Sam Harris' subsequent *Waking Up* effort.

The problem here is that, factually this position is easily questioned (even if some people are "uncomfortable" with that possibility). As a warm-up to this, it is worth leaping ahead from the apparent enlightened state of neuroscience in 1998 to the year 2014 as reflected in large survey article in *Scientific American* entitled, "The New Century of the Brain—Big Science lights the way to an understanding of how the world's most complex machine gives rise to our thoughts and emotions" (Yuste & Church, 2014). Beyond the apparent optimism of title was a very sober message about the current state of knowledge and the enormous obstacles to be overcome if neural materialism is to be confirmed. The opening paragraph read:

Despite a century of sustained research, brain scientists remain ignorant of the workings of the three-pound organ that is the seat of all conscious activity. Many have tried to attack this problem by examining the nervous systems of simpler organisms. In fact, almost 30 years have passed since investigators mapped the connections among each of the 302 nerve cells in the round worm Caenorhabditis elegans. Yet the worm-wiring diagram did not yield an understanding of how these connections give rise to even rudimentary behaviors such as feeding and sex. What was missing were data relating the activity of neurons to specific behaviors.

They went on to point how deceptive popular examples to the contrary are and how huge experimental developments would be needed to try to meaningfully observe the functioning of a brain.

But I suggest to really see the limits of brain science's position and possible potential for religious perspectives—it is best to look at discrete conditions and neuroscience's understanding there. Three conditions standout for the scientific (and public) attention they have drawn—schizophrenia, autism, and Alzheimers. The notable points here are their origins. Autism and schizophrenia are in large part presumed to be genetic (inferred through family and twin studies) and also for their physical (or neural-mechanical) nature. That is what causes the conditions, and also what the conditions themselves physically or neurally entail. For the two genetically influenced conditions, schizophrenia and autism—the genetic searches have failed and for all three—perhaps even more remarkably neuroscience is still grasping at models to try to describe the functional basis of the conditions.

A good example of this situation showed up in a *New York Times* article, "The 'Nation's Psychiatrist' Takes Stock, With Frustration" by Ellen Barry (Barry, 2022). The article reflected on a new book by the retired head of the National Institute of Mental Health, Dr. Thomas P. Insel. Insel had headed NIMH for 13 years and steered their resources "away from behavioral research and toward neuroscience and genetics [or a basic science approach]" in particular as Insel put it, he had "bet big on genomics." And his book's take on the outcome was that ever bigger searches were required implying that many variants making even "smaller and smaller effects" were responsible. Insel—like other geneticists—pretty much have to draw this conclusion because science has bet everything on DNA, and thus the unfolding failures imply they need to search ever more for more complex DNA explanations (which does not appear consistent with known genetically-influenced conditions). Insel in his book in fact states he feels we need to "double down" on basic research.

Additionally, natural science's materialist fixation came out indirectly in an interview with Dr. Allen Frances of Duke University. Frances had opposed the big bet on genes and yet was recently quoted as saying:

[t]he end result of these last 30 years is an exciting intellectual adventure, one of the more fascinating pieces of science in our lifetimes, but it hasn't helped a single patient.

What is of note here is that even a critic felt compelled to put a positive spin

on what has been an enormous failure (for details on the vast scope of the efforts and their outcome see "Schizophrenia's Unyielding Mystery" (Balter, 2017)). And a neglected and significant practical mystery here is that "[s]chizophrenia has a more benign course and outcome in the developing world" (Luhrmann, 2012). In fact, in our country, people with schizophrenia commonly spend a lot of time homeless in part because "[t]hey dislike the diagnosis even more than the idea of being out on the street, because for them the idea of being 'crazy'" is worse. Additionally, Luhrmann wrote that "Indian families don't treat people with schizophrenia as if they have a soul-destroying illness." This from Tanya Luhrmann, who like Justin Barrett, has dedicated a good chunk of her career to dismissing the potential validity of religious beliefs.

What is of further note here is that whatever their causal origins, neuroscience has yet to identify the functional basis for such conditions. While there have been a number of publicized hypothesis—involving amyloid plaque for Alzheimer's disease and mirror neurons for autism—they have not panned out (Kosik, 2020; Mosbergen, 2022; Napolitan, 2021). These are still basic functional mysteries. And now with increasing awareness of terminal/paradoxical lucidity it would seem that whatever explanation neuroscience identifies they will also have to explain how such profound conditions can dissipate in transient fashion prior to death.

The confidence of neuroscience—like that of genetics is not subtle. In a recent popular article dealing with the timing of death, the neurologist Michale Stanley made a number of confident claims including "[t]he brain is what makes you, you" and "there is no evidence of an active mind without living brain" (Stanley, 2022). So what feasible brain changes allow for the cognitive realization of "you"; the subsequent negation of "you"; and the subsequent re-realization of "you"?

5.2. Existing Approaches to Supporting Religious Beliefs

There have been many arguments used to support religious beliefs. For an overview readers might see (Stanford, 2021; Stanford, 2022). These include numerous philosophical arguments, including those centered on the implications and possible sources of human ethics. There have also been arguments that utilize elaborate physics-based reasoning including work such as (Tipler, 1994) and (Haisch, 2006). Additionally, there is an apparent large ongoing fascination with famous physicists who happened to have made reference to "God" (these include Albert Einstein and Steven Hawking). Together I suggest that the prominence of this apparent influence highlights how super-sized the import of physics is in the modern intellectual arena.

In the modern era, there have also been efforts to sanctify religious impulses not through support for the underlying beliefs, but as a kind of science-certified (materialist) fallout from evolution. This is reflected in the aforementioned works by Justin Barrett and Tanya Luhrmann. It also reflected in books by Andrew Newberg (Newberg, D'Aquili, & Rause, 2001; Newberg & Waldman, 2006) in which speculation about the neural correlates associated with religious practices is taken as further science-certification of those practices (and their presumed evolutionary basis). This is not subtle in books with such titles as *Why We Believe What We Believe* and *Why God Won't Go Away*. And the latter book even includes the prominent endorsements by religious figures who are apparently very pleased to find religious perspectives presumably vindicated via neural images. In a crude counterexample, if someone has a stomachache there might be relatively unique neural correlates to that condition, but there is also more to the condition than a neural state.

Another contemporary argument which has garnered quite a bit of attention is intelligent design (Meyer, 2013). But does intelligent design in fact even challenge the robotic determinism that naturally falls out of materialism? One might argue that Steven Meyer's optimistic take on DNA's biological functioning—including the apparent minimization of the junk/neutral portion of DNA—further encourages a belief in genetic determinism. Additionally, how could this more efficient view of DNA be consistent with the much larger genomes of simpler species, the obvious differences found between monozygotic twins, or more generally the unfolding missing heritability problem?

Ultimately, do any of these established efforts to bolster religious beliefs offer significant direct evidence supporting the realities purported by such beliefs? Do they challenge the materialist vision of you and your life, including hopefully providing some support for the existence of a soul and free will? Do arguments with regards to the ability of the universe to support life, or arguments claiming that evolution likely required outside steerage to arrive at intelligent life, in the end diminish science's bio-robotic vision of life? In a similar vein do they offer an alternative vision of how, seemingly against all odds, homo sapiens showed up? As long as the scientific vision of life (and its evolution) holds - being molecular-only and DNA-directed—what kind of deeper aspects of life are really feasible?

On the other hand, the unfolding failure of the DNA searches suggests that something else is going on. Such a general break—in and of itself should be significant to those trying to make objective sense of religious (or deeper) perspectives. When combined with phenomena such as terminal lucidity and our natural religion more direct arguments appear possible. Both phenomena suggest that beneath the surface there is a deeper spiritual/religious reality which belies our molecular descriptions.

6. Conclusion

For those interested in questioning this "biochemistry and biophysics"—only vision of life and in particular making sense out of religious or spiritual perspectives, some potential avenues have been suggested. Acceptance for such efforts within academia, though appears to be very limited.

Investigations of the phenomena associated with our natural religion and se-

condarily, terminal lucidity could be significant to any understanding of possible deeper aspects of life. Additionally, they represent clear challenges for science.

Questions abound surrounding our innate spiritual beliefs including of course the belief in a design impact but perhaps if the intervening stage (in a sequential life dynamic) involved psyche projections (as in dreaming) (Fremantle & Trungpa, 1992; Carter, 2012; Christopher, 2022b) that might contribute to a young child's belief in designs. One test of that hypothesis could come with investigations of natural religion around the globe. If our embodied experiences condition or shape our disembodied perceptions, then perhaps young kids from different cultures would display differing "natural religions" (analogous to the variations shown with NDEs from around the world). Nonetheless, in one way and another, our innate religion should draw more attention.

Continuing, for a very fine overview of clinical experiences with terminal lucidity readers can see the 2012 paper by Michael Nahm, Bruce Greyson, Emily Williams Kelly, and Erlendur Haraldsson (Nahm et al., 2012). Additionally, for further critical looks at the Religion-versus-Science terrain readers might see (Christopher, 2017; Christopher, 2020b) and for consideration of the implications associated with a spiritual/religious perspective readers might see Christopher, 2020c). For a truly remarkable deeper perspective on life—along with its stunningly lived realization—readers can see Jacque Lusseyran's *And There Was Light* (Lusseyran, 2014). And finally, for a strikingly broad discourse on relevant matters there is Sri Nisargadatta's *I Am That* (Nisargadatta, 1973). Nisargadatta's intellectually-humbling suggestion that the bottom line is "earnestness" is noteworthy. The suggested deeper spiritual/religious aspects of life might simply demand that we behave ethically, help out when possible, and hang in there and learn our lessons.

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Conflicts of Interest

The author declares no conflicts of interest.

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