

**70,000 Years Ago--
The Origin of a Soul?**
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This talk is based on a book that I just wrote entitled, *The Soul's Upward Yearning*, a part of a quartet, published by Ignatius Press. This presentation will briefly address the contemporary evidence from science, medical studies, anthropology, and philosophy pointing to a transphysical soul capable of surviving bodily death.

Let's begin with a historical and anthropological puzzle. For a long time we have heard that human beings have evolved over the course of time, principally through physical and organic evolution – which is partially true. There is a traceable movement from *homo habilis* to *homo erectus* to *homo sapiens* which branched off into *homo sapien neanderthalensis* and *homo sapien sapiens* – the latter of which became modern human beings. Among *homo sapien sapiens* was a woman who geneticists have named “mitochondrial Eve.” She is the common woman ancestor of all human beings everywhere in the world today, and lived about 200,000 years ago. All of us – no matter where we are from – still have a genetic remnant from her called “mitochondrial DNA.” In the same period (200,000 years ago), there was a man who geneticists call “Y chromosome Adam” who is the common male ancestor of all men. He generated the Y chromosome which constitutes the DNA of all men today. So we might conclude from this that we have common genetic ancestry in two individuals who arose physically and biologically out of an evolutionary process, and who transmitted their DNA through continued physical and biological development to us.

However, as Pope Pius XII noted in 1950 in his encyclical *Humani Generis*-- this is not all there is to the story. A pure physical, organic evolution is only part of the truth of human origins because God has given every human being an individual and unique transphysical soul -- something that is not reducible to physics or to a physical evolutionary process. Since it is transphysical, it must have a transphysical cause – namely, God. We take that as a matter of faith as Catholics.

Is there any scientific, medical, anthropological, or rational evidence to back this up – or is it merely a matter of faith? As will be seen, there is considerable evidence from all these rational domains to corroborate the existence of our transcendental souls. The evidence given in this paper may seem quite sophisticated to those who are not acquainted with contemporary science, anthropology, and philosophy of mind, but I would implore you to familiarize yourselves with it—even imperfectly-- so that you can point others to something credible. I have found that most people can understand some of the basics of the anthropology given below as well as near death experiences and the five transcendental desires. These alone can form a convincing case for a transcendent soul. However, if more is desired or needed, you may want to move into the areas of Gödel's Proof (mathematics), Heuristic notions (philosophy of mind--Kant Lonergan and Eccles) and self-consciousness (philosophy of mind--Chalmers). Give it your

best shot – and when possible, tell searchers, sceptics, and potential metaphysical materialists to consider it.

I would like to clarify one important point before beginning my case for the soul – namely that Catholics are not against evolution. As Pope Pius XII noted in *Humani Generis*, we as Catholics are permitted to believe in evolution – the only thing we are prohibited from believing is a *pure* reductionistic physical evolution which precludes the existence of a unique human soul. Saint Pope John Paul II declared that evolution is more than a mere hypothesis or theory – it has significant arguments to commend its truth (presentation to the *Pontifical Academy of Sciences* 1996). But I am not here today to defend the scientific credibility of evolutionary theory – St. John Paul II has already done that. I am here to defend the existence of our transphysical, transcendental soul in a culture reticent to acknowledge it.

Let me return to the puzzle I mentioned earlier. There is a new book from the foremost linguistic theorist in the country -- Noam Chomsky, and an MIT professor of computational linguistics and computer science and engineering named Robert Berwick, entitled, *Why Only Us* (published by MIT Press in 2016).

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1. Noam Chomsky and Robert Berwick:

Why Only Us? 2016 MIT Press

2. The Communications explosion:

70,000 years ago—evidence of universal grammar.
Universal grammar= same syntactical pattern-globally.
Small Steps of evolution cannot explain their sudden occurrence.
It is not simply cranial capacity, but the capacity to grasp syntactical patterns.
Chomsky-hardwiring the brain?

Without delving into the complexities of their analysis, I will give their main point – that between 60,000 to 70,000 years ago, human beings developed a capacity for abstract, syntactical, and universal communication that no other species – not even our most proximate ancestors – developed. I will explain abstract, syntactical, and universal communication later. For the moment, bear two things in mind. First, there is no known or probative biological or genetic

explanation for this unique development in human beings, provoking the questions, “What caused it?” and “Was this cause physical or transphysical?” Secondly, it seems that the progeny between mitochondrial Eve/Y chromosome Adam (200,000 years ago) and their progeny who were invested with this abstract and syntactical linguistic ability (70,000 years ago) did not seem to do anything more significant than use stone tools, live in community, and hunt in tandem – and then suddenly, after 130,000 years, an explosion of language, discovery, religion, symbolism, art, and geographical exploration. What happened? And what caused it?

It seems that our genetic ancestors did convey a genetic-biological-physical profile to us, but they did not give everything to us that makes us human. Something else was added 130,000 years after them (70,000 years ago) that gave rise to the explosion of universal syntactical language, religion, art, mathematics, and the precursors to complex civilization. I would submit that this “something” is a transcendent soul, and that such a soul is the condition necessary for all of the above powers and characteristics – syntactical language, abstract mathematics, religion, symbolic art, and the free choice and moral awareness necessary for law and civilization. If I am correct, then the woman geneticists call “Mitochondrial Eve” was probably not biblical Eve (the first woman having the soul necessary for free choice and moral decisions) and the man geneticists call “Y-Chromosome Adam” was probably not biblical Adam (the first man having a soul capable of free choice and moral decisions). Before exploring this contention – and the evidence for a soul, we will want to probe more deeply into the findings of Noam Chomsky and Robert Berwick about the sudden and unique occurrence – explosion – of universal syntactical language.

What does Chomsky mean by this universal syntactical language? There are two basic characteristics. First, human beings can pass what might be called the syntactical test – which means they have enough abstract capability to differentiate between the meaning of a subject and a predicate – and to differentiate between the meaning of a subject and an object. Thus, very small children can understand the difference between “dog bites man” and “man bites dog” – and even see the humor in it. But no chimpanzee – which can learn 200 individual signs in American Sign Language – can make this distinction. They simply do not have the capacity for abstraction (necessary to relate distinct objects to one another in various categories) required to differentiate between subjects (in general) and objects (in general). Chomsky and Berwick believe that there might be a physical explanation linked to a special genetic switch affecting the brain, but they are far from showing how such a genetic switch or a patterning of brain modalities could give rise to the power of abstraction (necessary for relating objects to one another in various categories).

As I will explain later, predicates and objects are conceptual ideas (i.e. ideas *relating* objects and ideas to one another) and subjects are merely perceptual ideas (ideas referring to a single object – like a man or a banana). You will just have to take my word for it now, but conceptual ideas need a basis for relating ideas to one another – and we call this “basis for relating ideas” – “heuristic notions.” This is just a fancy way of saying that we need big general ideas to relate other less general ideas to one another. So what are these big general ideas – these heuristic notions? They are six questions with which we are all familiar -- the questions why,

how, how many, what, where, and when. As we shall see, these big general ideas could not have been abstracted from experience or from wiring or patterns in the brain, and this is what has caused philosophers like Bernard Lonergan, or the Nobel Prize winning physiologist, Sir John Eccles, to declare that they must have a transphysical status and origin – a soul. But we are getting ahead of ourselves here. I only say this now, because as I will contend, I do not think that Chomsky's and Berwick's explanation of the explosion of universal abstract language – namely, brain patterning and wiring – is adequate. Nevertheless, I believe their insight about this uniquely human phenomenon occurring 70,000 years ago is quite valid.

The second major point of Chomsky and Berwick is the universality of the uniquely human capacity to pass the syntax test. What is remarkable about human beings is that we could take a child from an African culture which has a rather unique way of expressing syntax and grammar, and place him, say, in a Chinese culture which has a totally different way of expressing syntax and grammar, and that child will be able to learn the syntax and grammar of that completely different language almost immediately – as if there were a universal syntax underlying every particular expression of it which young children understand from birth! I have my reasons for suspecting that this universal syntax must come not from a brain – but from the soul. I believe that the reasons for this have been articulated by Aristotle, Saint Augustine, and Saint Thomas Aquinas in the past – as well as Bernard Lonergan, Sir John Eccles, and Michael Polanyi today. I will discuss these points briefly later in the talk. For those interested in a detailed explanation of the correlation between universal syntax and a transphysical soul, please read my book, *The Soul's Upward Yearning: Clues to our Transcendent Nature from Experience and Reason* (Chapters 3&6).

So let's recap -- 70,000 years ago human beings acquired the capacity for universal syntactical abstraction. Chomsky and Berwick believe this might be explained by biology and genetics alone, but I would contend that it cannot – because of reasons given later. Recall that no other primate, no matter how sophisticated, has ever crossed the syntax threshold according to the studies of not only Noam Chomsky and Robert Berwick, but also Herbert Terrace and a variety of others. But this is not all – the minute human beings receive this capacity for universal syntactical abstraction (and universal abstract language), they also received six other capacities/tendencies as well.

So what else happened 70,000 years ago? Since human beings had the capacity for abstract syntactical language, they could communicate something *about* something – and they could answer the questions “What?” “Why?” “Where?” “When?” “How?” and “How many?” This enabled them to express themselves geographically, temporally, causally, symbolically, and even transcendently. This led to a tremendous explosion of exploration, discovery, art, and religion.

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60,000 year ago six events happened without genetic, biological, or anthropological explanations:

- Human beings develop syntactical language and symbols
- Human migrations out of Africa to whole world
- Humans have interest in religion and burying dead
- Human beings have interest in abstract art (on cave walls) –
- Human beings develop abstract numeration and math
- Human beings have interest in law and legal systems

[.././AppData/Local/Microsoft/Windows/INetCache/Content.Outlook/E53799AI/%09http://--www.smithsonianmag.com/history-journey-oldest-cave-paintings-world-%09180957685-?no-ist](http://www.smithsonianmag.com/history-journey-oldest-cave-paintings-world-180957685/?no-ist)

Here's a source for cave carvings inspired by religion from 70,000 years ago:

<http://www.smithsonianmag.com/history/journey-oldest-cave-paintings-world-180957685/?no-ist>

Let us examine a few of these new developments. First, human beings seemed to have stayed within the vicinity of the border between Angola and Namibia (in Africa) for 135,000 years – between Mitochondrial Eve-Y Chromosome Adam (200,000 years ago), and the great migration out of Africa (starting 65,000 years ago). In other words, sometime after receiving the capacity for universal, syntactical language, human beings began to migrate from an area in which they lived for 135,000 years and began to spread all over Africa. 5,000 years later, they are moving out of Africa into the Near East and Middle East – and from the Near East and Middle East into Europe and Asia – and from Europe and Asia to the northernmost areas of Siberia. Then they crossed the Arctic land bridge (which existed at that time) into the northernmost part of America, and then proceeded south, so that in 1,000 years they would move from the northernmost point of the western hemisphere to the southern tip of South America. What explains this radical transition from a rather sedentary human community on the border of Namibia and Angola, to world exploration? Was it simply a lack of food? Simply a desire to escape tribal enemies? Though this may have been part of the reason, it does not explain the rapid and world-wide expansion of the human population even on the oceans to Indonesia and even Australia. I would submit that there is something more than simple need – there was a “spirit” of curiosity and adventure – something absent in our most proximate ancestors – that engendered the spirit to discover and explore.

Something else also happened in this period -- human beings started burying their dead – treating the remains of their deceased with respect – and burying them with rituals and objects indicating a belief that they would survive their physical death (see, for example, a burial site with these objects from this period in the Skhul cave at Qafzeh, Israel). If humans did not believe in their spiritual nature or life after death, we might ask, “Why did they bother to bury their dead with great respect – and with rituals and objects?” And if they did have an awareness of their spiritual nature and life after death, we might ask the further question, “Where did they get this awareness from?” After all, 130,000 years of ancestors did no such thing – and then suddenly,

human beings seem to be doing it as a universal practice. Did this spiritual awareness – this awareness of something beyond the physical world also come from our transphysical soul?

We also see another development concomitant with burial and religion – art and symbolic representation. There are cave drawings with religious significance dating back to about 70,000 years ago in Leang Lompoa in Maros, Indonesia (see Jo Marchant in *Smithsonian* January 2016). See also cave drawings approximately 50,000 years old in the caves in Pettakere on the island of Sulawesi in Indonesia. The drawings of animals are rather well developed and have symbolic significance, indicating that they were probably preceded by more primitive attempts at art and symbolization. Many scholars believe that the animal drawings have sacred and cultural symbolic significance (see Ghosh, Pallab, “Cave paintings change ideas about the origins of art”).

In the same period, numeration systems (the precursor to formal mathematics) originated. Counting or tallying by using fingers on the hand undoubtedly preceded tallying with objects (such as sticks). This in turn preceded written numeration. Tallies made by carving notches in wood, bone, and stone were used for at least forty-thousand years before the development of written numeration systems (see George Ifrah 2000 *Universal History of Numbers*, pages 64-67). There is no evidence of abstract numeration in any other species except human beings. Did this originate from our heuristic notion of “how many?” – And can this innate heuristic notion (standing at the foundation of all quantitative relationships) be explained by programming of the brain? As noted earlier, it is quite unlikely. For it is one thing to program a brain (or computer) to count, but quite another thing to understand counting itself and its significance. It is these abstract concepts that elude mere programming or patterning of the brain. As Gödel's theorem reveals (addressed later), humans do mathematics very differently from computers. The latter follow programs while the former invent them. The former have an abstract understanding of numeration itself in all of its permutations, while the latter lack all such understanding.

Human communities having durable structures, some specialization of labor and commerce, and a sense of social norms began to arise as a result of migrations, differentiated linguistic systems resulting from those migrations, and the ability to barter and exchange on the basis of counting and tallying. Religion probably had a part to play in the origin of social norms underlying these settlements. It seems that as migration occurred, some groups stayed behind while others continued to migrate. Those who stayed behind used their linguistic and numeric capacities to specialize labor, and their religious instincts to solidify basic social norms and rules.

Why did this explosion of universal language, exploration and discovery, abstract numeration, religion, art, and social norms occur? Up to now we have only surmised that all of these events were interrelated and originated about 70,000 years ago – and that merely physicalist explanations (such as brain rewiring) may well be inadequate. In light of this, we have speculated that there may be a transphysical cause of these capacities – a transphysical cause of the heuristic notions underlying syntactical language and mathematics – a transphysical cause for human interest in religion and art – and even a transphysical cause of our indomitable

spirit of discovery and adventure. But is there any evidence that such a transphysical cause exists? Any evidence for a transphysical soul – or for the transcendental capacities to which we alluded above? Is there any evidence we can turn to *now* to reveal an adequate explanation for what happened back then – 70,000 years ago? I believe there is. Let me briefly discuss five kinds of evidence which I have explored in depth in *The Soul's Upward Yearning: Clues to Our Transcendent Nature from Experience and Reason*.

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Five indications of our Transphysical Soul

1. Medical Studies of Near-Death Experiences.
2. Five transcendental desires-from Plato to Lonergan.
3. Heuristic notions, conceptual ideas, and the Syntax Test.
4. The hard problem of consciousness- Chalmers.
5. Gödel's Theorem.

Let us begin with the first kind of evidence – peer-reviewed medical studies of near death experiences. Though there may be many valid anecdotal accounts of these near death experiences – some of which are written by esteemed physicians (such as Dr. Eben Alexander), I would recommend restricting ourselves to large, longitudinal, peer-reviewed medical studies of this phenomenon that reveal considerable verifiable data of the survival of human consciousness after bodily death. There are several such studies in the 21st Century.

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1. Near Death Experiences

Recent Peer Reviewed Medical Studies

1. Samuel Parnia, M.D., *et al.* —South Hampton University Study 2014
2. Pim van Lommel, M.D. *et al.* –Lancet Study 2001
3. Kenneth Ring, PhD *et al.* –NDEs and the Blind 1999
4. Janice Holden, PhD, -Combined Vertical Study 2007
5. Journal of Near Death Studies (International Association of Near Death Studies)

<http://iands.org/research/publications/journal-of-near-death-studies.html>

Of particular note are the studies of Dr. Samuel Parnia and his colleagues at South Hampton University in 2014 (reported in the peer-reviewed medical journal *Resuscitation*), the study of Dr. Pim van Lommel and his colleagues in the Netherlands in 2001 (reported in Britain's prestigious medical journal *The Lancet*), and the study of Dr. Kenneth Ring and his colleagues on the near death experiences of the blind in 1999, and the study of Dr. Janice Holden in which she combines 39 independent studies of veridical data during near death experiences.

So what do these studies find? They find that 85% of children and 20% of adults who undergo clinical death (flat EEG, fixed and dilated pupils, and absence of gag reflex), have an experience of leaving their physical bodies. They experience themselves having a transphysical soul which leaves their bodies, enabling them to see their bodies from a point above and beyond them.

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1. Near Death Experiences

What happens?

1. Clinical Data- Flat EEG, fixed pupils
2. Transphysical Soul-Body:

- Can see, hear, involuntary move
- Can remember and recall past memories
- Self-conscious, functional intelligence, emotions

3. Body stays in physical world- reporting data
4. Body transported to a heavenly domain

When the transphysical soul leaves the physical body (coincident with the onset of brain death marked by an absence of electrical activity in the cerebral cortex and minimal electrical activity in the lower brain), it is conscious – and so we should refer to it as a person. This conscious soul is capable of seeing and hearing, recalling past memories, remembering new memories, and movement. The person enjoys the same kind of self-awareness enjoyed before clinical death – and his or her new spiritual form is not subject to physical laws – that is, it can pass through walls of the operating room – and even the hospital itself – and can defy gravity.

Of great importance here is the transphysical soul's ability to see, hear, and remember objects and activities in the operating room or other different physical locations around it. This enables independent researchers after the fact to evaluate the veracity of data reported by the patients during the time of clinical death. So what kind of data is reported?

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1. NEAR DEATH EXPERIENCES

Vertical data- NDE's

1. Accurate reporting of verifiable data during clinical death.
2. 80% of blind people see during clinical death.
3. Reports from a domain beyond the physical universe (e.g., the loving white light and deceased relatives).
4. The absence of death anxiety.

With respect to veridical data – unusual data not expected to occur that has been verified by an independent researcher after the fact – we have literally thousands of cases of perfectly accurate reporting from patients who were clinically dead. Some of these are reported in the *Soul's Upward Yearning*, but detailed accounts are also provided by the many books and articles referenced there as well as in the *International Journal of Near Death Studies*. A few examples will suffice. One patient (Maria) reported that she had passed through the walls of the hospital and was looking at the third floor ledge – from the outside looking toward it – and saw a tennis shoe with a worn toe and a shoelace underneath the heel. A researcher, Kim Clark, crawled out on the ledge of the hospital and found the shoe there precisely as Maria had reported it. In a Pim van Lommel study, one man who had been in a deep coma, later told a nurse that he recognized her and saw where she had placed his dentures during resuscitation efforts, and even described the cart into which she placed them. They were there, precisely as he described it.

Dr. Raymond Moody also reports similar veridical out-of-body experiences, the most frequent of which are people who leave the operating room (after seeing the resuscitation efforts going on) and visit their relatives and friends in hospital waiting rooms (literally moving through walls). One patient reported seeing her young daughter wearing mismatched plaids (which was highly unusual and only knowable if she had actually been in the waiting room). Another woman overheard her brother-in-law talking to a business associate in the hospital waiting room in a

very derogatory manner, and was able to report this back to him later. This goes to show that you should not speak badly about the dead!

The second kind of verifiable data – the near death experiences of the blind (from Dr. Kenneth Ring, et. al.) may be more significant than the first because it rules out a lot of physicalist explanations for NDE's. Essentially what Dr. Ring found was that approximately 80% of blind people – most of whom were blind from birth – could see and report verifiable data occurring during the time of their clinical death. If there is no transphysical soul capable of seeing, then these reported phenomena are inexplicable. Why? Because the patient in question (blind from birth) was not able to see in their physical bodies either before or after their near death experience – only during the time of it! These cases rule out physicalist explanations of NDE's -- such as hallucinations, stimulation of the parietal lobe, or dreamlets caused by trauma, anoxia, or medications – because all of these explanations require that visual images be a part of the brains memory or active imagination. Obviously a person who is blind from birth has no memory of visual images or an active imagination which includes them. This, it seems to me, lends considerable objective credibility to NDE's as a *transphysical* phenomenon occurring within a transphysical substance – i.e. a soul.

The third kind of verifiable data – reports of experiences of deceased relatives and friends in a heavenly domain – has been carefully catalogued by Dr. Raymond Moody, Dr. Bruce Greyson, Dr. Jeffery Long, Dr. Emily Kelly, and Dr. Pim van Lommel. Essentially, the clinically dead person leaves the operating room and is transported to a heavenly domain where they frequently encounter an intensely loving white light, Jesus (particularly in the case of children), and/or deceased relatives and friends. With respect to deceased relatives, many patients learn information from them or about them to which they would otherwise have no previous access. When this information is checked out by other relatives who knew the deceased person, it is confirmed to be true. For example, one patient met an aunt (the sister of his mother) who had died during childhood. His mother had never mentioned her sister, because he would not have known her. After he returned to his body, he reported the encounter to his mother who was surprised that he knew about her (since she had died so many years before he was born). When he told her the secret name that she and her sister had for their teddy bear, she was shocked. She had never divulged it to anyone. As with the first two kinds of verifiable data, there are literally hundreds of well-attested cases of this kind as well.

What might we conclude from this? There is a significant amount of independently verifiable data reported in multiple reputable longitudinal studies and published in peer reviewed medical journals. Most of the data in these studies cannot be explained by physicalist explanations (e.g. hallucinations). As has been aptly demonstrated not only by the NDE's of the blind, but also by the comprehensive refutation of these explanations by Arizona State Universities neuroscientist Dr. Mario Beauregard in his book *Brain Wars*. In view of this, it is reasonable and responsible to believe on the basis of objective and verifiable data that human beings can, and most likely will, live beyond the death of their physical bodies implying the existence of a transphysical soul.

Why is this important for explaining the puzzle of human development 70,000 years ago? If human beings really do have a transphysical soul capable of surviving bodily death, and this soul has other transcendental qualities – such as heuristic notions, self-consciousness, and transcendental awareness – then if physicalists’ explanations fall short of explaining the explosion of human creativity and discovery 70,000 years ago, we might rationally make recourse to the explanation suggested by Pope Pius XII in 1950 – namely that God creates in every human being a unique transphysical soul. Does this transphysical soul revealed by NDE’s have other transcendental qualities? Indeed it does. Let us examine some additional contemporary evidence.

Our second consideration is the five transcendental desires for perfect truth, perfect love, perfect fairness/goodness, perfect beauty, and perfect home/being. These transcendental desires were not discovered in the 21st century, but go back to the thought of Plato and Plotinus, and became central to the thought of Saint Augustine, Boethius, and Saint Thomas Aquinas. They have been reexamined and the arguments for them rearticulated over the last 60 years by thinkers such as Bernard Lonergan, Karl Rahner, and Hans Urs von Balthasar.

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Five Trancendental Desires

1. We have a desire for perfect truth- all correct answers to all questions
2. The desire for perfect love
3. The desire for perfect justice-goodness
4. The desire for perfect beauty
5. The desire for perfect home

Plato discovered that we not only have a desire for truth, but a desire for perfect truth; not only a desire for fairness and goodness, but also a desire for perfect fairness and goodness; not only a desire for beauty, but a desire for perfect beauty. We have the same desires for perfect love and perfect home. Just on the surface of it, we could not have these desires unless we are aware of the object of our desire. Hence we must have at least a tacit awareness of perfect truth, love, fairness/goodness, beauty, and home. Before asking the obvious question, “Where did we get this awareness from?” we can give a much more precise demonstration that we really are aware of these perfections.

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2. Five Transcendental Desires

How the argument works

1. We can recognize every imperfection in T, L, H-G, B+H
2. How could we recognize every imperfection in T, L, J-G, B+H unless we had at least a tacit awareness of what perfect T, L, J-G, B+H is like?
3. Where did we get our tacit awareness of perfect T, L, J-G, B+H from?

Cause must be commensurate with its effect.

4. Therefore, we must have connection with perfect T, L, J-G, B+H

Here is how the basic argument works.

1. We can recognize every imperfection in Truth, Love, Fairness/Goodness, Beauty, and Home. If we really can recognize every imperfection in these five transcendentals, then the rest of the argument will follow almost automatically. So what is the evidence for our ability to recognize every imperfection in these five areas? Various authors have articulated it in different ways. Bernard Lonergan addresses our desire for perfect truth – our desire for the complete set of correct answers to the complete set of questions – what he calls “the pure unrestricted desire to know.” His interior justification of this is too much for this paper, but those interested will want to read either Chapter 3 of the *Soul’s Upward Yearning*, or Lonergan’s *Insight: A Study of Human Understanding*.

We can verify our awareness of perfect truth, love, fairness/goodness, beauty, and home by a simple self-examination. Ask yourself, “Are you capable of recognizing virtually every imperfection in someone else’s love – or your own love?” How about imperfections in other’s and your fairness or goodness? How about imperfections in beauty – in the world around you or in nature? This is precisely what fascinated Plato – that we could almost unendingly detect such imperfections which moved us to the heights of creativity. What is even more remarkable is that children can do this – they recognize when knowledge is incomplete, love is less than perfect, fairness and justice less than perfect, etc. If you are interested in examples of how to do this self-examination, please refer to Chapter 4 of the *Soul’s Upward Yearning*. For the moment, if you can affirm this power to recognize imperfection in these five areas within yourself, proceed to Step 2.

2. How could we recognize every imperfection in these five transcendentals if we did not have at least a tacit awareness of what *perfect* truth, *perfect* love, *perfect* fairness/goodness, *perfect* beauty, and *perfect* home would be like? Without such a tacit awareness of perfection in these transcendental characteristics, imperfections in them would never occur to us. We would be like chimpanzees – having no sense of intellectual discovery, no sense of authenticity in love, no sense of fairness or justice, no sense of beauty, and no sense of a perfect home.
3. Where did we get our tacit awareness of these five transcendentals in their perfection? It could not be from our experience, because there is no perfect truth, perfect love, perfect fairness/goodness, etc., in the world around us – or, for that matter, *in* us. Thus we must make recourse to the first law of causation – a cause must be commensurate with its effect. This means that if we have a tacit awareness of perfect truth, it must come from a cause capable of producing this awareness in us – namely, a cause that can account for perfect truth – such as perfect truth itself. Similarly, our awareness of perfect love must be caused by something that can account for perfect love – such as perfect love itself, and so forth.
4. This means that our consciousness must have some connection with perfect truth itself, perfect love itself, perfect fairness/goodness itself, perfect beauty itself, and perfect home itself. Since the time of Plato, these five perfections in themselves have been identified with God, but not arbitrarily – for a very good reason which I am afraid is beyond the scope of this presentation. Those interested in the formal proof of why a necessary uncaused cause must be a unique unrestricted act of thinking which is the creator of all else that is (i.e. God) – please read Chapter 3 of my book the *Soul's Upward Yearning*. Those interested in why this unique unrestricted act of thinking (i.e. God) must be the single source of perfect truth, love, goodness, beauty, and home will want to read Chapter 4 of the same book.

If this argument is correct, then human beings not only have transcendental awareness and transcendental desires, we have a connection with the source of all transcendental perfections – namely, God. Another way of saying this is that God is present to human consciousness, and his presence engenders within us the tacit awareness for perfect truth, love, goodness, etc., which causes virtually every kind of human creativity and striving. Could this be the reason why human beings 70,000 years ago suddenly became religious, artistic, mathematical, and symbolic? If so, then it was not only our transcendent soul that engendered these forms of inquiry, creativity, and striving within us, it was concomitantly God's presence to our souls.

This is why Augustine begins his *Confessions* with the perennial truth -- "For Thou hast made us for Thyself and our hearts are restless until they rest in Thee." We are made for perfect truth, perfect love, perfect justice, perfect beauty, and perfect home. Thus only God – who is perfect truth, love, goodness, beauty, and home – can satisfy us. Without him, therefore, we will never be satisfied or fulfilled – we will never be at peace.

Let me go to a third point very quickly -- the distinction between perceptual ideas and conceptual ideas. I don't have a whole lot of time to explain this, but it is important for answering the question of how we came to our universal syntactical linguistic ability.

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Conceptual Ideas and Heuristic Notions.

- 1) Perceptual vs. conceptual ideas – latter can be used as objects, predicates and categories.
- 2) Conceptual ideas are relational – requiring heuristic notion to organize.
- 3) Heuristic notions are highest conceptual ideas – and cannot be learned from external world without using the very thing learned – vicious circle – therefore, innate.
- 4) Where did innate heuristic notions come from?

In brief, perceptual ideas are those that come from singular images or a symbol of a singular image (e.g. a banana or the American Sign Language for banana). Chimpanzees and other higher vertebrates are capable of forming perceptual ideas. Conceptual ideas are those that *relate* perceptual ideas to one another or *relate* perceptual ideas to conceptual ideas, or *relate* conceptual ideas among one another. These relational ideas are the basis for predicates and objects in a sentence. Individual things (perceptual ideas) can only ground a *subject* in a sentence. This is why chimpanzees cannot pass the syntax test. If they have no conceptual ideas (relational ideas), they cannot comprehend a predicate or an object – only subjects – in which case passing a syntax test is absolutely hopeless.

Notice that the vast majority of ideas we have and words we use are conceptual ideas – that is they are ideas that have no individual referent – such as the image of a banana, the image of a person, the image of a tree, etc. Read the previous two pages, and count the number of words that have individual referents. I'll bet they are less than 5% of the words on the page. All the rest of the words are grounded in conceptual ideas – relationships among perceptual and conceptual ideas.

Now here is the problem we noted above. If we are to relate ideas to one another, we will have to use some heuristic context through which they are related. The largest general heuristic

contexts are the six major questions – what, where, when, why, how, and how many. But notice something – these heuristic contexts are the highest level of relational ideas that there are! This is precisely how they can be the heuristic context to relate all other ideas.

Now here is the rub. If we have to understand the meaning of these six highest heuristic notions in order to relate any idea to any other idea, and we have to relate ideas to one another in order to transform individual perceptual ideas from our experience into the conceptual ideas necessary for syntax and understanding, then how could we have ever derived the six heuristic notions from experience? We would have to have known them *before* we derived them from our experience – because we would have to have used them to do so. This is a vicious circle. Therefore, these six heuristic notions must be innate – and since they abstract from all individuality, they cannot be reduced to physical reality which is manifest in precisely this way. This last point is important – every dimension of our brain – even quantum activity – is individuated (and subject to individuation), but the six heuristic notions in themselves have no such individuation – they prescind from it, implying that they are not physical -- that they are not produced by brain processes, patterns, or “wiring.” As Plato, Aristotle, Saint Augustine, Saint Thomas Aquinas, Immanuel Kant, Bernard Lonergan, and Sir John Eccles among many many others have concluded, the six heuristic notions are not only innate, they are transphysical – and the mind that grasps them is transphysical as well. If you are interested in the more lengthy explanation of conceptual ideas and the transphysical nature of the mind, see the *Soul's Upward Yearning* Chapters 3&6, as well as the references there to Eccles and Lonergan.

Alas, I have run out of time, and we are not going to be able to get to David Chalmers' interesting contention about human consciousness being non-reducible to physical processes. It is a very interesting argument which merits considerable attention. Those interested in the transphysical nature of consciousness may want to refer to Chapter 6 of the *Soul's Upward Yearning*. I provide here a slide which gives you an idea of how the general argument proceeds.

Slide 10

The Hard Problem of Consciousness

- 1. We experience ourselves experiencing—and we are aware of our awareness.**
- 2. No other species in the animal kingdom has this (Herbert Terrace).**

- 3. Physical processes cannot replicate this (David Chalmers).**
- 4. Why? The same reality is in two different positions with respect to itself at the same time.**
- 5. This transcends classical, relativistic, and Quantum physics.**

We are also not going to be able to discuss Gödel's Proof and the transcendental nature of the human grasp of mathematics (as distinct from all artificial intelligence). This too is an important indication of our transphysical soul particularly as the argument has been re-articulated by John Lucas and Roger Penrose. Those interested in this argument may want to read Chapter 3 of the *Soul's Upward Yearning* as well as Stephen Barr's book *Modern Physics and Ancient Faith*. I again provide a slide giving the basic argument.

Slide 11

Gödel's Theorem

- 1. We can recognize problems in algorithms and correct them without making recourse to them.**
- 2. Therefore, we must be aware of higher mathematical formulizations than are in any other previous set of algorithms.**
- 3. No artificial intelligence (computer) can do this—they are dependent on formulizations, rules and algorithms given to them.**
- 4. Human mathematical intellection is transphysical.**

We asked a question at the inception of this presentation – “What caused the explosion of communication, creativity, inquiry, and transcendence that occurred 70,000 years ago? -- What gave rise to the sudden appearance of a universal syntactical language, abstract numeration and mathematics, interest in religion, art, and symbol, and an indomitable spirit of inquiry, discovery, and adventure – in human beings alone?” We have cast doubt on the ability of physical processes in the brain to do this, and tried to validate these doubts by assessing the requirements for our five transcendental desires (entailing the tacit awareness of perfect truth, love, goodness, beauty, and home) as well as the requirements for conceptual ideas and the six heuristic notions they presuppose. In giving this validation, we pointed to a more reasonable and responsible explanation for the heuristic notions so necessary for conceptual ideas (and therefore universal syntactical language and abstract mathematics) and for the five kinds of transcendental awareness (which give rise to our interest in art, music, transcendence, religion, and all the social norms that follow from this) – namely a transphysical, transcendental soul. Lest it be thought that a transphysical soul is only an intellectual fiction used to ground the transcendental powers addressed above, we delved into the peer reviewed medical studies of near death experiences to

show the reality of such a soul. So, I leave you with this one question, “What is more reasonable and responsible as an explanation for the explosion of language, mathematics, religion, art, and discovery which only human beings manifest – a physical brain and an unknown genetic switch – or a transphysical soul?” If you affirm the latter, then affirm too your transcendent nature and its relationship to the ultimate transcendental being – God himself.