The Almost Obvious Case for a Transcendental Understanding of Life

Abstract - The follow-up to the Human Genome Project has found very little to connect variations in our DNA blueprints to some of our basic individual characteristics. This very surprising "missing heritability" problem, plus a number of existing under-appreciated challenges to the DNA-based model, together are consistent with an underlying complementary transcendental contribution to life. Some of the behavioral challenges for DNA and the material-only model are quite suggestive of transcendental contributions. This possible overlap between an apparent hole in the scientific understanding of life and the common premodern transcendental perspective is introduced here.

Science's understanding of life is based on a material-only, mechanistic model. This bio-robot like paradigm has essentially carved-in-stone status amongst scientists and intellectuals, and beyond this it appears to be largely unquestioned within modern societies. The ground floor of this model, as Richard Dawkins has put it, is that our DNA "created us, body and mind"[1], and as such we are very fortunate "to be alive, given that the vast majority of people who could potentially be thrown up by the combinatorial lottery of DNA will in fact never be born".[2] This view of DNA as individual-defining and also of conception as a lottery-like event, are in turn the basis of the ultimate scientific theory about life - evolution.

The DNA blueprint paradigm can be encountered in many fields and in particular it is the fundamental belief driving much of modern medical research. Thus in the summer of 2000 President Bill Clinton was simply offering the biomedical consensus when he stated that the Human Genome Project will "revolutionize the diagnosis, prevention and treatment of most, if not all, human diseases".[3] The associated "personalized medicine" strategy consists of developing the capabilities to identify peoples' DNA-given susceptibilities to serious diseases, and also using the relevant DNA insights to provide helpful medications and treatments. Disease susceptibilities vary amongst individuals, as is apparent with the gross inheritance patterns visible amongst families, and these should - so the mechanical reasoning goes - be related to the underlying DNA.

Ten years after successfully completing a rough draft of humans' DNA or genome, though, scientists are still searching for the DNA origins of those susceptibilities. The central follow-up to the Human Genome Project has after a "tour de force" effort - in a "beyond belief" finding - identified "almost nothing" connecting the common variations in DNA to the occurrences of

common serious diseases like cancer, diabetes, and mental illnesses.[4] Another researcher characterized this effort as a "magnificent failure"[3]. To see some relevant numbers, for type 2 diabetes it was reported that:

> association studies analyzing 2.2 million SNPs in more than 10,000 people have identified 18 SNPs associated with the disease, yet these sites in total explain only 6 percent of the heritability of the disease - and almost none of the causal biology.[3]

(SNP's are sites of single DNA nucleotide or letter variations amongst individuals, which in turn tend to coexists - and thus flag - larger variations in nearby gene portions of the DNA). With the above numbers one might wonder about the statistical creditability of a 6 percent contribution distributed amongst 18 contributors. Those are very thin slices of the heritability pie and thus perhaps the fears of some scientists that such "almost nothing" correlations are simply statistical illusions.[5]

Similarly it was expected that intelligence as measured in academic tests would have substantial DNA origins. About intelligence, psychologist Erik Turkheimer claimed that it and "intelligence test scores are in many ways the best predictor in all of psychology" and its innateness is reflected in that "[i]t's something that everybody observes in others". But after again examining the common DNA variants only 0.4 percent of the variation in intelligence test scores was accounted for.[6]

As scientists scramble around in search of these elusive DNA origins, it is worth noting that there appear to be bigger challenges facing the DNA-based model and that together these material-only enigmas are consistent with the common premodern transcendental understanding of life ("transcendental" will be used here as a general term in place of a number of existing terms). In particular in the realm of behavior there are a number of science-confounding phenomena including inexplicable phobias or philias, prodigies, unexpected sexual orientations, and wholesale anomalies such as children born nerd-inclined[7]. Also work by Ian Stevenson, Jim Tucker, and others suggested that some children have experienced explicit recall of a previous life[8,9], and additionally a psychology experiment that suggested that most young children do not view death as the end of psychological being.[10] What material-only explanation comes to mind when encountering people who have spent their entire lives wishing they were the opposite sex and a related recent study that found that many of them who have undergone sex-change efforts (transitioned) "knew they had been born into the wrong gender from childhood"?[11,12]

This article will introduce some of the apparent hole in the material-only understanding of life and with it a complementary transcendental explanation. With the latter there is somewhat of

a partition between the relatively intuitive or obvious explanations involving transcendental continuity, and then the much more puzzling explanations involving possible transcendental cause-and-effect relationships (and thus a possible disease occurrence connection). The premodern transcendental perspective appears to offer a deeper and more constructive attitude towards life, including a big motivational boost for sustainability action. It also implies the existence of a soul which could be crudely perceivable as our sense of an underlying time-less me which is a foundation of our religious instincts and an aspect of consciousness that neuroscience "has utterly failed to satisfactorily explain".[13]

A good starting point to see some of the difficulties facing the material-only model and also the fit of the transcendental model, is with monozygotic or identical twins. The cause of the origin of monozygotic twins - the initial split or division of a single cell zygote - is a mystery. So is its occurrence only in some species. Further, similar appearances and biological-presumptions aside, the empirical realities of the resulting twins represent a sweeping rebut to the DNA "created us body and mind" logic and also more generally a very big challenge to the encompassing scientific materialism.

These DNA-replicas whether they were raised together or separately, have been observed to on average be more different than alike personality-wise. Thus these clones can closely share the same environment or inhabit separate ones and still they appear to have comparably different personalities. With some personal exposure to such twins or perhaps reviewing relevant study data it should not come as a surprise that one conjoined (attached) monozygotic twin commented that "[w]e are two completely separate individuals who are stuck to each other. We have different world views, we have different lifestyles, we think very differently about issues".[14]

Yet in cases in which identical twins were separated at birth, they can still share remarkably specific behavioral tendencies or preferences. From the small and perhaps questionable stuff (with enough searching any pair of individuals might find they share some little preferences) to the big and life-defining stuff - like becoming very dedicated volunteer firemen.[15] This phenomenon has been used as strong evidence for the life-defining import of DNA, but set against the big and seemingly innate personality differences between such twins, it appears to be just another mystery.

The surprising health disconnect between monozygotic twins was nicely chronicled in a *New York Times* article by Gina Kolata.[16] The article opens by describing a healthy and active 92 year old and her identical twin. The latter "is incontinent, she has had a hip replacement, and she has

a degenerative disorder that destroyed most of her vision ... [and] has dementia". Yet the two have the same DNA, grew up together, and lived their lives in the same place. They also had very different personalities and ambitions.

The centerpiece of the Kolata article was a large study comparing the variations in longevities amongst identical and same-sex fraternal (or dizygotic) twins. Together the twins in the study together totaled 10,251 pairs. It was found that the identical twins died only slightly closer than the fraternal twins (who like non-twin siblings share only half of their variable or individual-distinguishing DNA) and specifically the deaths of the identical twins averaged over 10 years apart. Consistent with this one of the authors of the twin study commented "[h]ow tall your parents are compared to the average height explains 80 to 90 percent of how tall you are compared to the average person [but] only 3 percent of how long you live compared to the average person can be explained by how long your parents lived".

This inexplicable "randomness" was also noted amongst the longevity of genetically identical lab animals. Additionally, Dr. Robert Hoover of the National Cancer Institute was quoted from an editorial on the cancer connection, "there is a low absolute probability that a cancer will develop in a person whose identical twin - a person with an identical genome and many similar exposures - has the same type of cancer."

Another conundrum is the remarkable bond that tends to exist between identical twins, who "when separated at birth and reunited as adults, ... say they feel like they have known each other all their lives".[17] My own remembrances of growing up with exposure to such twins is that they seemed almost invisibly conjoined. In one of my childhood neighborhoods I can't even remember the local twins apart. Does this really make sibling-sense? How does this jive with the fact that siblicide is in fact common in nature?[18]

This introduction to the monozygotic mysteries closes by noting that large studies have implied a big socio-economic dependence with DNA's influence on their intelligence scores. As was reported about the work of Eric Turkheimer and colleagues, twin studies have concluded that:

> [i]n children from affluent families, about 60 percent of the variance in IQ scores could be accounted for by genes. For children from impoverished families, on the other hand, genes accounted for almost none.[6]

(The encompassing behavioral genetics framework compared the relative degrees of similarity found between monozygotic and dizygotic twin test scores, and then inferred DNA's contribution based on their respective fractions of shared variable DNA - all and one half.)

One might argue that the above 60 percent figure for DNA's affluent contribution implies unexpectedly large differences amongst the affluent identical twin test scores, but moving on, the "almost none" impoverished figure is simply material-only nonsense. These were biological replicas - growing up seemingly velcro'd to one and another - and they appear to differ in intelligence scores very much like regular siblings (who share only half of their variable DNA), and in turn implying these twins differ like pairs of unrelated, same-sex children chosen randomly from the impoverished sector. Consider this scenario - including the socio-economic dependence - if the context was instead another bodily attribute such as the shape of a person's nose.

Alternatively, a transcendental explanation of the overall monozygotic scenario is conceptually simple. In it identical twins were close before their current life, perhaps having recently shared a career together or having done a stint as identical twins. This closeness brought them together to be born as monozygotics and behavioral continuity tends to result in roughly similar personalities - as is often found between close friends. This same continuity also provides for some shared behavioral and possibly occupational preferences. Their transcendental connection, and perhaps particularly their disembodied pre-birth experiences together, offers an explanation for their unbelievable closeness. Superficially, such twins are material-only replicas produced by the same DNA blueprint, but underneath there are two separate beings with mostly separate backgrounds accounting for much of their unexpected differences.

One subtle explanatory point concerns the socio-economic dependence of their intelligence scores. One of the defining characteristics amongst many of the poor in America is that educational achievement and thus intelligence are relatively low priorities. In this circumstance one would expect to have close friendships be relatively uncorrelated on intelligence. Things that are not a big deal to us do not play a significant role in our selection of friends. Transcendental continuity could then preserve this relationship in begetting identical twins in this realm of relatively different intelligences.

Finally, from a transcendental perspective the drive of two souls for mutual incarnation could be the cause of the initial split of the single zygote. Along similar lines the select species in which monozygotic twins occur could reflect the limitations of such a drive for mutual incarnation.

The origins of my interest in a transcendental view are personal. As a young child I had repeated intense dreams which had no apparent connection to my life. I also experienced a deep and inexplicable phobia. Together with some features of my body I sensed a connection to

someone who had died in an unpleasant fashion. As an adult I noted some agreement between these observations and the possible reincarnation cases considered by the late Ian Stevenson. Then later I read details of how some members of a group died in a difficult situation and this immediately struck a chord. Not only was the dying scenario consistent with my assessment, but more generally there was prominent continuity between my life and the interests, priorities, and practices of that group. My immediate and lasting impression was that this kind of transcendental process is very likely general.

Historically, the transcendental continuity hypothesis was apparently come upon long ago, independently by many small groups. In *M'Clintock and Strong's Cyclopaedia of Biblical, Theological and Ecclesiastical Literature* it is said "[t]ransmigration, dating back to a remote antiquity, and being spread all over the world, seems to be anthropologically innate, and to be the first form in which the idea of immortality occurred to man".[19] Perhaps the apparent transcendental continuity of personalities in small (and undistracted) populations initiated and amplified the credibility of the hypothesis. The origins of the commonly associated and very subtle transcendental cause-and-effect hypothesis, and thus possible disease occurrence connection, appears to be a giant question mark, though.

Any significant transcendental import would have to be overlapping and also complementary to the DNA business. If an incarnating soul was drawn to their parents-to-be then that soul might tend to find some continuity in the conception-beget DNA specifics - beyond the species and sex default codes. This could include DNA-determined unusual conditions. But beyond this overlapping aspect, though, the odds that the crapshoot of conception would deliver a variable DNA match for a soul's overall trajectory is zilch. The material-only DNA definition would have to be breached in many ways. Conversely, to the degree that science can show that the conception-beget DNA plus realistic environmental impacts define individuals, then this would minimize the import associated with possible transcendental phenomena. Monozygotic twins are thus of prime interest.

From the transcendental perspective I think the early childhood years represent a profound shift. The underlying soul becomes increasingly accustomed to the body-mind carrier and its challenges, and simultaneously the previous very different disembodied experience fades out. From some personal observations, I suggest that eventually there is a fearful transition in which the identification with the body-mind - and its apparent mortality - becomes essentially complete, leaving only a slight sense of dualism which is our underlying religious sense. Further this transition could be coincident with the mysterious onset of childhood amnesia in which we lose

memories of our first three or four years.[9(p90)] Thus childhood amnesia could be an artifact of the soul's shedding or repressing of its memories of the previous disembodied experience.

The transcendental framework offers an as is explanation for our innate sense of a soul. No surprising fallout from the material-only evolutionary process needed. An explicit and clearly innate example of this dualistic sense can be found in Paul Bloom's *Descartes Baby: How the Science of Child Development Explains What Makes Us Human*.[10] The work cited involved telling four-to-six-year-olds a story in which a mouse gets eaten by an alligator. Subsequent questioning confirmed that the children appreciated the biological implications of death - "no need for bathroom breaks, the ears don't work and neither does the brain". But on the subject of psychological functioning, "over half of the children said that they would continue - the mouse can experience hunger, thoughts".[10(p207-208)] The remaining children could have already experienced the aforementioned identification with the body-mind. Bloom presents this phenomena as evolutionary fallout, but as an academic scientist what else could he do?

It seems remarkable that the material-only paradigm is currently so unquestioned. Personality mysteries are very common and often not subtle. Here are some relevant observations from the 1600's from Joseph Glanvill, Chaplain to King Charles II:

> To say that all this [individual] variety proceeds primarily from the mere temper of our bodies is methinks a very poor and unsatisfying account. For those that are the most like in the temper, air, and complexion of their bodies, are yet of a vastly differing genius [tendencies]. . . . What then can we conjecture is the cause of all this diversity, but that we had taken a great delight and pleasure in some things like and analogous unto these in a former condition?[19(p122)]

Environmental explanations - and with them behavioral genetics - are very questionable. Studies have concluded that only 5 percent or less of an individual's personality is attributable to their interaction with their parents. Conversely, behavioral genetics' majority (and third law) contributor is usually an imagined "other" or "unique" environment. Additionally, diverse and very surprising personalities have also been observed amongst a number of species.[20,21]

A number of health-relevant behavioral tendencies also appear to have heritable contributions. Their presumed DNA contributors or origins - along with those of the common complex diseases - are currently (physics-style) labelled "dark matter". As described in Francis Collins' 2010 book, *The Language of Life: DNA and the Revolution in Personalized Medicine*[22] these include the tendencies to become addicted to alcohol and tobacco.

The genetic roots of the susceptibility to alcoholism, though, are difficult to find.[23] The tendencies toward cigarette addiction are striking, as reported by Joseph R. DiFranza, "some youths had symptoms of addiction after smoking just one or two cigarettes".[24] An alternative to the searches for the associated elusive and remarkably potent DNA codes, is to consider transcendental continuity. Some relevant cases can be found in the reincarnation literature[8(p54),9(p86-89)] and more generally an underlying dynamic of souls tending to be drawn or attracted to their parents offers a coherent explanation of the crude heredity patterns (forget Mendel's Laws) that are the norm in the "dark matter" realm. From this perspective if an individual is hooked on drinking or smoking, then this could then be a factor in their subsequent rebirth route.

An apparently innate and essentially fixed tendency that Francis Collins' also considered was male exclusive homosexuality.[22(p204-205)] This appears to be established by birth and of course is a challenge to evolutionary reasoning. The DNA contributions can not be big, though, since when one monozygotic twin is gay then the other twin is gay in only about 20 to 30 percent of cases (against a backdrop overall gay frequency of 2 to 4 percent). Additionally, it appears empirically-solid that the likelihood of a male having a homosexual orientation increases by about 30 percent for each older brother preceding him. Thus a material-only gay explanation has to identify a very loose DNA contribution, find the means to ramp up the likelihood by 30 percent per older brother (apparently via the mother's previous boy-pregnancy experiences), and also identify some other very subtle prenatal environmental influences to allow for the differentiation of identical twins. From a transcendental perspective there is no reason to expect anything of DNA (other than a Y chromosome), being gay just happens to reflect a soul's trajectory (perhaps involving a previous gender change). The 20 to 30 percent monozygotic gay agreement could reflect their previous relative closeness. The 30 percent per older brother dynamic could reflect a secondary rebirth draw for such a soul. The more boy's present - male energy if you will - then the greater the draw to that couple and family.

Considered here is a relevant sample of science's trajectory. In a recent article, "Faulty Circuits", the director of the National Institute of Mental Health, Thomas R. Insel, portrayed science's current understanding of mental illnesses.[25] In it a hardware or circuit-based view - as opposed to the traditional psychological view - was espoused. Included were explicit analogies to electrical circuits and reference to treatment goals "akin to 'rebooting' a computer". An early paragraph laid out a number of the key positions:

> Many illnesses previously defined as "mental" are now recognized to have a biological cause: in autism, for example, it is an abnormality in the connections between neurons, often attributable to genetic mutations; schizophrenia is now viewed and treated as a developmental brain disorder. Yet the public and even clinicians have had difficulty accepting that certain other mental disorders such as depression, obsessive-compulsive disorder (OCD) or post-traumatic stress disorder (PTSD) could also be physiological disorders of the brain.

The ongoing shift identified in the article is that "[t]he intellectual basis of this field is shifting from one discipline, based on subjective 'mental' phenomenon, to another, neuroscience".

One key assertion in Insel's article was subjective, though:

> Perhaps the most immediate result of approaching mental disorders as brain circuit disorders will be changing public perception of these illnesses. In different generations, people with mental illness have been stigmatized as possessed, dangerous, weak-willed or victimized by bad parents. Science supports none of this. A scientific approach to mental disorders could allow those who struggle with these illnesses to receive full acceptance and the high quality care they deserve.

Thus, the hardware-based perspective was claimed to offer a big subjective well-being boost and furthermore the new approach "very likely will revolutionize prevention and treatment and bring real and lasting relief to millions of people worldwide".

The basis for this confident science-backed presentation is not particularly good, though, A recent review article on autism mentioned that scans of some grade-schoolers had "found rare, novel genetic variation in children with autism".[26] The associated leader of that study commented:

> [t]he actual mutations are different [among individuals], but there may be some commonalities in the biological pathways.

The speculation here appears to be indicative of the transition within genetics now and in fact each of us has an estimated 100 to 200 genetic mutations[27] anyway. With schizophrenia science has found "almost nothing".[4] And of course, there was the depression gene disappointment.

Substantial rebuts to other assertions by Insel were found in an article by Ethan Watters, "The Americanization of Mental Health" (related to his book, *Crazy Like Us: The Globalization of the American Psyche* [52]).[28,29] Watters cited work done at the University of Connecticut by Sheila Mehta and Amerigo Farino[30] in which experiments involving students found more harsh treatment elicited towards towards individuals whose apparent dysfunction was described in "disease" terms instead of a "psychosocial explanation". Mehta and Farino's strong conclusions on

this point found a larger resonance with American and international data on public perception of the dangerousness of those suffering from schizophrenia. One study cited considered attitudes in Germany, Russia, and Mongolia and found that "irrespective of place ... endorsing biological factors as the cause of schizophrenia was associated with a greater desire for social distance." It is also not clear how changing science's current biochemical "factors" description to one involving circuits would improve the situation.

A second relevant point presented in Watters' article is that in the case of schizophrenia it appears that patients do worse in modern countries. The World Health Organization carried out three large studies over a period of 30 years in which it was found that schizophrenia "patients outside the United States and Europe had significantly lower relapse rates - as much as two thirds lower in one follow-up study". Developed countries appear to have "the most troubled and socially marginalized patients."

The respective mental health articles did agree on one key point, though. The extraordinary confidence of Insel's presentation seemed consistent with Watter's claims that "[f]or the last 50-odd years, Western mental-health professionals have been pushing what they call 'mental-health' literacy' on the rest of the world" and that "[c]ultures become more 'literate' as they adopted Western biomedical conceptions of diseases like depression and schizophrenia". What would it take for scientists to begin to consider traditional, non-material-only understandings of psyche-life? And perhaps to consider a bigger agenda than pacifying neural correlates?

The basic features of science's model of life are not complicated[31,32] and so are the under-appreciated empirical problems with them. A significant chunk of the latter can be found with the fundamental and intuitive challenges posed by monozygotic twins, challenges that effectively bellyflop on the foundational DNA "created us, body and mind" logic. But even as scientists increasingly backpedal from basic assumptions about DNA, it is very unlikely that they - or more generally academics or even journalists - will begin to question the encompassing material-only view of life. On the other hand, un-anchored and curious individuals can of course do so.

A recent letter to the editor by Dean Ornish highlighted a significant inertia barrier. In responding to a hard-boiled materialist Op-Ed piece entitled "A Fighting Spirit Won't Save Your Life", Ornish concluded his letter with:

> It's not all in our genes - for example, meditation beneficially changes gene expression. Positive emotions don't always override our genes, but they can play an impor-

> tant role. We're not victims; our genes are a predisposition, but genes are not our fate.

Even the alternative-oriented Ornish is effectively acknowledging the basic material-only, DNA-beget paradigm and then left making some points on the margins. Why not point out that bedrock genetic assumptions are striking out empirically?

In introducing some basic points here the scope has been limited almost exclusively to humans. I suspect the underlying transcendental process is general and also not species-bound, with a common thread being personality. The transcendental view could also potentially provide a significant motivational boost towards our sustainability challenge. In Michael Tobias's epic on man-versus-nature, *World War III*[33], the group identified for their sustainability priorities were the lay Jains.

Since the suggested transcendental living import would be independent of DNA, it does not appear it would have any direct impact on evolution. On the other hand, though, a transcendental connection would open up many possibilities. These include an underlying and complementary aspect of reality involving eternal souls; a rational foothold amongst religious beliefs and experiences - at least on the soul-side; and a large empirically-based backdrop for a number of science-taboo topics. It would also suggest that people long ago came upon something fundamental and possibly undermine the routine arrogant dismissal of premodern beliefs.

I close with a few personal observations. My move towards a more sustainable lifestyle has been relatively easy. One aspect of this has been the adoption of a plant-based diet which also offers health benefits[34,35] that seem consistent with the subtle cause-and-effect logic. Much more challenging has been following up on the deeper implications of the transcendental perspective. This has increased my emphasis on trying to be a good or helpful person and also - somewhat in tandem - trying to relate with, and learn from, my ongoing experiences of life. This latter attending to life is hard but rewarding. This approach is at odds with our increasingly distracted norms and also the intellectual inclinations of science and academia. Years ago I had inferred some positives associated with a transcendental perspective in the lives of some neighbors from Laos. Perhaps more generally this overlaps with some of the positive effects that can be found with other sincere religious people.

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