Evidence of a Transcendent Soul

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First Topic Evidence of the Soul and Heaven from Near Death Experiences

Introduction

I cite the evidence of near-death experiences with caution, because there are many books written on this subject that are not scientific or based on any clinical, cross-cultural, long term study, but rather on a few anecdotes taken to the extreme. Some of these nonscientific books have rather manipulative agendas, and some are quite cultic in character. These problematic accounts do not mitigate the excellent longitudinal studies that have been carried out by Parnia et al. at Southampton University (2014),¹ van Lommel et al., reported in the prestigious British medical journal *The Lancet*,² the two studies carried out by Kenneth Ring on near-death experiences,³ and his later study of near-death experiences of the blind,⁴ and Dr. Janice Holden's analysis of veridical evidence in NDE's from thirty-nine independent studies.⁵ There are additional careful longitudinal studies cited in this Chapter,⁶ as well as many studies reported in

¹ Parnia et al 2014(a).

² van Lommel 2001.

³ Ring 1980.

⁴ Ring 1999.

⁵ Janice Holden 2009. *Handbook of Near Death Experiences: Thirty Years of Investigation* (Connecticut: Praeger Press).

⁶ Basford (1990), Fenwick & Fenwick (1995), Greyson & Flynn (1984), Roberts & Owen (1988), Sabom (1982), Zaleski (1987), Moody (1988), Greyson (2010), Cook et al (1998), Kelly et al (2000).

the *Journal of Near-Death Studies* published by the International Association for Near-Death Studies (peer-reviewed).⁷

Before responding to physicalists' objections, we will want to clarify some terms and circumstances surrounding this remarkable entryway into the realm of survival of bodily death and the existence of transphysical consciousness.

I. Definitions and Descriptions

In 1982, a Gallup survey indicated that approximately 8 million adults in the United States had had a near-death experience (a significantly large population from which to take accurate samples).⁸ The people sampled reported having some of the following eleven characteristics, eight of which appear to be unique to near-death experiences (in italics):

- *out of body experience*
- *accurate visual perception* (while out of body)
- *accurate auditory perception* (while out of body)
- feelings of peace and painlessness
- *light phenomena* (encounter with loving white light)
- *life review*
- *being in another world*
- encountering other beings
- tunnel experience
- precognition

According to the 2014 Parnia et al.-Southampton University Study, approximately 9% of adults have a near death experience after cardiac arrest (Von Lommel *et al* 2001 found that 18% had an NDE), and according to the International Association of Near Death Studies (that publishes the peer-reviewed *Journal of Near Death Studies*), approximately 85% of children have near death experiences.

The Transphysical Component of Near Death Experience

The transphysical component of a person having a near death experience may be described as follows: when a person undergoes clinical death (defined below), a transphysical component of that person leaves the physical body (frequently through a tunnel), emerging outside the physical body, and frequently looking down upon it. This transphysical component is completely intact without the physical body, and it is self-conscious and capable of seeing and hearing (without the biological organs associated with those functions). This transphysical component retains all its memories, and appears to have acute recall and memory functions (without use of the brain). It is aware of itself and its identity and its distinction from others – but it is more than self-

⁷ See the website www.iands.org for a complete index of 135 topics concerned with research and longitudinal studies of NDEs.

⁸ See Gallup and Proctor 1982.

consciousness. It has a remnant of its former embodiment – particularly the presence and sense of extendedness. Though it is *not* physical (constituted by and subject to the laws of physics), it is like an ethereal remnant of the physical body. It is not limited by physical laws (such as gravity), or the restrictions imposed by physical mass (such as walls or roofs). It can be called into a spiritual or heavenly domain in which it can encounter spiritual beings like itself (in human form) as well as wholly transcendent beings greater than itself (such as a loving white light). It can communicate with these beings without the use of voice and sounds. Though it has autonomy and self-identity, it does not have control over most dimensions of the out of body experience; for example, it is moved outside of its body, transported to a transphysical domain, and called back into its body by some higher transphysical power. In order to distinguish it from its former physical manifestation, I will refer to it as "a transphysical component."

Clinical Death

After a heart attack, drowning, or significant trauma, people frequently undergo severe oxygen deprivation leading to a gradual reduction of electrical activity in the brain, resulting in a "shutdown" of higher cerebral functioning as well as most functions of the lower brain (after 20 to 30 seconds). This phenomenon is marked by a flat EEG (electroencephalogram) indicating an absence of electrical activity in the cerebral cortex (generating higher cerebral functioning) and the absence of gag reflex as well as fixed and dilated pupils, indicating a significant reduction of lower brain functioning. In this state, sensory organs are non-functional, both in themselves, and in the brain's capacity to process their signals. Furthermore, higher cerebral functions such as thinking, processing memories, and linguistic functions would either be completely absent or reduced to insignificance. Lower brain activity is also minimized, though there may be some sporadic and minimal "sputtering" of pockets of deep cortical neurons in those areas.

Dr. Eben Alexander, a neurosurgeon and professor at the University of Virginia Medical School, who underwent a severe coma from encephalitis (and was monitored throughout his comatose state), described it as follows:

My synapses—the spaces between the neurons of the brain that support the electrochemical activity that makes the brain function — were not simply compromised during my experience. They were stopped. Only isolated pockets of deep cortical neurons were still sputtering, but no broad networks capable of generating anything like what we call 'consciousness'. The E. coli bacteria that flooded my brain during my illness made sure of that. My doctors have told me that according to all the brain tests they were doing, there was no way that any of the functions including vision, hearing, emotion, memory, language, or logic could possibly have been intact.⁹

II. Four Important Studies

⁹ Alexander 2012.

The studies of Dr. Sam Parnia et al. (2014), Dr. Pim van Lommel et al (2001), Dr. Kenneth Ring et al (2006), and Dr. Janice Holden (2007), provide significant verifiable evidence of survival of human consciousness after clinical death. There are many other careful studies that corroborate and extend their findings not explicitly discussed in this article, but are important for readers interested in more extensive research. The following studies are fully cited in the References to this book: Basford 1990, Fenwick & Fenwick 1995, Greyson & Flynn 1984, Roberts & Owen 1988, Sabom 1982, and Zaleski 1987. Dr. Bruce Greyson and Dr. Emily Kelly have made longitudinal studies of near death phenomena (with control groups) at the University of Virginia's Division of Perceptual Studies (in the Department of Psychiatry in the School of Medicine) which is partially dedicated to the scientific study of near death experiences.¹⁰

II.A The Parnia-Southampton University Study (2014)

In 2014, scientists under the direction of Dr. Sam Parnia at Southampton University completed the largest study of near death experiences. It was a 4-year study of 2,060 patients who had suffered cardiac arrest in hospitals in the U.S., U.K., and Austria. The researchers found that **9%** of the survivors (185 patients) had a *near death experience*, though many more—an additional 30% (618 patients) had some sense of postmortem consciousness and feelings which did not meet the full description of an NDE (see above, Section 1). Some of the patients (who had an NDE) maintained visual awareness for up to three minutes after cardiac arrest – long after the brain shuts down (occurring 20-30 seconds after cardiac arrest).

This study advanced those of van Lommel, Ring, and Holden by taking account of experiential markers showing how long patients maintain awareness after clinical death (after electrical activity in the brain is almost completely absent). For example, a patient reported hearing two "bleeps" from a machine that sounds in 3-minute intervals, revealing that he maintained awareness for more than three minutes after cardiac arrest. This patient was not only aware of sounds in the room, but was also able to accurately report with heightened visual acuity what was going on in the operating room. The events reported were verified by researchers after resuscitation.¹¹

II.B The van Lommel et al Study

The Lancet (Britain's most prestigious medical journal) reported the findings of a longitudinal study of near death experiences carried out by four researchers in Holland. The study surveyed 344 cardiac patients who were successfully resuscitated after cardiac arrest in ten Dutch hospitals. It compared demographic, medical, pharmacological, and psychological data between patients who reported near death experiences and patients who did not (controls) after resuscitation. It studied life changes after NDEs, and compared the groups two and eight years later.¹²

¹⁰ http://www.medicine.virginia.edu/clinical/departments/psychiatry

¹¹ Parnia *et al* 2014(a).

¹² See van Lommel, *et al* 2001.

This study found that 62 adult patients (18% -- roughly one out of every five) resuscitated from cardiac arrest experienced an NDE with some of the characteristics described above. No patients reported distressing or frightening NDEs. The 18% positive response does not necessarily mean that the others did not have an NDE. In fact, Parnia et al. believe that many of those who could not remember having an NDE may have been adversely affected by morphine or other medications administered during the resuscitation procedure.¹³ There may be other mitigating factors such as age or prolonged CPR, and some may have been unwilling to recount it (for fear of being thought to be unbalanced). This percentage enabled the van Lommel researchers to conclude that the experiences associated with NDEs were *not* likely to have been caused by physiology alone:

With a purely physiological explanation such as cerebral anoxia for the experience, most patients who have been clinically dead should report one.¹⁴

The researchers concluded from this:

Our most striking finding was that Near-Death Experiences do not have a physical or medical root. After all, 100 percent of the patients suffered a shortage of oxygen, 100 percent were given morphine-like medications, 100 percent were victims of severe stress, so those are plainly not the reasons why 18 per cent had Near-Death Experiences and 82 percent didn't. If they had been triggered by any one of those things, everyone would have had Near-Death Experiences.¹⁵

Van Lommel's rationale does not conclusively rule out a physiological explanation of near death experiences, because there might be other physical factors beyond those mentioned in his study. However when van Lommel's rationale is combined with the three kinds of verifiable evidence (discussed in Section III below), it virtually rules out the possibility of a purely physiological explanation of near death experiences, indicating the survival of human consciousness after clinical death.

Of the 62 patients reporting an NDE, all of them experienced some of the following ten characteristics, according to the following distribution:

- Awareness of being dead (50%) (1)
- (2)Positive emotions (56%)
- Out of body experience (24%) (3)
- Moving through a tunnel (31%) (4)
- Communication with light (23%) (5)
- Observation of colors (23%) (6)
- Observation of a celestial landscape (29%) (7)
- (8) Meeting with deceased persons (32%)
- Life review (13%) (9)

¹³ Parnia et al. 2014.

 ¹⁴ van Lommel, *et al* 2001, p. 2039.
 ¹⁵ van Lommel, *et al* 2001, p. 2044.

Presence of border $(8\%)^{16}$ (10)

This study also reported corroborative veridical out-of-body experiences. These experiences enabled patients to have sensorial knowledge which they were not able to have through their physical bodies. In other words, if these patients had not been in an "out-of-body" state, they would never have been able to experience the data they accurately reported.

The corroborated veridical sensorial knowledge by both sighted and blind patients is very significant because there does not appear to be any physical explanation for these corroborated phenomena, leading to the conclusion that there must be some form of nonphysical conscious existence (including self-consciousness, memory, intelligence, and self-identity). Van Lommel and his team conclude as follows:

How could a clear consciousness outside one's body be experienced at the moment that the brain no longer functions during a period of clinical death with flat EEG? . . . Furthermore, blind people have described veridical perception during out-of-body experiences at the time of this experience. NDE pushes at the limits of medical ideas about the range of human consciousness and the mindbrain relation. In our prospective study of patients that were clinically dead (flat EEG, showing no electrical activity in the cortex and loss of brain stem function evidenced by fixed dilated pupils and absence of the gag reflex) the patients report a clear consciousness, in which cognitive functioning, emotion, sense of identity, or memory from early childhood occurred, as well as perceptions from a position out and above their 'dead' body.¹⁷

Notice that van Lommel's study indicates that blind people see during clinical death. This finding is corroborated in greater detail by Dr. Kenneth Ring and his team (see below II.C).

II.C

Dr. Kenneth Ring's Studies of the Blind

Ring, Cooper, and Tart (1999), also reported in Ring and Valarino (2006), focused their research on near death experiences of the blind. Ring, Cooper, and Tart studied 31 blind patients (21 of whom had a near death experience and 10 of whom had out-of-body experiences only). Of these 31, 14 were blind from birth and evidently had no experience of seeing, and 17 had some experience of seeing in the past (though they were blind at the time of their near death experience or out-of-body experience). Ring summarizes his findings as follows:

> Among those narrating NDEs, not only did their experiences conform to the classic NDE pattern, but they did not even vary according to the specific sight status of our respondents; that is, whether an NDEr was born blind or had lost his or her sight in later life, or even (as in a few of our cases) had some minimal light perception only, the NDEs described were

 ¹⁶ van Lommel, *et al* 2001, p. 2041.
 ¹⁷ van Lommel, *et al* 2001. P. 2045.

much the same. Furthermore, **80 percent** of our thirty-one blind respondents claimed to be able to see during their NDEs or OBEs, and, like Vicki and Brad, often told us that they could see objects and persons in the physical world, as well as features of otherworldly settings.¹⁸

Ring, Cooper, and Tart also found that the quality of perception was quite high among the majority of blind patients who reported seeing during their near-death experience:

How well do our respondents find they can see during these episodes? We have, of course, already noted that the visual perceptions of Vicki and Brad were extremely clear and detailed, especially when they found themselves in the otherworldly portion of their near-death journey. While not all of our blind NDErs had clear, articulated visual impressions, nevertheless enough of them did, so that we can conclude that cases like Vicki's and Brad's are quite representative in this regard.¹⁹

What about the 20 percent who reported that they could not remember themselves seeing? There are two explanations: (1) they did not, in fact see anything during their near-death experience, or (2) even though they seem to have had some kind of perception, they did not recognize it as "seeing." Ring comments about the latter phenomenon with respect to one of his patients as follows:

As one man, whom we classified as a nonvisualizer, confessed, because 'I don't know what you mean by seeing,' he was at a loss to explain how he had the perceptions he was aware of during his NDE.²⁰

This study is particularly important, because there is no physical explanation for the phenomenon described by it. The sight of these patients was completely impaired or almost completely impaired – *in their physical bodies*. Thus the only explanation for their sight would seem to be the capacity for visual perception in their *transphysical* state. This requires their continued existence after bodily death.

II.D Consistency of Data in Moody, Ring, and van Lommel

In 1978, Dr. Raymond Moody wrote his first study of near death experiences entitled *Life After Life*. It was based on more than 100 case studies, but left several questions unanswered while revealing the need for a more sophisticated longitudinal study. Between 1978 and 1988, he completed that study after interviewing more than 1,000 patients who had had a near-death experience. He noticed that patients having near-death experiences reported having one or more of the following nine characteristics (seven of which seem to be unique to NDEs):

1. a sense of being dead,

¹⁸ Ring and Valarino 2006, p. 81.

¹⁹ Ring and Valarino 2006, p. 81.

²⁰ Ring and Valarino 2006, p. 81.

- 2. peace and painlessness,
- 3. the tunnel experience,
- 4. people of light,
- 5. the Being of Light,
- 6. the life review,
- 7. rising rapidly into the heavens,
- 8. reluctance to return, and
- 9. out of body experiences/different time and place.²¹

Moody's findings closely correlate with Ring's and van Lommel's. Ring divides his study into five stages of near-death experiences, while van Lommel divides his findings into ten features of near-death experiences. Ring's stages are as follows:

Peace	60%
Bodily separation	37%
Darkness/tunnel	23%
Light/beings of light	16%
Inner setting/paradise	10%

Notice the correlation with van Lommel's features:²²

Awareness of being dead	50%	(not reported by Ring)
Positive emotions	56%	(compared to Ring's 60% for what he
		describes as "peace")
Out of body experience	24%	(compared with 37% in Ring's study)
Moving through a tunnel	31%	(compared with 23% in Ring's study)
Communication with light	23%	(compared with 16% in Ring's study
Observation of colors	23%	(not reported by Ring)
Observation of a celestial landscape	29%	(compared with 10% in Ring's study)
Meeting with deceased persons	32%	(not reported by Ring, but reported by
		Moody ²³)
Life review	13%	(not reported by Ring)
Presence of border	8%	(not reported by Ring)

Evidently, the larger, more longitudinal study of Dutch patients experienced the tunnel, being/beings of light, and celestial landscapes more often than the smaller, less longitudinal, American group; while the American group experienced out-of-body survival more often. The differences in the data may be explained by the fact that most patients only experienced some of the above-mentioned features of near death experiences.

ILE.

Dr. Janice Holden's Assessment of 39 NDE Studies

²¹ Moody 1988, pp. 7-20.
²² van Lommel, *et al* 2001, p. 2041.
²³ Moody's study is significant because it indicates how patients were transformed by these encounters with departed loved ones. See Moody 1993.

Dr. Janice Holden made a compendium of 107 cases in thirty-nine studies by thirty-seven authors in 2007,²⁴ in which veridical (verifiable) experiences were reported. She concluded as follows:

Using the most stringent criterion – that a case would be classified as inaccurate if even one detail was found to not correspond to reality – Holden found that only 8 percent involved some inaccuracy. In contrast, 37 percent of the cases – almost five times as many – were determined to be accurate by an independent objective source, such as the investigation of researchers reporting the cases.²⁵

The other 55% did not involve inaccuracies, but could not be completely independently verified by other sources. Therefore, of the 48 cases (45% of Holden's sample) qualifying as veridical (an unusual or unique report corroborated by an independent source), 8 cases (17%) had some inaccuracy while 40 cases (83%) were reported completely accurately (using the strictest criteria).

It is difficult to believe that this degree of verifiably accurate reporting which occurred at a time when there was no electrical activity in the cortex can be attributed to a physical or physiological cause. In view of this, as well as the fact that many of the reported incidents reached beyond bodily capabilities of the patient, it is not unreasonable to conclude that these perceptions (as well as the self-consciousness which accompanied them) existed independently of bodily function, and could therefore, persist after bodily death.

III.

Three Kinds of Verifiable Evidence

There are three ways of verifying the transphysical nature of near death experience reports:

- 1. Veridical reported data (all major longitudinal studies).²⁶
- 2. Visual perception of blind (primarily Ring and van Lommel).
- 3. Personal information about deceased individuals (primarily Greyson 2010, van Lommel 2010, Moody 1993, Cook et al 1998, and Kelly et al 2000).

As will be seen, each of these kinds of evidence can be verified by independent researchers after the fact, and all of them are exceedingly difficult (if not impossible) to explain by merely physical or physiological theories (such as hallucinations, anoxia, narcotics, etc. -- see below section IV). We will examine each kind of evidence, and then assess the combined data.

III.A

²⁴ Holden 2007, pp. 33-42.

²⁵ Carter 2010, p. 217.

²⁶ Explored in all 15 studies mentioned in this Chapter – that is: Sam Parnia et al (2014), Pim van Lommel et al (2001), Kenneth Ring et al (2006), and Janice Holden (2007), Basford (1990), Fenwick & Fenwick (1995), Greyson & Flynn (1984), Roberts & Owen (1988), Sabom (1982), Zaleski (1987), Moody (1988), Greyson (2010), Cook et al (1998), Kelly et al (2000).

Reported Veridical Data

Frequently during near death experiences, the transphysical component leaves the body, but does not go immediately to an other-worldly domain. Instead, it remains in the resuscitation room or in close or remote proximity to the body. As noted above, this transphysical component is self-conscious, and can see, hear, and remember. Its memories can be recalled after patients return to their bodies. Some of these reports have highly unusual or unique characteristics which are not part of ordinary resuscitation or hospital procedures. Many of these reports can be verified by independent researchers after patients return to their bodies. When all of these conditions have been met, and the unusual accounts have been verified to be 100% accurate, they are termed "veridical." Virtually every peer-reviewed study reports multiple instances of such veridical data. The following cases typify a much larger array of reports, many of which have been assessed by Dr. Janice Holden (see above Section II.E).

In the Pim van Lommel study cited above (Section II.B), 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.²⁷ They were there, precisely as he described it.

Melvin Morse and Kim Clark report that a woman had knowledge of a shoe on a window ledge outside the hospital (not near the room where the patient was resuscitated, but next to a third-floor office where she was being interviewed). The psychologist who did the interview (Kim Clark) had to crawl along the ledge outside her window to verify the claim. The shoe was indeed there precisely as the patient had described it.²⁸ Though the shoe could have been seen from a window, the detail with which the NDE patient described it could not have been detected from that window (a worn little toe, a shoelace beneath the heel, etc.). Clark concluded that:

The only way she [the patient] could have had such a perspective was if she had been floating right outside and at very close range to the tennis shoe. I retrieved the shoe and brought it back to Maria; it was very concrete evidence for me.²⁹

Raymond Moody also reports similar veridical out-of-body experiences,³⁰ 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.

²⁷ van Lommel, et al 2001, p. 2042.
²⁸ Morse 1990, p. 20.

²⁹Clark 1984, p.243.

³⁰ Moody 1988, pp. 17-20.

Dr. Bruce Greyson (Department of Psychiatric Medicine at the University of Virginia) also reported several instances of accurate veridical data reported by patients after clinical death. He notes:

[veridical reports concern] only descriptions of extremely low antecedent probability that have been cited, such as one woman's accurate description of the plaid shoelaces on a nurse participating in her resuscitation (Ring and Lawrence, 1993), or one man's accurate description of his cardiac surgeon during his open-heart surgery "flapping his arms as if trying to fly" (Cook, Greyson, and Stevenson, 1998, p. 399), hardly the type of behavior typically shown in media portrayals of open-heart surgery. Both of these examples, incidentally, were corroborated by independent interviews with the doctors and nurses involved. In a specific test of ability of patients to imagine accurate resuscitation scenarios, Michael Sabom (1981, 1982) found NDErs' descriptions of their resuscitations to be highly accurate with specific veridical details, whereas those of resuscitated patients who did not report NDEs but were asked to imagine what their resuscitations must have looked like were vague and contained erroneous specifics.³¹

These are but a few examples of veridical data reported by patients in virtually every major study of near death experiences. They corroborate the validity of patients' claims to have been in an out-of-body state (with sensorial capabilities). The accuracy of veridical data from multiple studies was correlated by Dr. Janice Holden (see Section II.E above) using the strictest criteria. As noted above, she determined that the vast majority of veridical data were reported perfectly accurately – with only 8% having some inaccuracy.

These findings lend considerable probative force to the survival of human consciousness after bodily death, because they cannot be explained by physical causation. They apparently require a capacity to see and hear independently of the physical body, which cannot be explained by a physical model alone (such as hallucination arising out of narcotics, oxygen deprivation, revival of brain cells and neural functions). Dr. Mario Beauregard, Dr. Pim van Lommel, and Dr. Bruce Greyson have shown the vast differences between near death experiences and proposed physical explanations – like hallucinations (see below Section IV). Such hallucinatory activity is qualitatively different from NDEs. Moreover, unlike NDEs, hallucinations are random, sporadic, and highly inaccurate (see below Section IV).

III.B Visual Perception of the Blind during Clinical Death

As noted above (Section II.C), Ring, Cooper, and Tart (1999), and Van Lommel (2001) did focused studies on the near death experiences of the blind. 80% of these patients (many of whom were blind from birth) were able to see during their near death experience. These accounts show that patients who do not have the *physical* capacity to see – report visual data accurately about their experiences during clinical death. Some of this data is veridical (highly unusual and therefore difficult to guess).³²

³¹ Greyson 2007 p. 237.

³² See Ring, Cooper, and Tart 1999, and Ring and Valarino 2006, pp. 80-82.

Given the insurmountable difficulties of explaining this phenomenon physically (hallucinations, narcotics, oxygen deprivation, etc. – see below Section IV), it corroborates the likelihood of transphysical existence after clinical death. Furthermore, it shows the possibility of *transphysical* causes not only of consciousness, but also of vision, hearing, and memory. No adequate physical explanation has been offered for the visual perception of the blind during clinical death (see below Section IV).

III.C Meeting Deceased Persons in a Transphysical Domain

Many patients undergoing clinical death are moved from the physical world to an otherworldly or heavenly domain. Some of them see themselves crossing a border into a beautiful paradise in which many are greeted by deceased relatives or friends, Jesus, or a loving white light. Some patients may experience two or more of these phenomena. Some patients who are greeted by deceased relatives do not recognize them because they died before the patient was born. They often introduce themselves and reveal facts about themselves that the patients' relatives or friends are subsequently able to verify. Though this kind of evidence is not veridical (because it can't be corroborated as occurring during a patient's clinical death by an independent source), it has probative circumstantial value – particularly because it occurs in so many different cases of near death experiences.

Raymond Moody has written a book on these experiences entitled: *Reunions: Visionary Encounters with Departed Loved Ones.*³³ It has also been studied by Dr. Jeffery Long,³⁴ and Dr. Pim van Lommel,³⁵ all of whom show patients' knowledge of facts about or from deceased relatives and friends not formerly known. Dr. Bruce Greyson has made a detailed study of these cases entitled: "Seeing Dead People Not Known to Have Died: Peak in Darien Experiences."³⁶ His colleague at the Division of Perceptual Studies (University of Virginia), Dr. Emily Kelly gives a careful report of their research in an article entitled "Near-Death Experiences with Reports of Meeting Deceased People."³⁷ This article arose out of two previous studies (Cook, Greyson, & Stevenson, 1998;³⁸ Kelly, Greyson, & Stevenson 2000³⁹). These researchers found that out of 553 cases of people reporting near death experiences, 13% experienced a deceased relative or friend (a lower statistic than the 37% reported by Fenwick & Fenwick in 1995⁴⁰). Most of these individuals reported seeing deceased *relatives* (and only 5% reported seeing deceased friends). Most of them were from a previous generation (parents or grandparents). Several individuals reported seeing a religious figure, usually Jesus, and several also reported seeing unrecognized figures along with relatives.⁴¹

³⁵ See van Lommel 2010, pp. 310-319.

- ³⁷ Kelly 2001, pp. 229-249.
- ³⁸ Cook, Greyson, and Stevenson 1998, pp. 377-406.

⁴⁰ Fenwick & Fenwick 1995, p. 163.

³³ Raymond Moody 1993.

³⁴ See Long 2010, Ch. 8.

³⁶ Greyson 2010.

³⁹ Kelly, Greyson, and Stevenson 2000, pp. 39-45.

⁴¹ Kelly 2001, pp. 238-239.

One of the more important findings among these studies was the large number of patients who reported seeing people who were not close or even known. This finding militates against the hallucinatory expectation hypothesis – that dying individuals project an image of deceased loved ones who they would want to see in the afterlife. Kelly notes in this regard:

Although most people identified were emotionally close relatives, there were nonetheless a substantial number (32%) of people seen who were emotionally neutral or distant or whom the participant had never met. Many participants commented that seeing these people was unexpected and a 'surprise.' The expectation hypothesis seems a bit strained when we try to account for these numerous instances in which the deceased person was not someone the participant would particularly care about seeing....Furthermore, even among those participants who did see a loved one, the person seen was not always one whom the participant would presumably most expect or want to see.⁴²

When this is combined with the disclosure of information not previously known from deceased people (in Greyson 2010, van Lommel 2010, and Moody 1998), it suggests that clinically dead individuals encounter deceased people who are not a projection of wishful expectations. Though this kind of evidence is not as strong as veridical evidence (III.A), and the visual perception of blind people during clinical death (III.B), it provides another clue to a transphysical ground of consciousness.

III.D Conclusions Concerning Verifiable Evidence of Transphysical Consciousness

We may now briefly summarize the four kinds of evidence for transphysical consciousness after clinical (bodily) death:

- (1) Remarkable consistency surrounding ten features of the experience, seven of which are *unique* to near death experiences, two of which are shared with physical embodiment (positive emotions and visual/auditory perception), and one of which is shared with out-of-body experiences (seeing one's body from above) in all 15 studies cited in Sections II and III above.⁴³
- (2) Corroborated, veridical, sensorial knowledge by patients who were unconscious (more than thirty seconds after cardiac arrest) in all 15 studies cited in Sections II and III above.
- (3) Corroborated, veridical, sensorial knowledge by *blind* patients who were unconscious (primarily Ring, Cooper, and Tart 1999, Ring and Valarino 2006, and van Lommel 2001).
- (4) Reports of encounters with deceased people who were unexpected or unknown, and reports of unknown information disclosed by deceased people (primarily Greyson 2010, van Lommel 2010, Moody 1993, Cook et al. 1998, and Kelly et al. 2000).

⁴² Kelly 2001, p. 244.

 ⁴³ Dr. Sam Parnia et al (2014), Pim van Lommel et al (2001), Dr. Kenneth Ring et al (2006), and Dr. Janice Holden (2007), Basford (1990), Fenwick & Fenwick (1995), Greyson & Flynn (1984), Roberts & Owen (1988), Sabom (1982), Zaleski (1987), Moody (1988), Greyson (2010), Cook et al (1998), Kelly et al (2000).

As we shall see, physicalist explanations of near death experiences do not (and probably cannot) explain these combined phenomena. Though they can explain how a hallucination might be possible during clinical death, they do not explain how people can accurately report empirical data, how the blind can see, and how people can acquire previously unknown information about deceased individuals during the time of clinical death. A brief examination of the six major physicalist explanations will make this clear.

IV.

Response to Physicalist Explanations

As noted above, several physicians and neuroscientists have tried to explain near death experiences by making recourse to hallucinations and other possible physical triggers. Dr. Mario Beauregard, neuroscientist at the University of Arizona, has responded to these physicalist explanations in his recent book, Brain Wars (2012a). His findings and responses have been verified by the Parnia et al. study which concludes that known physical explanations do not account for visual awareness, clarity of thought, and positive emotions associated with NDE's.⁴⁴ The following is a brief summary of some of Beauregard's responses excerpted from that book.⁴⁵

Perhaps the most famous physicalist explanation of OBEs (out of body experiences) was proposed by Olaf Blanke in 2003 which received an accolade from the journal Nature claiming that Blanke's research discovered the part of the brain in which OBEs are induced. Blanke and his team placed electrodes in the angular gyrus of the parietal lobe which triggered an "OBElike" experience in a 43-year old patient with epilepsy. She claimed that she had left her body, but could only see the lower half of her body – her legs and lower trunk. As the experience progressed, she perceived her legs to be getting shorter and shorter.⁴⁶ In 2004 Blanke and his team reported that they had induced an atypical and partial OBE in three patients and autoscopy in four patients – in which the patient perceives a double from the vantage point of her physical body.47

Beauregard responds to this with van Lommel's critique – first Blanke's stimulations of the parietal lobe produce *abnormal* bodily experiences, and secondly these abnormal experiences give rise to a *false* sense of reality⁴⁸ (e.g. legs growing shorter and seeing body doubles). These experiences are *illusory* whereas typical OBEs are not illusory. Patients leave their body, and see (and accurately remember and report) what is going on inside the operating room and how their physical bodies are situated relative to the people, events, and instruments in that room. Greyson adds to van Lommel's criticism by noting that if we accept Blanke's stimulations as typifying an OBE, we would be constrained to think that OBEs are illusions, but as we have seen throughout

⁴⁴ See Parnia et al. 2014 pp 40-47.
⁴⁵ See Beauregard 2012 (b) p 2.

⁴⁶ See Beauregard 2012 (b) p 2. See Pearson 2002.
⁴⁷ See Beauregard 2012 (b) p 2. See Pearson 2002.

 $^{^{48}}$ See Beauregard 2012 (b) p 3.

this chapter, there is nothing illusory about them – they give accurate descriptions of verifiable data almost all the time (only 8% minor inaccuracies according to Holden).

Beauregard then turns to Susan Blackmore's hypothesis (1993) that anoxia (oxygen deprivation in the dying brain) could lead to the firing of neurons responsible for visual perception – possibly leading to an experience of a white light at the end of a tunnel.⁴⁹ Beauregard responds first with van Lommel's criticism (2001) – that 100% of dying people suffer from anoxia; so if anoxia is the cause of near death experiences, 100% of patients should have them (but in fact only 18% of adults do).⁵⁰ Furthermore, the studies of Sam Parnia (2008 and 2014) show that several people have had near death experiences while feeling well – and therefore not suffering from anoxia.⁵¹

Beauregard also looks into James Whinnery's hypothesis that "dreamlets" are a possible explanation of NDE's.⁵² "Dreamlets" occur in the stressed brain (e.g. of fighter pilots) immediately prior to unconsciousness. This does not seem to be a plausible explanation of NDEs because Whinnery's research indicates that these individuals wake up confused and anxious – instead of having lucid recollections and positive life-transforming experiences.⁵³

Beauregard then turns to the hypothesis of narcotically induced hallucination as a possible explanation of NDEs. Researcher Karl Jansen conjectured that he could produce an NDE by inhibiting NMDA receptors (by ingesting small quantities of ketamine – a veterinary anesthetic).⁵⁴ Though this did induce a sense of being out of body, the images in the hallucination were "weird" and perspectives were exaggerated.⁵⁵ In contrast to this, patients having a near death experience perceive their surroundings in precisely the way they exist – e.g. inside the operating room (many of these perceptions have been verified by independent researchers after the fact – see above Section III.A).

Another recent explanation has been offered by neuroscientist, Michael Persinger, who proposes that he too can stimulate an NDE by using weak transcranial magnetic stimulation (TMS) of the temporal lobes.⁵⁶ Beauregard, citing Greyson and the literature of epilepsy, shows that NDEs do not resemble the psychic states experienced by epileptic patients, and that transcranial stimulation of the temporal lobes does not result in experiences similar to NDEs, but rather in the psychic states associated with epilepsy.⁵⁷

⁴⁹ See Blackmore 1993 pp. 49–62

⁵⁰ See van Lommel 2001 p. 2044.

⁵¹ Parnia 2014 pp. 159-160.

⁵² See Beauregard 2012 (b) p. 3. See also Kelly, Crabtree, and Kelly, 2007, p. 379-380.

⁵³ See Beauregard 2012 (b) p. 3. See also Kelly, Crabtree, and Kelly, 2007, p. 379-380.

⁵⁴ Jansen 1997 pp. 79-95.

⁵⁵ Beauregard 2012(b) p. 3.

⁵⁶ See Beauregard 2012, p. 3. See also Kelly, Crabtree, and Kelly, 2007, p. 383

⁵⁷ Beauregard 2012 (b) pp. 3-4.

In 2013 (after Beauregard's book), Jimo Borjigin proposed another possible physicalist explanation for NDEs. During his experiments with rats, he discovered that a surge of electrical activity occurred in the brain (which he hypothesized *might* produce consciousness and an image) when rats experienced cardiac arrest.⁵⁸ This hypothesis is not on the same level as the ones mentioned above for three reasons: (1) it was restricted to rats (not humans), (2) there is no evidence that the electrical surge in the brain produced either consciousness or an image, and (3) even if there were evidence that it produced consciousness and an image, there is no evidence that this consciousness-image resembles near death or out of body experiences. In short, this hypothesis does not give researchers *anything* to compare to NDEs or OBEs – it is a pure speculation without an identifiable frame of comparison, meaning that it does not yet qualify as a scientific hypothesis.

At the present time, neuroscience is not able to generate a credible physical explanation for the verified out of body phenomena in near death experiences. There is reason to believe that such explanations will never be able to do this. First, there is a radical discontinuity between those experiencing NDEs and those experiencing physically induced illusory states (e.g. in the studies of Blanke, Whinnery, Jansen, and Persinger). The former group (NDEs) has no electrical activity in the cerebral cortex (marked by a flat EEG) and virtually no electrical activity in the lower brain (fixed and dilated pupils and absence of gag reflex). However, the latter group (physically stimulated illusions) has both a functioning cortex and lower brain. Susan Blackmore presents the only case of a "dying brain" in which electrical activity is being diminished because of anoxia. Though this hypothesis resembles the diminished electrical activity in the brain during clinical death, it falls prey to both van Lommel's criticism (since 100% of dying people experience anoxia, 100% should have a near death experience if anoxia is the cause of NDEs), and Parnia's criticism – (there are patients who have NDEs without anoxia).⁵⁹

The second major difference between NDEs and physically stimulated illusion (hereafter "PSI") is that the latter do not resemble the former. Blanke's PSI gives rise to abnormal bodily experiences and a false sense of reality (instead of a clear and accurate perception of reality and one's place in it), Whinnery's PSI gives rise to a state of confusion and anxiousness in its aftermath (instead of clarity and lifelong positive transformation). Jansen's narcotically induced hallucination gives rise to false and weird images and exaggerated perspectives (unlike NDEs), and Persinger's PSI gives rise to psychic states associated with epilepsy (which are quite distinct from those associated with NDEs).

The third major difference between NDEs and physicalist explanations concerns the accurate veridical experience of both sighted and blind people during clinical death. There is no

⁵⁸ Borjigin 2013.

⁵⁹ See Parnia 2014. pp. 159-160.

evidence of this occurring during anoxia or any of the above PSI phenomena. Even if PSIs could produce these effects, it would *not* prove that those effects had their origin in physical reality *alone*—i.e., that there is no *transphysical* dimension of consciousness. Indeed, there *must be* such a transphysical dimension of consciousness so that clinically dead individuals can accurately see and hear apart from and above their physical bodies. PSIs have certainly not given a *physical* explanation of how clinically dead individuals can see and hear apart from their physical bodies. Thus, even if PSIs could produce the effects of NDEs (which they are currently unable to do), it would only show that they had caused a *trans*physical state of consciousness to occur—a state of consciousness that can accurately see and hear apart from and above a clinically dead physical body. If PSIs could produce the same effect as NDEs it would only serve to show that stimulation of the brain caused a *separation* of a *trans*physical dimension of consciousness from the physical body—it would not disprove the existence of that *trans*physical dimension.

In sum, it is highly unlikely that physicalist explanations will ever be able to account for this last line of reasoning because it would require them to prove that merely physical phenomena can have unmistakably transphysical effects—which is at best a contradiction. Physicalist explanations *per se* are limited to showing how physical causes produce *physical* effects—nothing more. Therefore, the physicalists will have to either open the door to *transphysical* explanation, or leave the explanation of near death experiences to those who are open to the transphysical domain.

V.

Love and Near Death Experiences

As we have seen, there is considerable evidence of survival of human consciousness after clinical death, implying a transphysical dimension of human nature and a transphysical origin of consciousness. However, it does not show that this transphysical dimension of consciousness is *eternal*. Nevertheless, there are some *clues* that this transphysical condition is eternal – e.g. the love and benevolence of the white light as well as the love of Jesus and deceased relatives and friends, which seem to betoken the intention of a loving deity to fulfill our greatest desire, namely, unconditional love and joy with that deity throughout eternity. This last point deserves special consideration because in every instance of an encounter with the "being of light" in all of the above studies patients reported the experience to be one of intense love. The following case resembles hundreds of others reported by the above researchers:

I became very weak, and I fell down. I began to feel a sort of drifting, a movement of my real being in and out of my body, and to hear beautiful music. I floated on down the hall and out the door onto the screened-in porch. There, it almost seemed that clouds, a pink mist really, began to gather around me, and then I floated right straight on through the screen, just as though it weren't there, and up into this pure crystal clear light, an illuminating white light. It was beautiful and so bright, so radiant, but it didn't hurt my eyes. It's not any kind of light you can describe on earth. I didn't actually see a person in this light, and yet

it has a special identity, it definitely does. It is a light of perfect understanding and perfect love.... And all during this time, I felt as though I was surrounded by an overwhelming love and compassion.⁶⁰

This experience of overwhelming love by those who encountered the "being of light" may legitimately provoke the intuition that this being's intention is not only *transitory* benevolence, but to give unconditional and *eternal* love -- which corresponds to the fulfillment of our greatest desire.

VI. Conclusion

The above studies of near death experiences give considerable probative evidence of transphysical consciousness after bodily death which is not explained by current physicalist explanations and unlikely to be explained by future ones. In view of this, and the preponderance of evidence for a positive, loving experience after bodily death, we now have an ultimate context in which to interpret happiness and suffering. We no longer need to limit happiness to our physical existence and our bodily lifespan, but can explore transcendent and eternal happiness both now and in our eternal future.⁶¹

At this point, the evidence and methodology of experience, reason, and science fall silent. For even though near death experiences point to a future of intense love, we are left with many questions that NDEs, natural reason, and experience cannot answer. How do we orient ourselves toward this post-mortem life of love? Is the "being of light and love" God? Does God help us, protect us, guide us, and inspire us in *this* life? If so, how? In view of the fact that about 85% of children undergoing clinical death have near death experiences, why do only 9 to 18% of adults have one? Is there something that adults must decide or do before they can transition to a heavenly domain (with the being of light, deceased relatives, and Jesus)? Why do some adults (around 1%) have negative post-mortem experiences? Does God or the being of light have a specific purpose for each of us? Can we pray to God or the being of light before we die? These and many other questions go beyond the data of near death experiences – yet they beg for an answer in light of them.

Does God or the being of light stop his revelation (about our transcendence and postmortem future) with near death experiences – or does he provide additional revelation that can answer the above questions? I find it incomprehensible that a loving God who gives us a glimpse into our eternal existence with Him (through NDEs) would leave us completely in the dark about the above questions – especially if they have significance for that eternal existence with Him. If this conjecture is correct, then God must have given us another source of revelation to answer the above questions. What could be the source of that revelation?

⁶⁰ Moody, 1975, pp. 53-54.

⁶¹ Readers interested in transcendent happiness might want to look at the two free videos and the free article on this landing page -- ("Happiness & Suffering"). These free resources provide information on the Four Levels of Happiness, how to move from the lower levels to the higher levels, and how to interpret suffering in light of the higher levels of happiness.

I would submit that it is the revelation of Jesus Christ – not only because many people see Jesus in near death experiences, but also because the being of light is intensely loving – resembling Jesus' revelation of God as "Abba" and "the father of the Prodigal Son."⁶²

For Jesus, God is not only our Father, but "*Abba*" (the word used by little children to address their fathers). Jesus compares him to the father in the Parable of the Prodigal Son – a father who is unconditionally forgiving, compassionate, affectionate, accepting, and humble. Jesus not only reveals His *Father* to be unconditional love, but also He Himself. His miracles, teachings, love of sinners, and self-sacrificial death all show this unconditionally loving heart which gives credibility to his claim to be the only begotten Son. Moreover, many members of the early Church were witnesses to his resurrection, and reported that his risen body was transformed. Some aspects of this transformation resemble near death experiences. Furthermore, Jesus' view of the resurrection as a state of unconditional love is corroborated by the vast majority of near death experiences. These parallels between Christianity and near death experiences suggest that Jesus does hold the key to the additional revelation we need to orient ourselves from this life to the next.

If the above reasoning seems plausible to readers of this website, you might want to explore Jesus' revelation further. This can be done by clicking on the fourth pillar of intellectual evangelization – the "Reality of Jesus." In addition to the free video, you can explore the evidence from the Shroud of Turin and the free Jesus Wiki on the latest historical evidence supporting his claim to be the only begotten Son of the Father.

⁶² For an explanation of Jesus' Father being like the father of the Prodigal Son, go to the fourth pillar of intellectual evangelization (The Reality of Jesus) on this website, and click on the free video underneath my picture.

References

Alexander, Eben. M.D. 2012. "The Science of Heaven." In Newsweek. November 18, 2012.

Basford, T.K. 1990. Near-death experiences: An annotated bibliography. (New York: Garland).

Beauregard, Mario 2012 (a). Brain Wars: The Scientific Battle Over the Existence of the Mind and the Proof that Will Change the Way We Live (New York: Harper One).

----. 2012 (b). "Near Death Explained" in *Salon*. http://www.salon.com/2012/04/21/near_death_explained

- Beauregard, Mario and O'Leary, Denyse 2008. *The Spiritual Brain: A Neuroscientists's Case for the Existence of the Soul* (New York: Harper One).
- Beck, Friedrich. 2008. "Synaptic Quantum Tunneling in Brain Activity." *NeuroQauntology*. Vol. 6. Issue 2. pp.140-151.
- Beck, Friedrich and Eccles, John C. 1992. "Quantum Aspects of Brain Activity and the Role of Consciousness." *Proceedings of the National Academy of Sciences – USA*. Vol. 89, pp. 11357-11361.
- ---- 2003. "Quantum Processes in the Brain: A Scientific basis of consciousness." In *Neural Basis of Consciousness*. Philadelphia: John Benjamins.

Bermúdez, J. L. 2003. Thinking Without Words. (Oxford: Oxford University Press).

Blacher, R.S. 1979. "To sleep, perchance to dream..." In *Journal of the American Medical Association, 242, 2291.*

Blackmore, S. 1993. *Dying to Live: Science and the Near-Death Experience*. (London: Grafton).

- Borjigin, Jimo, 2013. "Surge of Neurophysiological Coherence and Connectivity in the Dying Brain." In *Journal Proceedings of the National Academy of Sciences*. August 2013.
- Carter, Christopher. 2010. *Science and the Near-Death Experience*. (Rochester, Inner Traditions).
- Chalmers, David 1995 "Facing Up to the Problem of Consciousness" *Journal of Consciousness Studies* 2 (3): pp 200-219.
- ----. 1997. *The Conscious Mind: In Search of a Fundamental Theory*. (London: Oxford University Press).

- ----. 2010. *The Character of Consciousness (Philosophy of Mind)*. (London: Oxford University Press).
- Clark, K. 1984. Clinical interventions with near-death experiencers. In B. Greyson & C.P. Flynn (Eds.), *The Near-Death Experience: Problems, Prospects, Prospectives.* (Springfield, IL: Charles C. Thomas).
- Cook, E. W., Greyson, B., & Stevenson, I. 1998. "Do any near-death experiences provide evidence for the survival of human personality after death? Relevant features and illustrative case reports." In *Journal of Scientific Exploration*, Vol. 12, pp. 377-406.
- Eccles, Sir John. 1970. Facing Reality: Philosophical Adventures by a Brain Scientist (Heidelberg: Heidelberg Science Library).
- ----. 1983. *Mind and Brain: The Many-Faceted Problems*. (St. Paul Minnesota: Paragon Books).
- ----. 1989. Evolution of the Brain: Creation of the Self (London, UK: Routledge).
- ----. 1990. "A Unitary Hypothesis of Mind—Brain Interaction in the Cerebral Cortex" in *Proceedings of the Royal Society – Biological Sciences* B 240, pp. 433-451.
- Fenwick, P., & Fenwick, E. 1995. *The Truth in the Light: An investigation of over 300 neardeath experiences.* (New York: Berkley Books).
- Gallup, George Jr. and Proctor, William. 1982. *Adventures in Immortality*. (New York: McGraw-Hill).
- Gödel, Kurt. 1931. "Über formal unentscheidbare Sätze der Principia Mathematica undverwandter Systeme I." In *Monatshefte für Mathematik und Physik* 38, pp. 173-98.
- Greyson, Bruce, 2007. "Comments on 'Does Paranormal Perception Occur in Near-Death Experiences?"" in *Journal of Near-Death Studies*, 25(4). Summer 2007, pp. 237-244
- ---- 2010. "Seeing Dead People Not Known to Have Died: "Peak in Darien" Experiences." American Anthropological Association. November 21, 2010. http://onlinelibrary.wiley.com/doi/10.1111/j.1548-1409.2010.01064.x/abstract.
- Greyson, B., & Flynn, C.P. 1984. *The Near-Death Experience: Problems, Prospects, Perspectives* (Springfield, IL: Charles C. Thomas).
- Holden, Janice. 2007. "More things in Heaven and Earth: A Response to Near-Death Experiences with Hallucinatory Features." In *Journal of Near-Death Studies* 26, no.1 (Fall 2007): 33-42.

- ----. 2009. Handbook of Near Death Experiences: Thirty Years of Investigation. (Connecticut: Praeger Press).
- Jansen, Karl, 1997 "Response to Commentaries on 'the Ketamine Model of near-death experience'", in *Journal of Near- Death Studies 16*: 79–95.
- Kelly, Edward, A. Crabtree, and E.W. Kelly. 2007, Irreducible Mind: Toward a Psychology for the 21st Century (Lanham, MD.: Rowman & Littlefield).
- Kelly, Emily. 2001. "Near-Death Experiences with Reports of Meeting Deceased People." In *Death Studies*, Vol. 25: 229-249, 2001. http://www.medicine.virginia.edu/clinical/departments/psychiatry/sections/cspp/dops/dr.stevensons-publications/STE30ArePersonsReportingNDEs.pdf)
- Kelly, E.W., Greyson, B., & Stevenson, I. 2000. "Can experiences near death furnish evidence of life after death?" In *Omega: Journal of Death and Dying*, Vol. 40, pp. 39-45.
- Lonergan, Bernard. 1992. Insight: A Study of Human Understanding. In Collected Works of Bernard Lonergan 3, edited by Frederick E. Crowe and Robert M. Doran. (Toronto: University of Toronto Press).

Long, Jeffery. 2010. Evidence of the Afterlife. (New York: Harper One).

Lycan, William. 1996. *Consciousness and Experience*. (Cambridge: MIT Press). Moody, Raymond A. 1975. *Life After Life*. (New York: Harper Collins).

- ----. 1988. The Light Beyond. (New York: Bantam Books).
- ----. 1993. *Reunions: Visionary Encounters with Departed Loved Ones*. (New York: Random House).
- Morse, MD, Melvin. 1990. Closer to the Light: Learning from the Near-Death Experiences of Children. (New York: Random House).
- ----. 1992. Transformed by the Light. (New York: Ballantine Books).
- Morse, M.; Castillo, P.; Venecia, D.; et al. 1986. "Childhood Near-Death Experiences." In *American Journal of Diseases of Children*, 140, pp. 1110-1113.
- Morse, M.; Connor, D.; and Tyler, D. 1985. "Near-Death Experiences in a Pediatric Population." In *American Journal of Diseases of Children*, 139, pp. 595-600.

Nagel, Thomas. 1974. "What is it like to be a bat?." In *Philosophical Review*, Vol. 83: 435-50.

----. 2012. Mind and Cosmos. (London: Oxford University Press).

- Nuland, S.B. 1994. *How we die: Reflections on life's final chapter*. (Norwalk, CT: Hastings House).
- Parnia, Sam et al. 2014 "AWARE Awareness during Resuscitation A Prospective Study" *Journal of Resuscitation* (October 6, 2014). http://www.resuscitationjournal.com/article/S0300-9572%2814%2900739-4/fulltext.
- ---- 2014 Erasing Death: The Science That is Rewriting the Boundaries Between Life and Death (New York: Harper One).
- Pearson, Helen, "electrodes trigger out of Body experience", Nature, September 19, 2002. www.nature.com/news/2002/020916/full/news020916- 8.html.
- Popper, Karl and Sir John Eccles. 1984. *The Self and Its Brain: An Argument for Interactionism* (New York: Routledge).
- Rahner, Karl. 1968. Spirit in the World. (New York: Herder and Herder).
- ----. 1982. Foundations of Christian Faith. (New York: The Crossroad Publishing Company).
- Ring, Kenneth. 1980. *Life at Death: A Scientific Investigation of the Near-Death Experience*. (New York : Coward, McCann & Geoghegan).
- Ring, Kenneth; Cooper, Sharon; and Tart, Charles. 1999. *Mindsight: Near-Death and Out-of-Body Experiences in the Blind*. (Palo Alto, CA: William James Center for Consciousness Studies at the Institute of Transpersonal Psychology).
- Ring, K., and Lawrence, M. (1993). Further evidence for veridical perception during near-death experiences. Journal of Near-Death Studies, 11, 223–229.
- Ring, Kenneth, and Valarino, Evelyn Elsaesser. 2006. Lessons from the Light: What we can learn from the near-death experience. (New York: Insight Books).
- Roberts G, & Owen J. 1988. "The Near-Death Experience." In *British Journal of Psychiatry*, Vol. 153, 607-617.
- Rodin, E. 1980. "The reality of death experiences: A personal perspective." In *The Journal of Nervous and Mental Disease*. Vol. 168, 259-263.
- Sabom, M.B. 1982. *Recollections of Death: A Medical Investigation* (New York: Harper & Row).
- Spitzer, Robert J. 2010 (b) "Why is Human Self-Consciousness Different from Artificial Intelligence and Animal Consciousness? In *Ultimate Reality and Meaning: Interdisciplinary Studies in the Philosophy of Understanding* (Vol. 33 nos. 1-2) pp. 5-27.

---- 2015 The Soul's Upward Yearning: Clues to our Transcendent Nature from Experience and Reason. (San Francisco: Ignatius Press). Available in Fall of 2015.

Stapp, Henry. 2002. "The basis problem in many-world theories." In *Canadian Journal of Physics* Volume 80, pp 1043–1052.

- ---- 2007. *Mindful Universe: Quantum Mechanics and the Participating Observer* (New York: Springing Publications).
- ---- 2012. "Reply to a Critic: Mind Efforts, Quantum Zeno Effect and Environmental Decoherence." *NeuroQuantology*. Vol. 10. Issue 4. pp. 601-605.

van Lommel, Pim. 2010. Consciousness Beyond Life. (New York: Harper One).

- van Lommel, MD, Pim; van Wees, Ruud; Meyers, Vincent; and Elfferich, Ingrid. 2001. "Near-Death Experience in Survivors of Cardiac Arrest: A Prospective Study in the Netherlands." In *The Lancet*. Vol. 358, Issue 9298, pp. 2039-2045.
- von Neumann, John 1996. *Mathematical Foundations of Quantum Mechanics*. Trans. by Robert Beyer. (Princeton: Princeton University Press).
- Watson, JNW 1983 "Mind and Brain" in *Mind and Brain: the Many-Faceted Problems* ed by Sir John Eccles (St. Paul Minnesota: Paragon) pp 315-325.
- Zaleski, C. 1987. Otherworld Journeys: Accounts of Near-Death Experience in Medieval and Modern Times (Oxford: Oxford University Press).

Second Topic Evidence of the Soul from our Transcendental Desires

There are five Transcendental Desires that were recognized around 400 BC by Plato and Aristotle. St. Augustine, St. Thomas Aquinas and many other philosophers have spoken of these same desires through the centuries. Let's look at how these transcendental desires indicate the presence of God to your consciousness.

I.

The Basic Argument from Plato to Lonergan

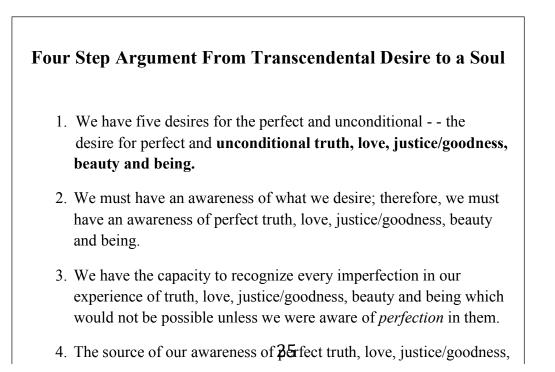
What are these transcendental desires? They are our built-in desires for:

- i. Perfect and unconditional **Truth**
- ii. Perfect and unconditional Love
- iii. Perfect and unconditional Justice (Goodness)
- iv. Perfect and unconditional Beauty
- v. Perfect and unconditional **Being (Home)**

Here is the **basic argument of Plato** which has influenced generations of philosophers:

- One of the most basic experiences we have is the experience of imperfections in the world around us. We seem to be **instinctively aware of imperfections** in our understanding of things (truth), imperfections in the love of others and even ourselves, imperfections in the justice or goodness of others and ourselves, imperfections in the beauty of the world around us, and imperfections in our sense of "being at home in the world." Indeed, we seem to recognize *every* imperfection in these five areas – instinctively and endlessly.
- 2. How could we recognize these imperfections unless we had an awareness of what **perfection** in these five areas would be like?
- 3. As we shall see below, the source of our awareness of these five kinds of perfection would have to be the five kinds of perfection themselves and these five kinds of perfection perfect **truth**, **love**, **justice/goodness**, **beauty and home/being** turn out to be the one perfect God.

It looks like we have a lot of explaining to do.



II.

The Five Transcendental Desires—Considered Individual

II A

Perfect Truth

Let's start with the desire for **perfect truth**. We can explore this in four steps:

- 1. We have a very interesting ability. Every time we give an answer to a question, we have the ability to know whether that particular answer is the knowledge of "everything about everything." As you may have discovered by now, you always seem to think that your answers are not the "knowledge of everything about everything" that your knowledge is **imperfect.** And so you ask another question. We not only have a desire to know everything about everything, we have the capacity to know whether we have reached that goal at any point in our inquiry, and if we have not reached it which at least for me has not yet occurred we keep asking questions. We won't be satisfied until we have finally gotten to our goal the whole truth knowledge of everything. By the way, if you did not know that your answer was not "everything about everything," you would not ask another question you would simply marvel blankly at the answer you have already gotten. But the fact is, we relentlessly ask questions because we are aware that our knowledge is imperfect and incomplete.
- 2. Now here is the crucial question. How can we always know that our knowledge is imperfect and that we have not yet reached the goal of perfect knowledge unless we had some idea of what perfect knowledge would be like? Think about it if you had absolutely no awareness of what perfect knowledge would be like, you would not recognize any imperfection in your current knowledge and so you would have no desire to ask a question indeed you would not even be aware that there was a question to be asked. In a sense then, without this awareness of what perfect knowledge would be like, we would be unintelligent and uncreative because we would ask no questions. That would be too bad because Aristotle said asking questions is the beginning of all knowledge and creativity.

Note: So what is this awareness of perfect knowledge? Well, it can't be the **knowledge** of perfect knowledge, because if you knew that, you wouldn't have any further questions – you would have perfect knowledge. So philosophers have talked about this as a **tacit** or notional awareness of what perfect knowledge

would be like. It is something we can **sense** as a goal of our inquiry, but we have not yet brought it into focus – so that we explicitly know it. Many philosophers, such as Karl Rahner, call it a horizon – we are aware of a horizon of perfect knowledge, but like any horizon, it is beyond our reach -- we have not yet reached its full extent.

- 3. What could possibly be the source of our tacit awareness of "everything about everything?" Well, as you can imagine, it cannot be anything in this world because all of the objects of our experience and all the ideas that we have are imperfect inciting us to ask further questions. So we clearly did not get our tacit awareness of everything about everything from either our experience of the outside world or the ideas we already grasp. So where did we get it from? Philosopher's from Plato, Aristotle, and Aquinas, to Rahner, Lonergan, and Coreth all say it must come from perfect knowledge itself "perfect truth itself" "the complete set of correct answers to the complete set of questions." No other reality can produce the idea of perfect knowledge except the idea of perfect knowledge itself.
- 4. So what is the idea of perfect knowledge itself? As you might suspect, it is God. This proof was given in the previous chapter (Chapter I—Third Topic—The Five Transcendental Attributes of God). Recall that this God must be an unrestricted act of thinking (shown in both the contemporary Thomistic metaphysical proof and the Lonerganian proof.

If the above reasoning is correct, then God is present to your consciousness – and not only that – his presence to you as "the idea of perfect knowledge" gives you a horizon of perfect knowledge, enabling you to ask questions ceaselessly and to create new ideas continuously in the wake of that questioning. God not only exists – he incites our continuous questioning and creativity.

II B

Perfect Love

If that didn't thoroughly exhaust you, then let's go to our desire for **perfect love**. You will notice that this argument follows the same lines as the argument from our desire for perfect truth. We will give this argument in an abbreviated way in four steps, but you will be able to see the point.

- 1. We have the ability to notice imperfection in love in both others and ourselves in virtually every conceivable context. Amazingly enough, very small children can notice imperfection or inauthenticity in the love of parents, teachers, brothers and sisters, and friends almost as well as adults.
- 2. How can we notice virtually every imperfection in the love of others and ourselves continuously and endlessly, if we did not have some idea of what perfect love would be like? Stated the other way around, if we had no sense of the perfect ideal of love (what perfect love would be like), we would never notice any imperfection in love we would be satisfied with any manifestation of affection much like my wonderful dog -- who is not perturbed by my inauthenticity, distraction, desire to do something else, etc.
- 3. Once again we must ask what could be the source of our awareness of what perfect love would be like. The source of this awareness cannot be any kind of love which we have experienced in the outside world. Let's face it it is precisely this love that causes us to recognize imperfection in it. This has led many philosophers to believe that the only possible source of our awareness of what perfect love would be like is perfect love itself.
- 4. What is perfect love? As you might suspect, it is the one God we proved in the previous chapter. (Chapter I-Third Topic-The Five Transcendental Attributes of God).

If we assume that the source of our awareness of perfect love is the one God (proved in the metaphysical proof), then we move to a two-fold conclusion – first, God is perfect love, and secondly, the perfectly loving God is present to our consciousness. Furthermore, when that perfectly loving God is present to us, we have a tacit awareness of what perfect love would be like, and this in turn, enables us to see imperfection in our love and the love of others – helping us to grow to evermore perfect kinds of love.

II C

Perfect Justice/Goodness

As you might suspect, the argument concerning our desire for perfect justice/goodness, follows the very same lines as the one above for perfect love. It too can be set out in four steps.

1. We have the ability to notice imperfection in justice (goodness) – in both others and ourselves – in virtually every conceivable context. We not only notice

unfairness (and evil) in individual people, but also in virtually every organization and institution. We can see unfairness in economic systems, judicial systems, educational systems, cultural institutions, and so forth. Our capacity to recognize imperfection in justice (goodness) seems to know no limits – resembling our capacity to recognize imperfection in knowledge and love. Again, little children have the ability to recognize unfairness in parents and teachers – even though their parents and teachers did not teach them how to do so.

- How can we notice virtually every imperfection in the justice (goodness) of others, ourselves, organizations, institutions, systems, and society -- endlessly, if we do not have some idea of what perfect justice (goodness) would be like? Stated the other way around, if we had no sense of the perfect ideal of justice (goodness), we would never notice any imperfection in justice (goodness) – we would simply count "survival of the fittest" as our lot in life.
- 3. Once again we must ask what could be the source of our awareness of what perfect justice (goodness) would be like. The source of this awareness cannot be any kind of justice (goodness) which we have experienced in the outside world. Again, it is precisely this justice (goodness) that causes us to recognize imperfection in it. This has led many philosophers to believe that the only possible source of our awareness of what perfect justice (goodness) would be like is perfect justice (goodness) itself.
- **4.** What is perfect justice (goodness)? As you might suspect, it is the one God we proved in the previous chapter (Chapter I Third Topic).

What can we conclude from this? If the above reasoning is correct, then God is not only perfect intelligence and perfect love, he is also perfect justice (goodness). Furthermore, he is present to our consciousness as perfect justice (goodness), creating a horizon of perfect justice (goodness) which incites us to strive for ever greater forms of justice and goodness in ourselves, others, organizations, institutions, laws, ideals, government, culture, and every other aspect of human endeavor.

ll D

Perfect Beauty

The very same line of reasoning applies to perfect beauty as to perfect truth, love, and justice (goodness). At this juncture, it will only be necessary to present the first step of

the argument, and you can figure out the other three steps from the line of reasoning given above.

- 1. We have the capacity to recognize imperfection in every dimension of every kind of beauty – artistic beauty, musical beauty, architectural beauty, literary beauty – and even beauty manifest in the human heart, human ideals, and human aspirations. Even when we are immersed in the most beautiful of nature walks or along a beautiful seascape, we always seem to strive for another angle – something more interesting – more beautiful. We try to enhance beauty in music by making it more complex – and sometimes by simply "turning up the volume." We see endless imperfections in the beauty of ourselves and others, and strive to overcome those imperfections.
- How can we notice virtually every imperfection in all of the above forms of beauty

 continuously and endlessly? You should be able to answer this question –
 without even being a Platonist philosopher.
- 3. What could be the source of our tacit awareness of what perfect beauty would be like? Again, you should be able to answer this question.
- 4. What is perfect beauty? Once again, it is the same God we proved in the previous Chapter (Chapter I- Third Topic).

Now you draw the conclusion – what does this say about who God is and how he is present to our consciousness?

III Final Conclusion

If the above reasoning is correct, then God is not only the unique unrestricted uncaused reality who is the cause of everything else; he is also perfect intelligence, perfect love, perfect justice (goodness), and perfect beauty. Furthermore, he is present to our consciousness as the source of our awareness of perfect truth, love, justice (goodness), and perfect beauty – and as such, he incites us to creativity in every form of human endeavor – in the striving for greater truth, love, justice (goodness), and beauty. God not only gives us a transcendent soul (manifest in the evidence of near death experience), He also fills our soul with the horizon of his perfection which causes us to be everything that we are – an image of himself.

Third Topic God's Presence to Our Consciousness: The Numinous Experience, Intuition of the Sacred, and Conscience

Introduction

The evidence for our interior awareness of a Transcendent Reality is primarily subjective - though it is not limited to *our* personal subjective experience alone. It can be correlated with the subjective experience of thousands of others in different cultures and religions to detect similarities and patterns which show their virtually universal presence in both history and the contemporary age. Though this is not strictly speaking objective evidence (grounded in a similar extrinsic publically accessible data source), it is persuasive because of its multiple occurrences. This evidence, as William James notes, is not dissimilar from much of the evidence for neurosis, psychosis, and other mental disorders described in the annals of contemporary psychology. As we shall see, the evidence strongly indicates that human beings have religious experiences that have a common root. But does this common root indicate the presence of a Transcendent Other or only a manifestation of hyper imagination or hyper emotion arising out of merely natural causes? If one contends that the cause of the numinous is merely natural, then we will have to find *completely* naturalistic answers to the following questions: Why is 84% of the world religious?⁶³ Why do most world religions share seven common beliefs amidst many differences?⁶⁴ Why do people from every culture throughout history believe that something "wholly Other" is present to them and inviting them into itself?⁶⁵ Why do people from every culture throughout history believe that this "wholly Other" is fascinating, wonderful, and desirable amidst its mystery and overpowering energy?⁶⁶ Why do the vast majority of people from every culture feel a call to worship – both privately and publicly?⁶⁷ Why do people of virtually every culture naturally connect with symbols of transcendent mystery, power, and glory?⁶⁸ Why do people of every culture throughout history have a sense of sacred origins, places, times, and history?⁶⁹ Why does religious belief come so naturally to children of every

⁶³ According to the 2012 Pew Research Religion and Public Life Project Report *The Global Religious Landscape*,
84% of the world's population (in 230 countries and territories), identify with a religious group. This encompasses 5.8 billion religiously affiliated adults and children out of a world population of 6.9 billion.

⁶⁴ Freidrich Heiler enumerates seven major similarities amongst the seven major contemporary religions – see Heiler 1959, pp. 142-153.

⁶⁵ See Otto 1958. This is discussed explicitly below in Section I.

⁶⁶ See Otto 1958. Discussed explicitly below in Section I.

⁶⁷ Eliade 1987. Discussed explicitly in Chapter II.

⁶⁸ Eliade 1987. Discussed explicitly in Chapter II.

⁶⁹ Eliade 1987. Discussed explicitly in Chapter II.

culture?⁷⁰ Why do divine goodness, divine power, personified evil, and evil power appear in the dreams of virtually every religion and culture with similar symbols?⁷¹

Religious believers and mystics assert with certainty that our interior awareness of the absolute, the transcendent, the spiritual, and the sacred comes from a divine source because this interior awareness is of something other, something higher, something not controllable by us. Though we sense this presence within us, we are aware that it is outside of us, and if we allow it, it can sweep us into its energy, mystery, and love.

Secular psychologists and anthropologists contend the opposite. Some think that they have never had an experience of a divine Other which incites humility, excitement, fascination, and worship. Others contend that they have such feelings, but are certain that their origin is from their unconscious minds and their free floating imagination.

It is interesting to note that both groups come to the investigation of religious experience with a considerable number of presuppositions. Religious people not only come with openness to faith, but also with a desire not to reduce spiritual or transcendent data to materialistic or physical categories (they are methodologically non-reductionistic). Alternatively, secular psychologists and anthropologists tend to be closed to the possibility of transcendence and faith, and feel the need to be reductionistic in order to be "honestly scientific."

There is a problem from the outset with attempting to reduce and explain transcendent and transphysical realities in terms of physical and material categories. Transcendent categories, by definition, go *beyond* the physical, and so we can never be sure whether physical categories are capable of explaining what lies beyond them. Scientific honesty does not require forcing square pegs into round holes. Should scientists ask whether transcendent experience is reducible to physical processes or should they ask whether transcendent experience can *not* be adequately explained by physical processes? Should science be focused on how to make transcendent experience has a dimension of the transphysical in it? Should people's experience of an absolute spiritual Other be respected as having a quality of genuine "*Otherness*?" The enterprise of honest scientific inquiry is a matter of interpretation – but we should bear in mind that every reductionistic system falls prey to one of logics most fundamental precepts (discussed earlier) – that there are far more errors of omission than commission. These errors of omission can come from innocent ignorance

⁷⁰ Harvard psychiatrist Robert Coles interviewed in-depth over 500 Catholic, Protestant, Jewish, Islamic, Native-American, and agnostic children, ages 8-12, living in North and South America, Europe, Africa, and the Middle East. He found that the vast majority of children had a strong belief in a transcendent deity, who was in a relationship with them personally and with others. Since they felt that God cared for them and had expectations of them, they had strong convictions about theological matters, and wanted answers to perceived contradictions between their spiritual experience and theological doctrines. The children were earnest and sincere about their beliefs and theological viewpoints. See Coles 1991.

⁷¹ See Jung 1981.

or from willful *aprioristic* assumptions. But whatever the case, they generally produce history's most egregious intellectual and methodological blunders.

For this reason, I have chosen to discuss the topic of our interior awareness of the transcendent from two authors who are open to the transcendent, not governed by reductionistic, methodological assumptions, acquainted with a vast number of transcendent experiences from virtually every culture and religion, have understanding and respect for the symbols and expressions of those cultures and religions, and draw their conclusions from their vast empirical and historical studies -- Rudolf Otto and Mircea Eliade.

I. The Numinous Experience—Rudolf Otto

No one has influenced the study of the interior awareness of transcendence more than the great scholar of comparative religion, Rudolf Otto in his classic work *The Idea of the Holy*. Though Otto borrowed from the American psychologist William James (*The Varieties of Religious Experience*) and the liberal German theologian Friedrich Schleiermacher, he nuances and goes beyond them in many significant respects. His seminal work influenced the great historian of religion, Mircea Eliade and most major protestant theologians of the 20th century (including Karl Barth, Paul Tillich, and C.S. Lewis) as well as Catholic philosophers and theologians, e.g. Max Scheler and Karl Rahner.

Section I. A A General Description of the Numinous Experience

After a comprehensive study of historical and contemporary religion, Otto concludes that most human beings have an irreducibly, non-rational experience of the numinous (the interior presence of the transcendent or divine).⁷² The "numen" (that which is experienced as transcendent) presents itself fundamentally as "wholly Other,"⁷³ having two distinct poles of "*feeling*-content:"

⁷² See Otto 1958, pp. 6-7.

 $^{^{73}}$ As will be explained in Section II below, the numinous experience at base is one of mysteriousness in which the numinous object is felt to be completely different from the experiencing subject – "wholly Other." Otto describes it as follows: "Taken in the religious sense, that which is 'mysterious' is – to give it perhaps the most striking

- 1. A sense of something mysterious, overwhelming, and daunting which elicits from us a sense of diminution, humility, submission, and creatureliness.
- 2. A sense of something fascinating, desirable, good, caring, and comforting which invites us into its fullness, fulfills us, and in so doing produces a unique kind of spiritual joy (bliss).

Otto nuances the elements of these two poles in considerable detail, careful to show their non-rational (i.e. pre-rational, pre-reflective, pre-thematic) feeling-content which is intrinsic to the numen present to us. Before discussing these nuances, it must be emphasized that these different (virtually opposing) poles of feeling-content are not synthesized in *our* consciousness, but rather in the wholly Other *numen* present to us. The wholly Other numen is immediately present to us, and the two poles of feeling are synthesized in *it* (not in us). Otto asserts strongly that the presence of the numen to individuals is the foundation of religion throughout history and the world:

There is no religion in which [the numen present to individuals] does not live as the real innermost core, and without it no religion would be worthy of the name.⁷⁴

It now remains to give a nuanced description of each of the poles, an explanation of their recognition in human history, and their synthesis in both the numen itself and human experience. This will be done in three sections:

- 1. The First Pole: Mysterium Tremendum in the Numen (Section II).
- 2. The Second Pole: Fascination, Desire, Love, and Bliss in Our Experience of the Numen (Section III).
- 3. The Unity and Opposition of Both Poles in Our Experience of the Numen (Section IV).

We will then consider the distinctive contribution of Christianity to the awareness of the transcendent – the *unconditional* love of God (Section V).

I B. The First Pole: *Mysterium Tremendum* in the Numen

The elements of dread, awe, dauntingness, and creatureliness are the most evident dimensions of the numen in the early stages of the development of individual and cultural religious consciousness.⁷⁵ Since this pole of feeling-content is manifest earlier in history than the

expression – the 'wholly other' ... that which is quite beyond the sphere of the usual, the intelligible, and the familiar.....(Otto 1958, p. 26).

⁷⁴ Otto 1958, p. 6.

⁷⁵ See Otto 1958 pp 32-33 and the explanation of it in Section III below.

elements of the second pole, it makes sense to address it first (as Otto does). However, by putting this pole in a primary position, we do not mean to imply that it is more important or powerful than the elements of the second (more positive) pole in a mature person or culture (see below Section III).

Otto is in fundamental agreement with William James about the most basic appearance of the numen (though he thinks that James' analysis is somewhat unnuanced), and so he quotes James as follows:

It is as if there were in the human consciousness a *sense of reality, a feeling of objective presence, a perception of* what we may call "*something there*", more deep and more general than any of the special and particular "senses" by which the current psychology supposes existent realities to be originally revealed.⁷⁶

Otto concurs with James that the numen appears as an objective presence – and that it is distinguishable from every other object we experience because it is more deep and more general (all-encompassing) than all other objects. However, Otto goes further than James noting that this deep and all-encompassing objective reality appears to be very *powerful* and *spiritual*, causing us to be respectful, humble, and submissive before its presence. Otto calls this reaction "creature consciousness," and distinguishes himself from Friedrich Schleiermacher who implies that the self-conscious act of being a creature is primary. Otto contends that the presence of the powerful and overwhelming numen is primary, and this causes us to react to it with a sense of reverence, humility, and creatureliness.⁷⁷

There are two special characteristics of this first pole of experience -- overwhelming power and spiritual presence. Notice that these two characteristics are categories of *thought*, and Otto insists that such categories are not primary to the experiencing subject, but rather are derived from more primary *feeling-contents*. So what are the feeling-contents that give rise to these categories of overwhelming power and spiritual presence?

For Otto, the first response we have when the numen becomes present to our consciousness is fear – but not the fear we might have toward a natural object. Rather it is the fear we have toward spiritual presence – such as ghosts. The fear of natural objects (that can threaten survival or safety) tends to produce a hyperactive state (induced by adrenaline) raising blood pressure, inciting panic, making us feel warm and causing the face to flush. The fear we feel when confronted by a ghost or spirit (or hearing a ghost story) is quite different – it makes us feel cold, causes our blood pressure to drop, the blood to drain from our face, and our flesh to creep or crawl.

⁷⁶ James 1929, p.58 (italics James').

⁷⁷ Otto 1958, p. 10.

Otto terms this special kind of fear toward a spiritual presence "daemonic dread." "Daemon" here does not mean "demon" in the sense of a malignant or evil spirit, but only "spirit" in a general sense which can refer to a benign or good spirit. When we feel the presence of a benign or good spirit, it evokes a sense of uncanniness, of being beyond our control or power. Its other worldly character makes it unpredictable and feels *daunting*.⁷⁸ Though the numen does not present itself as evil, it does present itself as "beyond us" and capable of overpowering us.⁷⁹ We sense its' overwhelming or superior power even if it is manifest in a "gentle tide, pervading the mind with a tranquil mood of deepest worship."⁸⁰ William James recounts a case study in which the superior power of the numen manifested itself gently and sublimely:

The perfect stillness of the night was thrilled by a more solemn silence. The darkness held a presence that was all the more felt because it was not seen. I could not any more have doubted that He was there than that I was. Indeed, I felt myself to be, if possible, the less real of the two.⁸¹

This higher power carries with it a profound sense of mystery and incomprehensibility. Otto describes our experience of this incomprehensible mystery as "stupor" which he distinguishes from "tremor:"

Stupor is plainly a different thing from *tremor*; it signifies blank wonder, an astonishment that strikes us dumb, amazement absolute.⁸²

We are tacitly aware that we cannot comprehend this higher power, and so we view it as *wholly Other*. In its overwhelming presence, we sense our creatureliness – what Otto and Schleiermacher term "creature consciousness."

There is one additional element in the feeling-content of the first pole – Otto describes it as "energy or urgency" which betokens passion or will within the numen. The felt presence of the numen not only indicates spiritual presence, overwhelming power, and incomprehensible mystery, but also something personal and passionate in its energy. Otto states:

...and it everywhere clothes itself in symbolical expressions – vitality, passion, emotional temper, will, force, movement, excitement, activity, impetus.⁸³

⁷⁸ Otto 1958, p. 14.

⁷⁹ Otto 1958, p. 19.

⁸⁰ Otto 1958, p. 12.

⁸¹ James 1929, p. 66.

⁸² Otto 1958, p. 26.

⁸³Otto 1958, p. 23.

Terms like "vitality," "passion," "emotional temper," and "will" are concepts -- what Otto terms "symbolical expressions" – representing our experience of the more fundamental feelingcontents within the numen. So how does the numen appear to us through the feeling-contents of spiritual fear, dauntingness, overpoweringness, mysteriousness, and vitality-energy? It appears as a wholly Other superior, incomprehensible, and mysterious power with passion, emotion, and will which elicits from us a sense of creatureliness, humility, submission, respect, reverence, and worship.

From Otto's descriptions, we can infer four layers in our encounter with the numen -(1) a fundamental layer of *feeling-contents* – spiritual fear, tremor, dauntingness, overwhelmingness, stupor, mysteriousness, and energy-vitality, (2) a layer of *intuited appearance* of the numen – as a wholly Other, spiritual, superior, incomprehensible power with passion and will, (3) a layer of *reaction* to the presence of this mysterious higher power -- a sense of diminution, humility, respect, and creatureliness, and (4) a layer of action following our reaction – reverence and worship. This constitutes our initial or primary response to the numen. Some people, religions, and cultures do not move beyond this initial encounter with the numen (which Otto terms "the first pole"), but most major religions do move beyond it to the second more positive pole of feeling-contents. This is borne out by the fact that most contemporary religions today share seven common characteristics, four of which are derived from the second pole (see below Section III).

I. C The Second Pole: Fascination, Desire, Love, and Bliss in Our Experience of the Numen

Just as the first pole is marked by feeling-contents of dauntingness, overwhelmingness, mysteriousness, and energy-vitality, so the second pole elicits another set of feelings – we find the numen attractive, alluring, charming, fascinating, and enchanting. Otto phrases it as follows:

The mystery is for [the person experiencing the numen] not merely something to be wondered at but something that entrances him; and beside that in it which bewilders and confounds, he feels a something that captivates and transports him with a strange ravishment, rising often enough to the pitch of dizzy intoxication...⁸⁴

So what is so fascinating, alluring, enchanting, and even intoxicating in the numen? It resembles what is fascinating and enchanting in the natural world – love, goodness, beauty, home, and the joy that arises out of them. These qualities are attributed to God in all major religions, 85 and they

⁸⁴ Otto 1958, p. 31.

⁸⁵See below Section III on Heiler's seven common characteristics of major religions. See also Heiler 1959 pp. 142-144.

are attributed to the *experience* of God in all major mystical traditions.⁸⁶ When they are experienced in the numen, they have a purer and more integrated reality than when they are experienced in the natural world. Otto states it as follows:

> The ideas and concepts which are the parallels or 'schemata' on the rational side of this non-rational element of 'fascination' are love, mercy, pity, comfort; these are all 'natural' elements of the common psychical life, only they are here thought as absolute and in completeness.⁸⁷

In heightened experiences of the numen (such as mystical experiences), the characteristics of the second pole have an absolute or perfect quality which elicits ecstatic joy.

Interestingly, these characteristics are attributed to the transcendent or Divine Being by Platonists and other rational monotheists. Plato not only attempts to prove the absolute and perfect one true good love, and beautiful, but implies that he and others can experience it through the contemplation of love and the beautiful in its highest form:

> He who has been instructed thus far in the things of love, and who has learned to see the beautiful in due order and succession, when he comes towards the end will suddenly perceive a nature of wondrous beauty...a nature which in the first place is everlasting, not growing and decaying... but beauty absolute, separate, simple, and everlasting, which without diminution and without increase, or any change, is imparted to the evergrowing and perishing beauties of all other things.⁸⁸

Though Plato does not attribute this experience specifically to the numen (the presence of the divine within him), he associates perfect love, beauty, and goodness with the one God, and implies (in the above passage) that he and others have experienced it.

One of Plato's most ardent followers, Plotinus (204-270 a.d.) sees the mystical experience of the numen flowing directly out of contemplation of the One which is good, loving, and beautiful. His disciple Porphyry indicated that Plotinus had reached "ecstatic union with the One" on four separate occasions.

Evidently, Plotinus and other neo-Platonic philosophers went far beyond the domain of rational philosophy into their inward experience of the One. This led to an experience of the One's absolute goodness, love, and beauty, which they identify as "ecstatic union with it."

 ⁸⁶ See Heiler 1959 pp. 142-44 and 150-52. See also Otto 1958 pp. 36-39.
 ⁸⁷ Otto 1958, p. 31.

⁸⁸ Plato 1993, 210a-211b.

Inasmuch as this Supreme Being has the qualities of absolute love and goodness, it must in some sense be inter-relational, and this implies personal qualities. Just as numinous energy and vitality (first pole) suggests *personal* attributes such as will and passion in the numen, so also the alluring, enchanting, and fascinating elements of the numen (second pole) suggests positive *personal* attributes of openness, love, and goodness. The first pole elicits a relationship of humility, submission, and reverence while the second pole elicits a relationship of closeness, familiarity, and friendship.

Both James and Otto pay close attention to the heightened or mystical dimension of the numinous experience. James describes several cases in which ordinary people (not monks or sisters in a monastery) experienced the numen in a heightened state. One case study described it as follows:

For the moment nothing but an ineffable joy and exaltation remained. It is impossible fully to describe the experience. It was like the effect of some great orchestra, when all the separate notes have melted into one swelling harmony, that leaves the listener conscious of nothing save that his soul is being wafted upwards and almost bursting with its own emotion.⁸⁹

One can see in James' case study, the contrary elements of both calm and transport – a sense of peace and propulsion. Otto notes that this peace-propulsion can be induced by the presence of the numen through many "gateways." It can come from reading a passage of scripture, reflecting on a supreme truth (e.g. perfect goodness or perfect love), taking a walk in a natural setting, hearing a bird's song, looking at religious art or architecture, hearing a religious hymn or glorious symphony, or simply sitting at one's dinner table or desk. In my case, it once occurred while giving a physics lecture. When the feeling of peace-propulsion occurs, it is generally accompanied by a profound sense of unity with everything which takes away alienation, and feels like we are perfectly at home with the totality. This sense of being "perfectly at home with the totality" is frequently connected with spiritual joy. Otto puts it this way:

....in all these forms, outwardly diverse but inwardly akin, it appears as a strange and mighty propulsion towards an *ideal good known only to religion* and in its nature fundamentally non-rational, which the mind knows of in yearning and presentiment, recognizing it for what it is behind the obscure and inadequate symbols which are its only expression. And this shows that *above and beyond our rational being* lies hidden the ultimate and *highest part of our nature*, which can find no satisfaction in the mere allaying of the needs of our sensuous, psychical,

⁸⁹ James 1929 p. 66.

or intellectual impulses and cravings. The mystics called it the basis or *ground of* the soul.⁹⁰

In this remarkable passage, Otto describes three key characteristics constituting a *heightened* experience of the numen:

- 1. The numen causes a sense of propulsion into itself.
- 2. In this propulsion, we sense the numen as perfect goodness and a Supreme Being (known only to religion).
- 3. Our temporary connection or unity with this Supreme perfect goodness reveals to us our highest transcendent nature our soul which can only be satisfied by the Supreme goodness.

For James and Otto, many individuals from virtually every major religion and culture have heightened experiences of the numen. Embedded in that experience is an awareness that our propulsion toward it (being swept into it) is not caused by ourselves, but induced by the Divine "wholly Other" present to us. As we are swept into it, we become aware at once of its supremeness and goodness (including elements of both the first and second poles), and when this happens we are transformed – we no longer think that we are merely physical or material, but that we are transcendent, having a soul which can only be satisfied by supreme goodness itself. This puts all material things into perspective – as merely partial, temporary satisfactions of our sensuous and psychical nature.

Though these *heightened* experiences are important, it should not be thought that incisive encounters with the numen are limited only to people who have experienced them. The "average person" can enjoy sparks of divine love-goodness-beauty-joy, but it might occur so gently, subtly, and quickly that they fail to recognize what is happening to them until they encounter a book or a conversation which describes the numinous experience. After hearing these descriptions, they might say, "Well, I've never had a heightened experience of the numen, but I think I have had an experience of connecting with God that has His distinctive signature in it – some sense of supremeness, specialness, holiness, and goodness which is different from other interior experiences."

Sometimes the average person can be praying an ordinary prayer like the "Our Father" or a well-known Psalm, and sometimes a few of the words will, as it were, leap off the page – leaving in its wake a feeling of supremeness-holiness-goodness-peace. Sometimes the average person can look at the simplest religious object – a little picture or statue – and it will incite the same special interior experience. Sometimes these same stimuli can cause us to recall a hazy experience of something that happened to us as children or young adults. Frequently young

⁹⁰ Otto 1958 p. 36. (Italics mine).

people do not reflect on the specialness of their experience, and therefore have no *rational* memory of them. Nevertheless, they have a *pre-rational* memory of them, and when the numen presents itself in a gentle way (say, looking at a picture), it brings to mind the feeling embedded in their pre-rational memory, causing them to say, "That was really strange – I feel like I remembered something profound and good from my past."

We should not underestimate our proclivity to put pre-rational memories into the recesses of our mind. When we don't reflect on the specialness of an experience, we don't remember it *as special*. It simply gets remembered as a set of intense feelings that can be reawakened when it happens to us again. When C.S. Lewis was a child, he had *heightened* experiences of the numen, but because he did not reflect on them as special, he simply put this peculiar set of feelings into the recesses of his mind, which he only remembered after having religious conversations and subtler experiences of the same feelings as an adult.⁹¹

These seemingly strange but subtle experiences should not be discounted, for even though the experience can be gentle, subtle, and brief, it will retain traces of the distinctive signature of the numen (supremeness, mystery, and holiness combined with some sense of goodness, love, and/or joy). The most subtle of these experiences communicates a sense of our true home in the supreme and holy goodness which elicits a sense of peace (absence of alienation) and unity with everything in which time stands still.

Though it seems like a contradiction to suggest that the numinous experience can be subtle or gentle, the numen can relieve alienation gently, can reveal its superior power and incomprehensibility softly, and can overwhelm us with deep beauty and goodness like Elijah's "gentle breeze:"

[The Lord said to Elijah] 'Go out and stand on the mountain, I want you to see me when I pass by.' All at once, a strong wind shook the mountain and shattered the rocks. But the LORD was not in the wind. Next, there was an earthquake, but the LORD was not in the earthquake. Then there was a fire, but the LORD was not in the fire. Finally, there was a gentle breeze, and when Elijah heard it, he covered his face with his coat (1Kings 19:11-13).

As noted above, when the numen presents itself in a gentle or subtle way, and we do not reflect upon the specialness of the experience, we put the experience in the recesses of our mind. We might say that it becomes subconscious or unconscious. Sometimes we will have stronger experiences of the numen later in our lives and then we frequently bring our subconscious or recessed memory to our conscious mind, enabling us to see a pattern of interaction with the Divine One throughout life. However, if we don't have a strong experience later in life, does that

⁹¹ Lewis 1966.

mean that the gentle presence of the numen is completely ineffective in our lives? Absolutely not. As will be seen with respect to Mircea Eliade's analysis of sacred symbols and the transconscious, multiple, subtle, unreflective experiences of the numen create a strong *unconscious* impression which becomes part of our general frame of mind, causing us to desire, seek, and value sacred and religious symbols, community, worship, and revelation. The numen's subtle and persistent appearance causes us to be naturally spiritual and religious, inciting us to find outward communal expressions of what we interiorly sense and desire. This may explain why the vast majority of people throughout history have had a sense of the spiritual and transcendent, have sought religious communities, were moved by sacred symbols, liturgy, and music, and found their highest sense of fulfillment through these outward expressions and connections to the transcendent and spiritual domain.

I. D The Unity and Opposition of Both Poles in Our Experience of the Numen

The two poles of the numinous experience might be compared to the double-helix characterizing DNA – they are not really separated in the numen, but rather fully integrated, complementing each other, presenting a good and even loving Deity. As Heiler indicates in his seven common characteristics of major religions, the supreme transcendent reality for all major religions is loving, and the Deity reveals this love within human beings.⁹² When we combine the studies of Otto and Heiler, it is difficult to imagine that the numen is not in some sense personal. Even if we concentrate on the mysterious, incomprehensible, and wholly Other characteristics (of the first pole) associated with some eastern religions, we still sense that the numen is making itself felt - inviting us more deeply into itself -- and is not simply a passive depersonalized reality (like a metaphysical substrate) into which we are merely and ultimately assimilated. When the second pole (which includes a sense of goodness, love, comfort, peace, and joy) is considered along with the characteristics of the first pole, the *personal* element of the "wholly Other" becomes more clear, because the characteristics of the second pole are oriented toward relationship – and specifically, fulfillment and joy in relationship. Understating the characteristics of the second pole generally leads to a diminution of the personal qualities of the numen.

There is one other observation that should be made before nuancing the feeling-content of both poles. Otto believes that the first pole (the mysterious, powerful, and daunting pole) is the primary manifestation of the numen in the development of religious consciousness, and the second pole (which is always present but deemphasized in early cultures) becomes gradually manifest as history progresses. The gradual manifestation of this second pole may be a major influence in the progress of culture throughout the world. It seems to come to light with specially inspired prophets, wise men, and enlightened individuals. These enlightened individuals – these

⁹² See Heiler 1959, p. 143 (the fourth characteristic of all major religions).

external sources of inspiration -- do not invent these positive characteristics of the Transcendent Reality, but rather point to *It* as the origin of their enlightenment. Thus if Buddha, Ezekiel or Jesus speaks about the love of the Transcendent Reality, they are speaking about their *experience* of that Reality, and not about their theological speculations. We assent to their teachings, not out of blind faith in their authority, but out of an interior conviction that what they are saying resonates deeply with what we know to be intuitively true. They are saying something that we recognize from our experience of the numen, and for this reason, people (both individually and collectively) are willing to allow their thoughts about the numen (at first sensed to be daunting) to evolve toward a fascinating, caring, and joy-filled Being. Otto puts it this way:

It may well be possible, it is even probable, that in the first stage of its development the religious consciousness started with only one of its poles – the 'daunting' aspect of the numen – and so at first took shape only as 'daemonic dread.'⁹³ But if this did not point to something beyond itself, if it were not but one 'moment' of a completer experience, pressing up gradually into consciousness, then no transition would be possible to the feelings of positive self-surrender to the numen. The only type of worship that could result from this 'dread' alone would be that of Expiation and propitiation, the averting or the appeasement of the 'wrath' of the numen.⁹⁴

The emergence of the second pole in the evolution of religious consciousness is corroborated by the work of Friedrich Heiler's seven common characteristics among the world's major religions:

- 1. The transcendent, the holy, the divine, the Other is real (from the first pole).
- 2. The transcendent reality is immanent in human awareness (from the first pole).
- 3. This transcendent reality is the highest truth, highest good, and highest beauty (from the second pole).
- 4. This transcendent reality is loving and compassionate and seeks to reveal its love to human beings (from the second pole).
- 5. The way to God requires prayer, ethical self-discipline, purgation of self-centeredness, asceticism, and redressing of offenses (from mostly the first pole).
- 6. The way to God also includes service and responsibility to people (from the second pole).
- 7. The highest way to eternal bliss in the transcendent reality is through love (from the second pole).

The world's major religions differ considerably on the interpretation of the above seven common characteristics, and in several cases, some of the characteristics are elevated above others or even mitigate others. However, if one accepts at least traces or fragments of the above

⁹³ Recall that "daemonic" does not mean "demonic" in the sense of an evil or malignant spirit. It only refers to the other worldly reality of the spiritual, which like sensing a ghost (or hearing a ghost story) can elicit uncanniness, a shudder, "creeping flesh" – which points to an uncontrollable spiritual presence near us or in us.

⁹⁴ Otto 1958, p. 32.

seven characteristics in all major religions, it reveals the presence of Otto's second pole in the gradual evolution of religious consciousness, suggesting strongly that this pole is intrinsic to our common experience of the numen. If the second pole were not present in our common experience of the numen, it would be difficult to explain how the third, fourth, sixth, and seventh characteristics became universally recognized and accepted.

The probable reason why early religious consciousness emphasized the first pole was because its characteristics are powerful and fearful, and like children, we pay most attention to what can harm or overpower us. As we mature and become less daunted by the overpowering and uncontrollable other, we allow the *other's* more benign and compassionate qualities to be recognized -- typifying Maslow's need hierarchy.

In that theory, Maslow ranks basic human needs according to five levels – (1) physical needs, (2) safety and security needs, (3) the need for love and belonging, (4) the need for esteem/selfesteem, and (5) self-actualization. Maslow contends that when needs on a more basic level are not met, we will not feel need on higher levels. However, when that more basic need is met, the next level of need emerges as important. Accordingly, when religious consciousness is preoccupied with the daunting, mysterious, and uncontrollable qualities of the numen (safety and security needs), it is unlikely to experience a need for love and belonging from the numen. However, over the course of time, it becomes apparent that the numen is not *completely* daunting in its interaction with us – and that the numen manifests graciousness and goodness – at which point, the need for security becomes much less important, and the need for love emerges.⁹⁵ At that point, the second pole of the numen's feeling-contents becomes evident and desired.

I.E Conclusion

As noted above, this is the first kind of evidence for our transcendence and relationship with a Transcendent Being. When we combine it with the evidence from Eliade's study of the sacred, and Kant's and Newman's study of conscience, our conclusion will gain in probative force, for it will be corroborated by four distinct kinds of data, all pointing to the same conclusion.

⁹⁵ Otto believes that in the transition from emphasis on the first pole to integration of the first and second poles, there is an intervening stage of magic. As the benevolent qualities of the numen emerge, priests or shamans attempt to control or manipulate the benevolent side of the divine Other by means of incantations, formulae, or other magical pursuits. However, this intervening stage is temporary, and is corrected by specially inspired prophets or wise people – who point to the purity of goodness and love in the divine, and discourage attempts to manipulate the deity – as if it were self-seeking. See Otto 1958 pp 15, 33, & 66.

II. The Intuition of the Sacred—Mircea Eliade

Mircea Eliade (1907-1986) was a philosopher and historian of religion at the University of Chicago who elaborated one of the most comprehensive transcultural and trans-historical theories of the origin of religion. Born in Romania and educated at the University of Bucharest, he became familiar with the work of Rudolf Otto on the numinous experience which influenced his thought on the philosophy of religion.⁹⁶ He is the author of hundreds of articles, the general editor of the sixteen-volume *Encyclopedia of Religion*,⁹⁷ and the author of dozens of books including *The Sacred and the Profane: The Nature of Religion*,⁹⁸ and *Patterns in Comparative Religion*,⁹⁹ all of which proved to be highly influential in the contemporary study of comparative religions, Eliade concluded that religion originates from an irreducible experience of the sacred (common to most human beings) which seeks to find its outward cultural expression in myths and rituals. These myths and rituals become the communal gateways to connecting with the Transcendent Reality.

The reader may recognize the hand of Rudolf Otto in Eliade's use of "the irreducible experience of the sacred," but it should not be thought that Eliade blanketly based his research on Otto's studies. Instead, he found Otto's conclusions to be probative and conducive to explaining his own research into the cross-cultural expression of religion. Putting it the other way around, Eliade's research into myths, symbols, rituals, and the sacred led him to conclude that Otto was correct about the numinous experience because it could explain several cross-cultural common elements in religious expression. It could also explain the drive of *individuals*¹⁰⁰ (across cultures) to seek out and experience sacred myths, rituals, symbols, and communities. This last point enables Eliade's research to *expand* and *corroborate* Otto's findings (which are based on the data of *individual interior* experience of the holy) by adding the component of *outward community* expression to interior experience. We will examine the significance and corroborative features of his research in three steps:

- 1. His findings about the common cross-cultural elements of religion (Section I.A).
- 2. His characterization of the religious individual --"homo religiosus" (Section I.B).

⁹⁶In addition to Otto, Eliade was influenced by Gerard van der Leeuw, the Dutch philosopher and historian of religion who wrote a seminal phenomenological approach to religion in 1933 entitled *Religion in Essence and Manifestation: A Study in Phenomenology*, and Rene' Guenon, French philosopher of religion and metaphysics who set out a theory of cross-cultural "universals" among world religions – as well as other philosophers and historians of religion.

⁹⁷ Eliade 1986.

⁹⁸ Eliade 1987.

⁹⁹ Eliade 1996.

¹⁰⁰ Eliade distinguishes between "traditional man" and "modern man" in this regard. Up to the 18th Century Enlightenment, the vast majority of human beings across the globe strove to find meaning and reality in sacred places, times, myths, symbols, and rituals. However, since the modern age, "modern man" has become progressively more distanced from the perspective of "traditional man," thinking that rational (scientific and mathematical) explanations are superior to religious ones.

3. His contention that rejection of the sacred will produce a heightened state of existential anxiety in "modern man" (Section I.C).

I.A **Common Elements in Cross-Cultural Religious Expression**

Eliade uses two major concepts to organize the common cross-cultural elements of religious expression: (1) "hierophany" and (2) "homo religiosus." A brief explanation of each from his seminal work The Sacred and the Profane: the Nature of Religion will help to elaborate his theory.

"Hierophany" -- from Greek -- means "appearance of the sacred." It expands the more common term theophany ("an appearance of God") to include all world religions. All world religions are based on a belief that transcendent reality (whether it be God or gods or a quasipersonal force) has broken into the world, bringing with it sacredness or holiness (transcendent goodness, power, and beauty) splitting the world into two parts - "the sacred" (connected to transcendent reality) and "the profane" (not connected to transcendent reality). Eliade described this universal dimension of hierophanies as follows:

> It could be said that the history of religions – from the most primitive to the most highly developed – is constituted by a great number of hierophanies, by manifestations of sacred realties. From the most elementary hierophany -e.g.manifestation of the sacred in some ordinary object, a stone or a tree – to the supreme hierophany (which, for a Christian is the incarnation of God in Jesus Christ) there is no solution of continuity.¹⁰¹

Every religion identifies a place and a time (or places and times) when the transcendent breaks into the world (and world history). When it does, it makes holy or sacred the place and the time of the "breakthrough." The sacred place does not simply remind (mentally) religious people about the "breakthrough," it retains its sacredness, so that pilgrims who come to it can continue to have an experience of the transcendent which sanctifies them. Thus pilgrims actually experience the sacred at the place where the transcendent reality appeared. In primitive religions, villages have centers which imitate a place of sacredness, and then extend out from that center. Eliade notes in this regard:

> ...Settling in a territory reiterates the cosmogony. Now that the cosmogonic value of the Center has become clear, we can still better understand why every human establishment repeats the creation of the world from a central point (the navel). Just as the universe unfolds from a center and stretches out toward the four cardinal points, the village comes into existence around an intersection.¹⁰²

The creation or origin story provides an ideal model of place that when imitated sacralizes villages, temples and homes. According to Eliade:

¹⁰¹ Eliade 1987, p. 11. ¹⁰² Eliade 1987, p. 45.

...religious architecture simply took over and developed the cosmological symbolism already present in the structure of primitive habitations. In its turn, the human habitation has been chronologically preceded by the provisionally consecrated and cosmicized... All symbols and rituals having to do with temples, cities, and houses are finally derived from the primary experience of sacred space.¹⁰³

In virtually every culture, the hierophany not only sacralizes space and place, but also time. The time of the hierophany is the origin or creation of reality. It is *the* sacred time, and like sacred places has the capacity to sacralize people who enter into it. But how can a religious person enter into the sacred time (the time of origin or creation)? With every elapsed moment of time, we pull further away from the sacred time (origin), and so it would seem that we become more and more profane as history progresses. Eliade discovered that most religions do not have this problem because of their belief in what he terms, "the myth of eternal return."¹⁰⁴

For Eliade, "the myth of eternal return" refers to the capacity to return to the time of origin or creation by participating in religious rituals or recounting sacred myths. Sacred rituals are not simply a commemoration or mental remembrance of the sacred origin; they are a *reliving* or "reactualizing" of it. As the ritual is celebrated, the participants enter into the sacred time of origin allowing them to connect with the transcendent reality in it.

Myths have the same mystical powers as rituals. As myths are recounted, the participant re-enters the past sacred event – almost as if the time separating it from the present moment collapsed (or did not exist at all). This puts the participant in contact with the transcendent reality who was present at that time. Eliade phrases it this way:

In *imitating* the exemplary acts of a god or of a mythical hero, or simply by recounting their adventures, the man of an archaic society detaches himself from profane time and magically re-enters the Great Time, the sacred time.¹⁰⁵

So what happens to the participants in sacred rituals and the recounting of sacred myths? When the participant connects with the transcendent reality through the sacred passageways that collapse time, they come into contact with what Elide calls a "paradigmatic model" – that is with absolute truth and goodness toward which they will want to strive and ultimately imitate:

The myth relates a sacred history, that is, a primordial event that took place at the beginning of time, *ab initio*.....Once told, that is, revealed, the myth becomes apodictic truth; it establishes a truth that is absolute.¹⁰⁶

This paradigmatic model - this absolute truth - is not abstract; it is embedded in the stories of the creation and the heroes that completed the act of creation. Thus there is a call within the myth to

¹⁰³ Eliade 1987, p. 58.

¹⁰⁴ Eliade 1971.

¹⁰⁵ Eliade 1975.

¹⁰⁶ Eliade 1987, p. 95.

imitate the actions and the virtues of heroes (and to shun the actions and vices of villains). Rituals and myths, then, provide two functions:

- 1. They strengthen the participant by putting them into contact with the sacred moment of origin (and through this, the transcendent reality itself).
- 2. They present a paradigmatic model or action and virtue which is felt to be absolute truth.

The breakthrough of the transcendent reality is not neutral. It provides strength and a paradigmatic model to all participants who enter into the rituals and myths that re-present it. In so doing, it tells us how to attain our true purpose (divine purpose) which in turn tells us how to live our lives and how to develop our character (by imitating the heroes of the great time of origin). The actions of the great heroes show us not only how to act, but why we ought to act that way; they give us clues about the end and goods for which we should be living, and show how certain actions fulfill those ends or goods.

For Eliade, religion is the key not only to connection with the transcendent reality, but also to purpose in life, to the ends and goods connected with that purpose, and to the virtues and actions that accomplish them. Without religion, "traditional man" (who lived in a society before the pervasiveness of the scientific and Enlightenment mentality – prior to the 18th Century) would have been purposeless, directionless, and virtueless. He would not only have been lost; he would have been insignificant and even reduced to nothing.

This last point deserves explanation. For traditional man, the sacred is reality, and the profane is insignificant and virtually unreal. So failure to make contact with the sacred is to be reduced to nothingness, and failure to imitate the paradigmatic model of the sacred is to be reduced to insignificance.

In sum, Eliade has made a most remarkable discovery – namely that for more than four millennia, human beings from virtually every culture around the world yearned for and sought the sacred. In virtually every culture the expression and the fulfillment of that yearning is similar in four general areas:

- 1. A belief in the sacred (transcendent reality) in which there is absolute truth and goodness.
- 2. The Sacred (transcendent reality) desires to connect with human beings and so enters into the profane world at a particular place. Its entrance into the world is the originative or creative moment. The physical world may have existed before the sacred's entrance into it, but the world was not significant or real prior to its entrance. Thus for traditional man true reality and meaning began when the sacred reality broke through.
- 3. When the sacred reality broke through, it sacralized (made holy) the place and time it entered. When human beings draw close to the place of entrance it makes them holy. Similarly when human beings celebrate the ritual of origin and recount the myth of

origin,¹⁰⁷ time collapses, and they re-enter the sacred time of origin again connecting them with the sacred which strengthens them.

4. The celebration of rituals and recounting of myths not only strengthens the participants but also imparts what Eliade terms "paradigmatic models" – that is lessons about purpose in life, the goods to be pursued, evils to be avoided, the virtues and laws that will help to achieve the good, and the vices that will undermine it. Thus traditional man receives purpose, direction, and virtue from reentering the sacred time through ritual and myth.

The odds of these similarities among the world's religions occurring by pure chance are exceedingly low, so we must seek an explanatory cause. What could have produced this four-fold coincidence of religious belief and expression in so many utterly diverse cultures with so many distinct histories? The sheer *variety* of communities, cultures, and histories virtually rules out *social* explanations as a cause of the four *common* features of religion. In the absence of a *social* cause, we will have to examine whether there could be a *common* cause within *individual humans beings* who participate in very different cultures. We have already seen one potential candidate for a common cause within a vast majority of individuals – namely Otto's numinous experience. However, before we can turn to this *supernatural* interior explanation, we must rule out potential *natural* (*physical*) explanations. Though we cannot *completely* rule out a *natural* cause, we can show the vexing questions that natural causes (insofar as they are natural) will be unlikely to answer:

- 1. How does a *natural* (physical) cause produce an awareness of *transcendent* reality, a desire to draw close to that reality, and a passion to seek it?
- 2. How can a *natural* cause produce a belief that the transcendent reality wants to connect with human kind, and will even "step down" to enter into the profane world to make it sacred for human kind?
- 3. How can a *natural* cause produce a belief that the transcendent reality is *absolutely* good and possesses *absolute* truth?
- 4. How can a natural cause produce a belief that real meaning and reality itself does *not* come from profane nature, but only from the sacred reality?

Eliade (and his colleagues) never found an adequate answer from the domain of natural causation. As a result, he rejects the possibility of finding such an answer from any secular scientific or social scientific discipline (psychology, sociology, anthropology, etc.). Realizing that no combination of natural phenomena could add up to a transnatural or supernatural one, he concluded that the cause must be some *irreducible* presence of the sacred-transcendent reality within us:

To try to grasp the essence of such a phenomenon [hierophany – the appearance of sacred transcendent reality in the world] by means of physiology, psychology, sociology, economics, linguistics, art or any other study is false; it misses the one unique and *irreducible* element in it – the element of the sacred. Obviously there are no *purely* religious phenomena; no phenomenon can be solely and exclusively

¹⁰⁷ The myth of origin is not only the precise moment at which the sacred enters the world; it includes unfolding of the originative moment through the actions and virtues of heroes, the overcoming of evil, and the teaching and development of human beings.

religious. Because religion is human it must for that very reason be something social, something linguistic, something economic...But it would be hopeless to try and explain religion in terms of any one of those basic functions which are really no more than *another* [natural] way of saying what man is.¹⁰⁸

Viewing this from the vantage point of an individual person, Eliade would assert that the interior cause for the awareness of, desire for, and fulfillment through the sacred cannot be fear, anxiety, biological impulse, or merely imaginary wish fulfillment. In the words of John Holt (writing the introduction to *Patterns in Comparative Religion*):

Eliade rejected every social scientific attempt to explain the totality of religious experience causally. For him, religion was more than an arena of meaning or discourse produced by an anxiety, an acquisitive disposition, political aspirations, or simply a penchant for creativity. As a phenomenologist, Eliade never tired of arguing that religion must be described and understood on its own terms, or within its own plane of reference. That is, the sacred manifests itself in "hierophanies"; it has a language and form of its own that has been recognized historically and cross-culturally.¹⁰⁹

If natural causation (and the methodologies that describe and explain natural causes) cannot explain the occurrence and prevalence of the sacred throughout the world, we will have to look toward a supernatural explanation. Could Rudolf Otto's numinous experience provide the explanation for the similarities among world religions? Could it be the *supernatural* interior cause of what Eliade calls the "irreducibly sacred" in all religious experience, belief, and expression? In view of the likelihood that Otto's numinous experience comes from the presence of the transcendent reality within us I would submit that it is a very probable candidate. In order to give a more definite answer to this question, we will want to first examine Eliade's idea of "*homo religiosus*."

I.B Homo Religiosus

In the previous Section we discussed Eliade's four similarities among world religions and how to find a reasonable explanation for this remarkable phenomenon among utterly diverse cultures throughout history. We now move into the interior domain of the people who participate in these religions (who Eliade terms *homo religiosus*). Do the similarities among world religions indicate a concomitant similarity among religious people? Eliade is convinced that they do:

...Religious man assumes a particular and characteristic mode of existence in the world and, despite the great number of historico-religious forms, this characteristic mode is always recognizable. Whatever the historical context in which he is placed, *homo religiosus* always believes that there is an absolute reality, *the sacred*, which transcends this world but manifests itself in this world, thereby sanctifying it and making it real. He further believes that life has a sacred

¹⁰⁸ Eliade 1996, p. xvii.

¹⁰⁹ Eliade 1996, p. xiii.

origin and that human existence realizes all of its potentialities in proportion as it is religious – that is, participates in reality. The gods created man and the world, the culture heroes completed Creation, and the history of all these divine and semidivine works is preserved in the myths. By reactualizing sacred history, by imitating the divine behavior, man puts and keeps himself close to the gods – that is, in the real and significant.¹¹⁰

Where did this common interior religious disposition come from? Did it come from the teaching of religious people within an already formed religious community, or rather did it come from something within *homo religiosus* himself -- which he brought to the community of belief? Religious communities teach lessons and doctrines to their adherence – how their religious rituals function, the details of the myths, the meaning of various symbols, colors, and actions, the sacredness of particular places and times, etc. Yet Eliade believes that this alone cannot make a religion. There must be people who are aware of the sacred, desire it, are passionate about it, and are fulfilled by it. They must also be capable of understanding the significance of sacred time, sacred place, sacred myth, sacred ritual, and sacred symbol. If these interior dispositions were not antecedently present, traditional man would never have sought out religion and would certainly not have made it his center of meaning and the source of reality.

Without an awareness of and desire for the sacred (transcendent reality), traditional man would have found a substitute for the center of significance and source of reality – perhaps food, shelter, procreation, manhood, womanhood, knowledge, practical skills, etc. No intelligent being will place something unintelligible and undesired at the center of meaning and reality. In light of this, it is likely that *homo religiosus* did not acquire his awareness of and desire for the sacred transcendent reality from a religious cult or community. If he did not have an antecedent desire to connect with the transcendent reality, he would have been indifferent to sacred cult and community – like children who are indifferent to anything whose value they do not comprehend. In contrast, *homo religiosus* is attracted to, fascinated by, and fulfilled by the sacred re-presented in religious rituals and myths. He seeks out and participates in sacred ritual because he is aware of the sacred and understands its central significance in his life.

Recall how Otto described the numinous experience – the sense of mystery, awesomeness, Otherness, uncontrollableness, and dauntingness arising out of a sense of the transcendent Other's power, majesty, and glory (the first pole) – as well as a sense of fascination with, desire for, and passion for the transcendent reality arising out of a sense of its goodness and care (the second pole). Can this irreducible experience of the numen explain *homo religiosus'* awareness of and desire for the sacred -- his belief in the absolute goodness and truth of the sacred reality; his belief that the sacred reality broke into the profane world to connect with humanity; and his fascination with sacred place, time, myth, and symbol? As noted above, the numinous experience cannot explain the four-fold *content* of the religious intuition. However, it can explain why human beings have a sense of transcendent reality that causes them to passionately desire and seek it in sacred places, rituals, myths, and symbols. If Otto's numinous experience does not provide the awareness, desire, and passionate pursuit of the sacred in religious community, places, myths, rituals, and symbols, then what does? What else could explain the common human desire for, interest in, and passion about the sacred? What else could

¹¹⁰ Eliade 1987, p. 202.

provoke human beings to surrender individually and collectively to a non-empirical reality? What else could provoke human beings to place such a reality at the center of their individual and collective universe? What else could ground *homo religiosus* 'belief in the significance of sacred place, time, myth, ritual, and symbol when these realities are so much less obvious than the profane ones?

Merely natural explanations fall far short of what is needed to explain this most peculiar common desire to invest ultimate significance and reality in what is invisible, out of reach, wholly Other, and uncontrollable. If no alternative explanation can be found, then it is likely that our inner experience of the numen (transcendent reality) has incited our interest in, desire for, fascination with, and surrender to the sacred.

Yet, the numinous experience does not account for everything in the religious intuition of *homo religiosus*. Though it is the source of the feeling-contents of the transcendent reality's presence (as mysterious, daunting, fascinating, good, and "wholly Other"), it does not explain the common cross-cultural belief of *homo religiosus* in an appearance of the sacred (transcendent reality) in the world at a particular place and time, or the sanctification of the world and individuals through that appearance, or the power of ritual and myth to re-actualize this appearance and sanctification. This additional intuition of the sacred-transcendent reality's presence and sanctification provides the impetus to move from the numinous *experience* to *religion* – that is religious community and expression that seeks the transcendent reality in sacred places, rituals, myths, and symbols. Thus it seems that the sacred (transcendent reality) manifests itself in an additional way – in an intuitive way -- building upon the numinous manifestation of itself -- to incite us to look for hierophany, to form religious community around it and to be fulfilled by it. Henceforth I will call this additional intuitive manifestation of the transcendent reality, "the *religious intuition.*"

The coincidence of Otto's and Eliade's research has a mutually corroborative effect, because they come from different data sets – Otto's from the study of the common interior spiritual experience of *individuals* and Eliade's from the study of the common beliefs and expressions of world *religions*. When two distinct data sets connect causally it enhances the probative force of both and provides a broader and deeper explanation of our relationship to the transcendent.

I.C.

The Anxiety of "Non-Religious Man"

Up to now, we have been summarizing Eliade's findings about religion in what he calls "traditional man." Recall that this term signifies the mindset of people prior to the time when scientific and Enlightenment viewpoints became dominant among certain groups in Western Europe (around the 18th century). Recall also that virtually every person at the time of traditional man was *homo religiosus*. Though Eliade indicates the presence of some philosophical atheism or agnosticism during that time, it was so rare that it did not represent what might be termed a "cultural viewpoint."

The time of "modern man" is distinct, because a significant percentage of modern individuals are non-religious (16%), and in Western Europe, the percentage is significantly higher (approximately 50%). Furthermore the perspective of what Eliade calls "modern non-religious man" is becoming dominant in Western Europe, and some of this is spreading to other modern democracies around the world. Do Eliade's (and Otto's) findings apply to modern man? Can modern man be considered "*homo religiosus*"?

Most religious people in the modern world (84%) still possess many, if not most, of the characteristics of *homo religiosus*. ¹¹¹ They believe in an absolute transcendent reality that manifests itself in the world, and in so doing, sanctifies the world and gives it significance (ultimate significance). They also believe that life has a sacred origin (and is therefore sacred) and that human potentiality can only be realized (both in this world and the next) through a vital connection with the sacred transcendent reality. Finally they make recourse to sacred stories, rituals, and symbols to commemorate and re-enter sacred time and place in order to participate in holiness (the sacred) and to be strengthened in their capacity to follow the paradigmatic models provided by the sacred realities entrance into the profane world. Inasmuch as they exemplify *homo religiosus*, they *satisfy* their desire for transcendent reality incited by the numinous experience, and find a source of the ultimate meaning, fulfillment, and reality does not come from merely *intellectual* assent to the existence of a transcendent reality, but more from *connecting* with and *relating to* the sacred reality (through sacred ritual and sacred writings¹¹²) and following the goods, ends, and virtues elucidated by these sacred writings.

Evidently modern religious people experience the same problems arising out of natural causation, economic difficulties, political turmoil, and other worldly challenges as modern non-religious people. However, religious people have a level of ultimate, transcendent, and sacred meaning, hope, happiness, dignity, and destiny that "modern *nonreligious* people" have implicitly or explicitly denied. Furthermore modern *homo religiosus* has an ultimate and transcendent sense of the good and virtue that "modern nonreligious people" do not recognize. For Eliade, this absence of the sacred in modern nonreligious people introduces a heightened anxiety about existence, meaning, and reality (what might be called "existential anxiety"¹¹³). It comes from "the absence of things yearned for" – that is the absence of the transcendent which we desire implicitly or explicitly (because of the numen's presence within us). For Eliade, the more modern nonreligious people reject the sacred and the transcendent, the more acute their alienation from self and reality becomes, which brings with it an increasing sense of existential anxiety.¹¹⁴

¹¹¹ 2012 The Pew Global Religious Landscape Study indicates that 84% of the world's population self-identify as believers who subscribe to religion. The Pew Study did not measure specifically for Eliade's characteristics of *homo religiosus*, but inasmuch as most world religions adhere to most of these general characteristics, and most individuals who self-identify as "subscribers to religion" are in general agreement with the basic tenets of religion, it seemed reasonable to infer that most of them subscribe to most of Eliade's characteristics of *homo religiosus*.

¹¹² In modern cultures, sacred writings include more than the great myths. They also include theological histories (many of which accurately recount historical facts and events), wisdom sayings, prophetic utterances, prayers, and laws. Therefore when referring to "modern man," I will use "sacred writings" instead of "sacred myths." ¹¹³ For a complete explanation of "existential anxiety," see Volume One, Chapter 5, Section I of this Quartet.

¹¹⁴ Eliade 1987, p. 211.

Does Eliade's contention here stand up to scrutiny? Interestingly, it is the hallmark of not only theistic existentialism but also *atheistic* existentialism (e.g. Sartre, Camus, Kafka, etc.). In Chapter 12 we will describe existential anxiety in both theistic and atheistic existentialist schools. We will there refer to it as "*cosmic* emptiness, alienation, loneliness, and guilt." These anxieties are frequently alleviated through religious faith. But is there more than philosophical and anecdotal evidence for the efficacy of religion in psychological health?

The 2004 study in the *American Journal of Psychiatry* correlated nonreligious affiliation with suicide rates and found that nonreligious affiliation was the strongest contributing factor to an increase in suicide (verifying the conjectures and predictions of Eliade and theistic existentialists). The study concluded:

Religiously unaffiliated subjects had *significantly* more lifetime suicide attempts and more first-degree relatives who committed suicide than subjects who endorsed a religious affiliation. Unaffiliated subjects were younger, less often married, less often had children, and had less contact with family members. Furthermore, subjects with no religious affiliation perceived fewer reasons for living, particularly fewer moral objections to suicide. In terms of clinical characteristics, religiously unaffiliated subjects had more lifetime impulsivity, aggression, and past substance use disorder. No differences in the level of subjective and objective depression, hopelessness, or stressful life events were found.¹¹⁵

This statistical verification of the positive effects of religion on the human psyche supports Eliade's and existentialists' predictions about the alienation of many nonreligious people. If this trend continues, modern nonreligious culture may be headed for a crisis in which it no longer sees a call to higher principles, virtues, ideals, dignity, and destiny – progressively losing its sense of hope in a positive future, leaving its participants in a state of moral and metaphysical alienation, emptiness, and superficiality – reduced to "little worlds of materialism, autonomy, and self-indulgence." Eliade believes that this crisis may be inevitable because modern nonreligious man's sense of self and freedom is based upon the rejection of the sacred:

Modern nonreligious man assumes a new existential situation; he regards himself solely as the subject and agent of history, and he refuses all appeal to transcendence. In other words, he accepts no model for humanity outside the human condition as it can be seen in the various historical situations. Man *makes himself*, and he only makes himself completely in proportion as he desacralizes himself and the world. The sacred is the prime obstacle to his freedom. He will become himself only when he is totally demysticized. He will not be truly free until he has killed the last god.¹¹⁶

Is the viewpoint of modern nonreligious man justified? Is collective existential anxiety and crisis inevitable? Do freedom and self-identity have to come from the rejection of the sacred? Otto and Eliade think not. The remarkable cross-cultural and cross-historical coincidence

¹¹⁵ The statistical analysis for this conclusion may be found in Dervic et al. 2004. pp 2303-2308.

¹¹⁶ Eliade 1987, p. 203.

of the human sense of the spiritual (the numinous experience) and expression of the sacred (hierophany) and the likelihood that these remarkable coincidences have an interior supernatural origin should give the modern person pause, for there may be good reason to suspect not only that human beings have a transcendental dimension (and are destined for transcendental fulfillment), but are created in a relationship with the transcendental reality that is at once mysterious, daunting, and wholly Other, as well as desirable, fascinating, good, and caring.

Some contemporary critics may object that the interior evidence of the numinous, and the cross-cultural evidence of religious expression are not enough - no matter how omnipresent they are. This objection may be grounded in an inability to detect the numinous experience for themselves or to desire a connection with the sacred through ritual and sacred writings. No doubt these individuals see their inner world to be devoid of transcendent awareness and desire; however this is not the only way of gaining access to the sacred. Frequently, it is easier to detect its presence through the negative effects of rejecting it – that is, through the anxiety, alienation, and emptiness that arises out of ignoring or frustrating it. Is the reason that non-religiously affiliated people have significantly higher suicide rates, less reasons for living, less contact with family, and greater anxiety merely a result of fear or unfulfilled wish -- or rather, is it a result of radical incompleteness of being, purpose, and destiny? Non-religious people must answer this question for themselves. However, if theistic existentialists are correct, the anxiety is not so much a matter of fear as emptiness and loneliness; not so much a matter of unfulfilled wishes as alienation from self and reality. If this is the truth, then Otto and Eliade hold out a solution to the existential anxiety of modern times - namely, an openness to the transcendent reality within us and to collective participation in religious community, ritual, and symbol.

There are other clues to the transcendental nature of human beings and our relationship to a transcendent reality beyond that of Otto and Eliade:

- (1) The origin of conscience (Section III.)
- (2) Four transcendental desires for perfect truth, love, goodness, and beauty (Section II.)
- (3) The evidence of survival of bodily death from medical studies of near death experiences (Section I.)

These other clues corroborate the findings of Otto and Eliade, strengthening the plausibility and expanding the horizon of our transcendental nature and destiny.

III. Kant and Newman on the Divine Origin of Conscience

The transcendent reality has frequently been identified as the source of the *good* – the good in itself and the good in human consciousness. Otto's research indicates that the numinous is perceived to be good while Eliade's research indicates that hierophanies concern not only the breakthrough of the sacred into the world, but also the revelation of paradigmatic models for human behavior. The identification of the transcendent reality with the good is not only a part of religious intuition, but also philosophical reflection since the time of the ancient Greeks.

Plato believed that the highest reality was the good itself,¹¹⁷ and that the good itself was present to human beings, and that we could know it through questioning and dialectic. St. Paul brought these considerations to a whole new level by showing that all human beings could know the good (as well as evil) through their *consciences*. In the Letter to the Romans, he reflects on the Gentile's ability to know God's law without having the benefit of Judeo-Christian revelation:

Indeed, when Gentiles, who do not have the law, do by nature things required by the law, they are a law for themselves, even though they do not have the law. They show that the requirements of the law are written on their hearts, their consciences [$\sigma uvei\delta\eta\sigma i\varsigma$] also bearing witness, and their thoughts sometimes accusing them and at other times even defending them (Rom 2: 14-15).

For St. Paul, "the law" is *God's law*, and he asserts that God writes this law on the hearts of all people so distinctly that it accuses and defends them.

St. Thomas Aquinas concurred with St. Paul, and formulated a general explanation of conscience which has become a cornerstone of philosophy up to the present time. Conscience has two components:

- 1. What Aquinas called "*synderesis*" (an attraction to and love of the good and a fear of and repulsion toward evil), and
- 2. Awareness of certain general precepts of the good.

With respect to *synderesis*, our attraction to and love of the good leads to feelings of nobility and fulfillment when we do good (or contemplate doing it). Conversely, our fear of and repulsion toward evil leads to feelings of guilt and alienation when we do evil (or contemplate doing it).¹¹⁸

Conscience not only has the above emotional and personal component, it also has an intellectual one. We have a sense of *what* is good or evil (in a general way). These precepts might include do good, avoid evil, do not kill an innocent person, do not unnecessarily injure another, steal from another, or otherwise unnecessarily harm another; give a person their just desserts, and be truthful to yourself and others.

Aquinas associated these precepts of conscience with the natural law, holding that the natural law is part of God's eternal law:

Now among all others, the rational creature is subject to Divine providence in the most excellent way, in so far as it partakes of a share of providence, by being provident both for itself and for others. Wherefore it has a share of the Eternal

¹¹⁷ Plato 1961 (b), Bk. VII.

¹¹⁸ "...[I]t is fitting that we have bestowed on us *by nature* not only speculative principles but also practical principles...[T]he first practical principles bestowed on us by nature, do not belong to a special power but to a special *natural* habit, which we call *synderesis*. Thus *synderesis* is said to incite to good and to murmur at evil, inasmuch as we proceed from first principles to discover and judge of what we have discovered." Aquinas 1947, p. 407 (ST, 1, Q. 79, Art 12). Italics mine.

Reason, whereby it has a natural inclination to its proper act and end: and this participation of the eternal law in the rational creature is called the natural law.¹¹⁹

III.A. Kant and the Divine Origin of Conscience

The above thinkers presume the existence of God, and attempt to show that the good we know in our conscience comes from God. In the 18th Century, Immanuel Kant looked at the reverse contention. Instead of assuming the existence of God and inferring his presence in our conscience, Kant begins with the moral obligation imposed by conscience and moves to the existence of God. He believed that the way in which the good was known through human consciousness entailed its divine origin:

> Through the idea of the supreme good as object and final end of the pure practical reason the moral law leads to religion, that is, to the recognition of all duties as divine commands, not as sanctions, that is, as arbitrary commands of an alien will which are contingent in themselves, but as essential laws of every free will in itself, which, however, must be looked on as commands of the supreme Being, because it is only from a morally perfect (holy and good) and at the same time all-powerful will, and consequently only through harmony with this will, that we can hope to attain the highest good, which the moral law makes it our duty to take as the object of our endeavour.¹²⁰

The essence of Kant's thought here may be summarized in two statements in his Opus *Postumum*: "In the moral-practical reason lies the categorical imperative to regard all human duties as divine commands;"¹²¹ which causes him to view God as follows: "the concept of God is the concept of an obligation-imposing subject outside myself."¹²² Kant moves from an intrinsic awareness of an absolute moral duty (categorical imperative) to an awareness of a morally perfect will which is the source of that absolute duty, and then to an awareness of the Supreme Being who is an "obligation-imposing subject outside [himself]." Notice that this transition of awareness is not a formal set of inferences, but rather an unfolding of the meaning of the absolute duty which is central to Kant's consciousness.

For Kant, the good (within our consciousness) is embedded within an absolute duty to do that good, which in its turn, is embedded within a divine source of that absolute duty. He cannot conceive of the good without the duty to do it (for what makes the good recognizable is the duty or imperative to do it), and he cannot conceive of an *absolute* duty to do the good without an absolute obligation-imposing Subject outside himself. Goods cannot be recognized without the

¹¹⁹ Summa Theologica I-II, O, 91, art. 2.

¹²⁰ Kant 2004, p. 233.
¹²¹ Kant 1960 p. 12.
¹²² Kant 1960 p. 12.

duty to do them, and the *absolute* duty to do them cannot be recognized without an *absolute* obligation-imposing Subject outside ourselves.

This line of thought may seem unsatisfying to a skeptic, but Kant is not trying to prove anything to a skeptic. He is trying to shed light on the implications of the good within our consciousness. For anyone who cares to probe the distinctive quality of the good within himself, God is an inescapable reality. Anyone who probes the qualities of that good will sense the presence of the "obligation-imposing Subject" within it. If we allow the good to reveal itself within us, we will not only know of its divine origin, we will know that the Divine is present to us – at once outside of us and embedded in the absolute duty of the good within us. This presence of the Divine within us makes us transcendental.

Notice that Kant has not constructed a *formal* proof *of* God here, but rather has given an *existential* inference *to* God. He makes no use of deduction or logic, but rather is interested in the existential (concretely experienced) content of his interior recognition of the good. The recognition of the good leads to the absolute duty that makes the good to be recognizable as good, and the absolute duty leads to the Supreme Subject who imposes that absolute duty.

III.B. Newman and the Divine Origin of Conscience

John Henry Newman brought this line of thought to a new level about eighty years later. Though he borrows the general structure of "existential inference" from Kant, he shifts the emphasis from an "obligation-imposing Subject outside ourselves" to an "interpersonal, caring, fatherly authority who is the source of goodness and law." Unlike Kant, who moves from the good to God through two existential inferences, Newman uses five inferences (detailed below) – careful to distinguish his sense of conscience from other natural phenomena.

Unfortunately, Newman did not leave us with a formal rendition of his existential inference to God, but he did leave an unpublished manuscript with a set of organized passages from his sermons and additional notes. Adrian J. Boekraad and Henry Tristram have published an edition of this unfinished work entitled *Proof of Theism*.¹²³ Since Newman presents his points quite systematically, I will here present only the main movements of the argument with a brief interpretation of his texts. His general argument proceeds as follows. He begins with an overview of his main contention:

Ward thinks I hold that moral obligation is, because there is a God. But I hold just the reverse, viz. there is a God, because there is a moral obligation. I have a certain *feeling* on my mind, which I call conscience. When I analyse this, I *feel* it involves the idea of a Father and a Judge, -- of one who sees my heart, etc.¹²⁴

¹²³ I will cite the texts of Newman from the work of Boekraad and Tristram 1961 entitled *The Argument from Conscience to the Existence of God*, and then cite the page numbers from Newman's unpublished paper as given by Boekraad and Tristram.

¹²⁴ Boekraad and Tristram 1961, p. 103; citing Newman (unpublished), p. 1.

Newman then proceeds to an assessment of the unity of his consciousness and his existence, which shows that his consciousness is as undeniable as his existence (since one cannot be aware of the latter without being aware of the former). He further shows that he has an *immediate* awareness of his consciousness, and therefore he does not have to deduce it or believe in it. Belief occurs when one is not certain, but Newman is as aware of his consciousness as he is of his existence. He intends to show later that if conscience is intrinsic to his consciousness, then he can be just as immediately aware of his conscience as he is of his consciousness and existence. He then proceeds to a definition of conscience:

Man has within his breast a certain commanding dictate, not a mere sentiment, not a mere opinion, or impression, or view of things, but a law, an authoritative voice, bidding him do certain things and avoid others. I do not say that its particular injunctions are always clear, or that they are always consistent with each other; but what I am insisting on here is this, that it commands, that it praises, it blames, it promises, it threatens, it implies a future, and it witnesses the unseen. It is more than a man's own self. The man himself has no power over it, or only with extreme difficulty; he did not make it, he cannot destroy it.¹²⁵

For Newman, conscience "commands" (just as for Kant, the categorical imperative imposes duty). He is not so much concerned with whether the specific dictates of the command are always consistent from person to person or from culture to culture, but is impressed by the seeming universality of what is ingredient to conscience's dictates, namely, "command, praise, blame, promise, a future, and the unseen." These characteristics intrinsic to conscience's dictates imply something more than a mere standard or authority. They seem to have an origin outside the self; an origin which is not a matter of human learning (controlled by an inquiring subject), but rather one which is *uncontrolled* by the self. The more we recognize, listen to, and obey this uncontrollable authority, the clearer it and its *dictates* become:

Conscience implies a relation between the soul and something exterior, and moreover, superior to itself; a relation to an excellence which it does not possess, and to a tribunal over which it has no power. And since the more closely this inward monitor is respected and followed, the clearer, the more exalted, and the more varied its dictates become, and the standard of excellence is ever outstripping, while it guides, our obedience. A moral conviction is thus at length obtained of the unapproachable nature as well as the supreme authority of that, whatever it is, which is the object of the mind's contemplation.¹²⁶

It seems that the dictates of conscience and the presence of its authority are somewhat dim in the unpracticed moral agent; but as one listens to and follows these dictates, the dictates themselves and the presence of their source become clearer and clearer to the point of being

¹²⁵ Newman 1908, Sermon #64. See also Boekraad and Tristram 1961, p. 114; citing Newman (unpublished), pp. 11-12.

¹²⁶ Boekraad and Tristram 1961, p. 113; citing Newman (unpublished), pp. 10-11.

virtually undeniable. The presence of this authority is so strong that Newman is impelled to make his first inference:

> This is Conscience, and, from the nature of the case, its very existence carries on our minds to a Being exterior to ourselves; or else, whence did it come? And to a being superior to ourselves; else whence its strange, troublesome peremptoriness?...Its very existence throws us out of ourselves and beyond ourselves, to go and seek for Him in the height and depth. whose voice it is.¹²⁷

Newman is relating a dimension of his *experience* of conscience, namely, a presence which not only invites us out of ourselves, but draws us and even throws us out of ourselves. It is a presence which calls us to itself – sets us seeking "for Him in the height and depth, whose voice it is." If we respond to this invitation; if we follow the call of the "voice," then its personal presence will become apparent. In an 1855 novel entitled *Callista*, Newman uses the voice of his protagonist to make this point:

> [God] says to me, Do this, don't do that. You may tell me that this dictate is a mere law of my nature, as is to joy or to grieve. I cannot understand this. No, it is the echo of a person speaking to me. Nothing shall persuade me that it does not ultimately proceed from a person external to us. It carries with it its proof of its divine origin. My nature feels towards it as towards a person. When I obey it, I feel a satisfaction; when I disobey a soreness, -- just like that which I feel in pleasing or offending some revered friend...The echo implies a voice; a voice a speaker. That speaker I love and I fear.¹²⁸

In order to clarify and validate this experience, Newman contrasts the experience of conscience to the experience of what he calls "taste" (aesthetic experience), and shows that aesthetic experiences do not call me out of myself in an interpersonal way as does the experience of conscience. If conscience were only intrapersonal (private), it would resemble aesthetic experience, but it is so much more:

> Now I can best explain what I mean by this peculiarity of feeling [intrinsic to conscience], by contrasting it with the rules of taste. As we have a notion of wrong and right, so we have of beautiful and ugly; but the latter set of notions is attended by no sanction. No hope or fear, no misgiving of the future, no feeling of being hurt, no tender sorrow, no sunny selfsatisfaction, no lightness of heart attends on the acting with beauty or deformity. It is these feelings, which carry the mind out of itself and bevond itself, which imply a tribunal in future, and reward and punishment which are so special.¹²⁹

 ¹²⁷ Boekraad and Tristram 1961, pp. 114-115; citing Newman (unpublished), p. 12.
 ¹²⁸ Boekraad and Tristram 1961, p. 116; citing Newman (unpublished), p. 13.

¹²⁹ Boekraad and Tristram 1961, pp. 117-118; citing Newman (unpublished), p. 14.

He then focuses on these special feelings to distill the *interpersonal* nature of them, revealing that these feelings could not be experienced were it not through a relationship with another person – a person like a father:

[T]he feeling is one analogous or similar to that which we feel in human matters towards a *person* whom we have offended; there is a tenderness almost tearful on going wrong, and a grateful cheerfulness when we go right which is just what we feel in pleasing or displeasing a father or revered superior. So that contemplating and revolving on this feeling the mind will reasonably conclude that it is an unseen father who is the object of the feeling. And this father has necessarily some of those special attributes which belong to the notion of God. He is invisible – He is the searcher of hearts – He is omniscient as far as man is concerned – He is (to our notions) omnipotent....¹³⁰

We may now summarize Newman's thought on this matter. First, he claims that he does not *believe* in conscience any more than he *believes* in his consciousness; he is *directly aware* of them, for consciousness is intrinsic to his awareness of everything – including his own existence, and conscience is intrinsic to his consciousness, presenting him with an awareness of interpersonal relationship and authority. He then describes in five steps how conscience is an *immediate* awareness or experience of a personal God:

- 1. He observes that conscience commands him, and that this command includes praise, blame, promise, a future, and the unseen (and is in *immediate* relationship with his consciousness when it does so).
- 2. He then observes that intrinsic to this "praise, blame, promise, etc." is a concomitant awareness of an *external source* ("Its very existence throws us out of ourselves and beyond ourselves, to go and seek for Him in the height and depth, whose voice it is").
- 3. He then shows that these feelings are not reducible to other kinds of feelings within human consciousness (such as aesthetic feelings): "[The feeling of beauty or ugliness] is attended by no sanction; no hope or fear, no misgiving of the future, no feeling of being hurt, no tender sorrow, no sunny self-satisfaction, no lightness of heart."
- 4. He then shows that there is a *personal* dimension intrinsic to these special qualities of the feelings of conscience: "[T]he feeling is one analogous or similar to that which we feel in human matters towards a *person* whom we have offended; there is a tenderness almost tearful on going wrong, and a grateful cheerfulness when we go right which is just what we feel in pleasing or displeasing a father."
- 5. He then reveals that this personal dimension is not completely similar to those experienced with human beings, but has a divine dimension which is implicit in its supreme authority ("an authoritative voice, bidding him do certain things and avoid others...The man himself has no power over it, or only with extreme difficulty; he did

¹³⁰ Boekraad and Tristram 1961, pp. 118-119; citing Newman (unpublished), pp. 14-15.

not make it, he cannot destroy it"). When this *supreme* authority is considered within the context of "the voice of a father," it manifests divine attributes ("So that contemplating and revolving on this feeling the mind will reasonably conclude that it is an unseen father who is the object of the feeling. And this father has necessarily the notion of God. He is invisible – He is the searcher of hearts – He is omniscient…").

The more we recognize, listen to, and follow the urgings of conscience, the more clear and evident both the dictates of conscience and its personal, external, divine source become.

Newman has not formulated an *inferential* argument here; rather, he has rationally unfolded the fivefold dimension of his immediate experience of God in his conscience. He reveals, as it were, a dimension within a dimension within a dimension within the feelings and experience of conscience. What are these dimensions? A divine dimension (invisible, searcher of hearts, omniscient...) *within* a personal dimension (a tenderness almost tearful on going wrong, and a grateful cheerfulness when we go right) *within* special qualities (sanction, hope, fear, misgiving of the future, feelings of being hurt, tender sorrow) *within* the feelings and experience of conscience (praise, blame, promise, etc.). This total experience of conscience ("the divine dimension within the personal dimension within the special qualities within the feelings and experience of conscience") is intrinsic to his consciousness, and therefore, he is *immediately* aware of it.

Thus, Newman is not making an inferential argument; he is unfolding his own immediate experience of God through his conscience. Newman assures us that the more we listen to and follow our conscience, the more deeply and clearly we will experience the God who both guides and invites us to His life of transcendent and perfect goodness. Once again, we find God present to human consciousness – not only in the numinous experience and our religious intuition of the Sacred, but also in the omniscient, invisible, searcher of hearts who bids us to do good and avoid evil.

IV. Conclusion

An Initial Conclusion about "the Soul"

We have seen three ways in which the transcendent reality touches us:

- 1. The numinous experience in which the numen presents itself as mysterious, daunting, uncontrollable, fascinating, good, and empathetic, and invites us into itself by inciting our interest and desire.
- 2. The religious intuition -- in which we sense that the sacred transcendent reality has broken into the world, which invites us to draw closer to the sacred reality through sacred place, ritual, and myth.
- 3. Conscience through which an omniscient, invisible, searcher of hearts bids us to do good and avoid evil.

These three dimensions of contact with transcendent reality invite us and bring us into the sacred and spiritual domain.

These three connections with the Sacred-Transcendent Reality are not static; they are interrelational and dialogical. Otto's numinous experience includes a dimension of empathy and invitation within the feeling-contents of fascination, desire, goodness, care, and comfort. Eliade's religious intuition includes a dimension of sanctification by the Transcendent Reality within the desire for the sacred, and Newman's conscience includes an experience of an omniscient invisible searcher of hearts within the feelings of guilt, hope or fear, misgiving of the future, being hurt, tender sorrow, sunny self-satisfaction, and lightness of heart. When the Transcendent Reality makes itself present to us, it manifests concern and care for us, calls us into a deeper relationship with itself, and offers us guidance and sanctification in our life's journey. Those who open themselves to the "transcendent presence within" will find not only the mysterious and sacred "wholly Other," but also a personal, empathetic, and loving being passionately interested in bringing us to the fullness of life through itself.

Fourth Topic Human Intelligence versus Artificial and Animal Intelligence

This topic will be divided into two parts:

- 1. Human intelligence VS Artificial intelligence
- 2. Human intelligence VS animal intelligence

I. Human Intelligence versus Artificial Intelligence

There are four major differences between human and artificial intelligence and it is highly unlikely that we will be able to bridge this gap on any of the four levels into the indefinite future. What are they?

- 1. The five transcendental desires manifesting our awareness of perfect truth, love, justice/goodness, beauty and hope.
- 2. The formulation of conceptual ideas (abstract interrelational ideas that can be used as predicates and objects).
- 3. Self-consciousness, experiencing of experiencing, presence to self, and the experience of inwardness (David Chalmers' hard problem of consciousness).
- 4. Transalgorithmic mathematical thinking (manifest by Gödel's theorem).
- 5. Each will be discussed in turn.

We have already discussed one obvious difference between human and artificial intelligence—the presence of the five transcendental desires manifesting our awareness of perfect truth, love, justice/goodness, beauty and home. As we showed, the source of these five kinds of transcendental awareness must be God (perfect truth, perfect love, perfect justice/goodness, perfect beauty and perfect being themselves). For a proof of this, see above—Second Topic as well as Chapter I –Third Topic. Since we do not have the capacity to give artificial intelligence these five kinds of transcendental awareness and desire (because only God can do this) we can assume that computers will never be enlightened in this way.

There's a second difference between human and artificial intelligence—the capacity to formulate conceptual ideas. In Section II below (Human Intelligence versus Animal Intelligence), we will discuss the need for heuristic notions in formulating conceptual ideas (abstract ideas which are interrelational and can be used as predicates and objects). We will there show that animals do not have conceptual ideas (because they cannot pass Chomsky's syntax test), showing that they do not have the heuristic notions needed to ask questions and formulate these conceptual ideas. It is unlikely that *artificial* intelligence will ever have the capacity to formulate conceptual ideas, because we will not be able to give heuristic notions to them. Why? If Bernard Lonergan is correct in asserting that the origin of all heuristic notions is what he calls "the notion of being" (the notion of complete intelligibility), and the origin of that notion must be "being through itself" or "complete intelligibility itself," then God alone (who is the only reality that exists through itself and is an unrestricted act of thinking) can cause this notion. Since this notion is the origin of all other heuristic notions, then only God can be their ultimate source. For an explanation of this see Section II. below on this topic.

There is a third difference between artificial and human intelligence—selfconsciousness. The recent work of David Chalmers, called "the hard problem of consciousness" brings this to the fore. He notices that there are various dimensions to the inwardness of subjective experience that cannot be replicated and therefore cannot be produced by physical processes alone. Phenomena such as delight, appreciation, enjoyment, awe, and wonder, manifest not only an experience of the outward world, but an experience of inwardness—an experience of experiencing.

Chalmers works backwards from what he calls "the easy problems of consciousness" (i.e. any phenomenon that can be explained by an aggregation of physical processes) to the "hard problem of consciousness" (i.e. any phenomenon – such as the above experiences of delight, appreciation and awe which are not able to be explained by an aggregation of physical processes).¹³¹

 ¹³¹ David Chalmers, 1995 "Facing Up to the Problem of Consciousness" Journal of Consciousness Studies 2 (3): pp 200-219. See also Chalmers 1997. The Conscious Mind: In Search of a Fundamental Theory. (London: Oxford University Press). See also Chalmers,

The problem with describing *inner* experiences by means of physical processes is that physical processes have no "inner sense" – that is, no "presence to self" – "no awareness of self." Physical realities have no "inwardness" – no "interior depth" – but only "outwardness" which can interact or be aggregated with other physical ("outward") realities.

Thomas Nagel looks at it the other way around – from the vantage point of physical processes. He notes that physical processes are "objective" – they can be *shared* in a consistent way with anyone who has the means to observe them, but subjective "experiences" – "inner appreciation and enjoyment" – cannot be shared with anyone. They are un-shareable because the "inwardness" of subjective experience cannot be objectified – "made outward."¹³²

If Chalmers and Nagel are correct then self-consciousness, "experiencing of experiencing," "experiencing of inwardness," and the experience of owning feelings and states of appreciation, delight, awe, etc. will not be replicatable by artificial intelligence—which by definition can be reduced to physical and outward processes.

There is a fourth significant difference between artificial and human intelligence manifest in Gödel's theorem. The famous German mathematician Kurt Gödel first formulated the proof of the non-rule based, non-algorithmic, transcendent nature of human intelligence in 1931.¹³³ It was revised on several occasions by John R. Lucas¹³⁴ and by the eminent physicist Roger Penrose.¹³⁵ In brief, Gödel showed that there will always be unprovable propositions within any set of axiomatic statements in arithmetic. Human beings are able not only to show that consistent, unprovable statements exist, but also to prove that they are consistent by making recourse to axioms *beyond* those used to generate these statements. This reveals that human thinking is not based on a set of prescribed axioms, rules, or programs, and is, by nature, *beyond* any program. Stephen Barr, summing up the Lucas version of Gödel's argument, notes:

First, imagine that someone shows me a computer program, P, that has built into it the ability to do simple arithmetic and logic. And imagine that I know this program to be consistent in its operations, and that I know all the rules by which it operates. Then, as proven by Gödel, I can find a statement in arithmetic that the program P cannot prove (or disprove) but which I, following Gödel's reasoning, can show to be a true statement of arithmetic. Call this statement G(P). This means that I have done something that that computer program P cannot do. I can show that G(P) is a true statement, whereas the program P cannot do so using the rules built into it. ¶ Now, so far, this is no big deal. A programmer could easily

2010. *The Character of Consciousness (Philosophy of Mind)*. (London: Oxford University Press).

¹³² See Nagel 1974, pp 435–50.

¹³³ Gödel 1931, pp. 173-198.

¹³⁴ Lucas 1961, p. 120. Lucas 1970, pp. 149-151. Lucas 1990.

¹³⁵Penrose 1989. Penrose 1994. Penrose 1996, p. 23.

add a few things to the program – more axioms or more rules of inference – so that in its modified form it can prove G(P). (The easiest thing to do would be simply to add G(P) itself to the program as a new axiom.) Let us call the new and improved program P'. Now P' is able to prove the statement G(P), just as I can. ¶ At this point, however, we are dealing with a new and different program, P', and not the old P. Consequently, assuming I know that P' is still a consistent program, I can find a Gödel proposition for *it*. That is, I can find a statement, which we may call G(P'), that the program P' can neither prove nor disprove, but which I can show to be a true statement of arithmetic. So, I am again ahead of the game. ...This race could be continued *forever*.¹³⁶

Since human beings can *indefinitely* prove propositions which are not provable through the axioms from which they were derived, it would seem that human intelligence is *indefinitely beyond* any axiomatic or program-induced intellection.

Gödel's proof shows that human thinking is not only *always* beyond axioms, rules, and programs (to which artificial intelligence is limited), but also capable of *genuinely originative creativity* (that is, capable of thinking without deriving from or making recourse to any prior axioms, rules, or programs).

How is this possible? We must have some kind of tacit awareness of mathematical intelligibility as a whole-- a sense of how all the parts relate to each other as a whole. With this remarkable general sense of mathematical intelligibility we can develop mathematics beyond the total implications of all past algorithms—we can be genuinely creative. This is precisely what has occurred throughout the history of mathematics—from the time of Euclid, Pythagoras and Archimedes to the present.

Where did our general notion of mathematical intelligibility come from? It does not come from the world of concrete space-time particularity (because the general notion of mathematical intelligibility is beyond all space-time particularity). Similarly, it does not come from physical processes in our brain (because these processes, too are restricted to space-time particularity). It seems that we have only one option left— it must be an integral part of our innate transcendental horizon of complete intelligibility which allows us to have a tacit awareness of perfect truth (see above--Second Topic—Perfect Truth). Recall that this transcendental horizon of complete intelligibility presents us with a tacit awareness of everything about everything—and the general ways in which everything can be related to everything. It is the source of all heuristic notions—what Lonergan calls the "notion of being." He describes it as follows:

¹³⁶ Barr 2003, p. 214. Italics mine.

[T]he notion of being penetrates all cognitional contents. It is the supreme heuristic notion. Prior to every content, it is the notion of the to-be-known through that content. As each content emerges, the 'to-be-known through that content' passes without residue into the 'known through that content.' Some blank in *universal anticipation* is filled in, not merely to end that element of anticipation, but also to make the filler a part of the anticipated. Hence, *prior* to all answers, the notion of being is the notion of the *totality* to be known through all answers.¹³⁷

All forms of artificial intelligence are based on prescribed rules, algorithms, axioms, and programs.¹³⁸ If Lonergan's implicit solution to Gödel's Theorem is correct, then no artificial (machine) intelligence will ever be able to replicate human questioning and creativity – let alone our quest for complete and unrestricted intelligibility. Artificial intelligence has no consciousness of a horizon of greater intelligibility – let alone a horizon of complete and unrestricted intelligibility, and human beings will not be able to create such a horizon for it because any such horizon is beyond the domain of individuation and space-time particularity which means it is beyond the domain of macroscopic and quantum physics. Furthermore, human beings will never be capable of creating a horizon of *complete and unrestricted* intelligibility ltself" (and unrestricted act of thinking—God). We will never be able to create artificial replicas of our own free and creative inquiry because we are mere restricted beneficiaries of a capacity given to us by a truly unrestricted intelligence.

II. Human Intelligence versus Animal Intelligence

There has been considerable speculation about higher primates having similar intellectual and linguistic capabilities to humans. Some have conjectured that the difference between humans and higher primates is only a matter of *degree*, but the *essential* cognitional activity is the same. If these thinkers are correct, it would mean that higher primates have a tacit awareness of the

¹³⁷ Lonergan 1992. *Insight*, pp. 380-381.

¹³⁸ Currently all forms of artificial intelligence can be replicated by a universal Turing Machine which is bound by prescribed rules, axioms, algorithms, and propositions. "A Turing Machine" is a hypothetical device that models the basic mechanical, logical, and computational properties intrinsic to every computer. Alan Turing (1936) described this basic model which has helped computer scientists and philosophers to theorize about both the potential and limits to mechanical intelligence (logical and computational processing through scanning and binary circuitry). Turing's model has been sufficiently generalized to replicate any known form of mechanical intelligence, and it is called, "a universal Turing Machine." It is theoretically possible to have non-Turing forms of machine intelligence, but these will not be able to escape the requirement for prescribed rules, axioms, algorithms, and propositions, because the only way to move beyond them is to be tacitly conscious of a horizon of higher intelligibility (and if Lonergan is correct, a horizon of *complete and unrestricted* intelligibility). Such a horizon is beyond all physical and mechanical processes – including quantum ones, for it cannot be limited by individuation and space-time particularity (see the explanation above in Sections IV&V.A). See Spitzer 2010 (b) pp 5-27 – particularly the response to R. Penrose & S. Hameroff (pp 19-23).

supreme heuristic notion of being, and are therefore, transcendent in the same way as humans. Is there any way of determining whether this is the case? As a matter of fact, there is.

The critical distinction between perceptual ideas (picture images of individuals) and conceptional ideas (relational ideas which can abstract from individuality and space-time particularity) dovetails felicitously with a behavioral test developed by the well-known philosopher of language, Noam Chomsky. This test can be applied to the socio-linguistic behavior of higher primates. A quick explanation of this reveals that human beings are categorically different from primates, not only in their linguistic capabilities, but also in their capacity to formulate conceptual ideas in language, logic, mathematics, natural science, social science, and philosophy. There is nothing in the socio-linguistic behavior of higher primates – even the best trained ones – that indicates the presence of conceptual ideas, heuristic notions, or a supreme heuristic notion. Primates appear to be limited to the domain of perceptual ideas – and linguistic signs that refer to those perceptual ideas. We shall now consider each of these points in more depth.

With respect to perceptual and conceptual ideas, consider the following. Look at the previous paragraphs in this chapter. What percentage of the words in those paragraphs have individuated referents—referents that are susceptible to pictorial imaging? I would wager they are less than three percent. So what are the referents for the other ninety-seven percent of our words? They refer to *relationships*—relationships among pictorial images, relationships among relationships, and the ways in which things and ideas are related. Perceptual ideas are pictorial images—individuated images coming from direct experience or images derived from direct experience. In contrast, conceptual ideas have *relational* referents—which are not derived from direct experience, but from relating direct experiences and other conceptual ideas to one another.

Throughout our educational process we learn how to complexify these relationships among things and ideas. First, we relate perceptual ideas to one another—ideas that have pictorial referents – such as "cat" or "tree" or "man." Then we relate conceptual ideas to one another (such as "noun," "verb," "too," and "add"). We can move to higher levels of abstraction – relationships among relationships, etc. This can be done in the domain of grammar, logic, mathematics, the natural sciences, etc.

How do we create these relationships among perceptual and conceptual ideas? There must be some *context* through which to organize them – something like a map or a clock or a table of genus and species – which could provide a background or superstructure through which ideas can be related in an organized way. Each of these superstructures has high-level ideas intrinsic to them which determine the way in which ideas are organized – for example, "here-there-right – left-center" stand behind the question "Where?" "Earlier-later-past-present-future" stand behind the question "When?" "Similarity-difference" stand behind the question "What?" "Causation-possibility-necessity-contingency-actuality" for the question stand behind the question "Why?"

As implied above, the heuristic notions and high level concepts standing behind each kind of question derives its meaning from the supreme heuristic notion of "the complete intelligibility of reality." Why? Because the supreme heuristic notion of complete intelligibility is what enables us to see the deficiencies and imperfections in our current knowledge, causing us to inquire about the next step beyond it. Recall that this supreme heuristic notion is the "tacit awareness of everything to be known"—and the notional anticipation of achieving it. When we contrast this universal anticipation with our current knowledge—we become aware that there are blanks to be filled in —and we desire and seek to do so. This universal anticipation stands behind every question, and every question stands behind the heuristic notions and high level conceptual ideas used to relate all other ideas and images to one another.

We are now in a position to make a judgment about animal intelligence (specifically the intelligence of higher primates). Do higher primates form conceptual ideas? Do they transform perceptual ideas into conceptual ideas through interrelationships within superstructures organized by heuristic notions? Noam Chomsky gave the first linguistic test to answer these questions, and on the basis of it, held fast to the belief that they do not. Chomsky realized that certain words in a sentence could have direct pictorial referents, but was certain that the *syntax* of a sentence could not be grasped pictorially. It can only be grasped by understanding relationships among ideas. A simple test of this would be to grasp the meaning of subject and object in the word order of a sentence – for example "dog bites man" versus "man bites dog."¹³⁹ Even though one could grasp "dog," "bites," and "man" through perceptual ideas, one cannot grasp the difference between subject and object in a sentence's word order without some conceptual (relational) ideas.¹⁴⁰ Do higher primates grasp the syntactical difference between subject and object in a sentence's more of a man biting a dog? Contemporary research indicates that they do not.

¹³⁹ Chomsky was primarily concerned with the operation of *innate* structures for *syntax* capable of *creatively* combining and adapting intelligible phrases from words and signs. Control over syntax (e.g., understanding the difference between "dog bites man" and "man bites dog") is an essential test of this capability. See Chomsky 2007. Chomsky was highly critical of B.F. Skinner's functionalistic (behavioristic) explanation of language which implied commonality between animal linguistic functions/behaviors and human linguistic functions/behaviors, because it ignored this central test of creative combining, organizing, and adapting of words and signs manifest in syntactical control. See Chomsky 2007, 1971, and 1967.

¹⁴⁰ Chomsky held that humans can both create and understand these syntactical differences (in the ordering of words within an expression) because they can apply transformation rules to universal core patterns, and therefore, do not need to be trained to understand and use every expression. It does not matter whether one accepts Chomsky's whole theory of human linguistic creativeness, because his syntactical control test for the presence of conceptual intelligence in animals is still valid whether or not one accepts his explanation of how syntactical control occurs.

There is considerable evidence that vertebrates generate perceptual ideas, manifesting perceptual intelligence. For example, animals can relate perceptual images, such as a rabbit and a tree, to one another spatially (as well as to themselves). Notice that what the animal *perceives* is an individual object or image – it is a picture in the animal's consciousness. So does the animal go beyond relating perceptual ideas in space and time? Do they implicitly understand the most rudimentary implications of grammar communicated by word order? If they do not, then we can be sure that they do not grasp elementary conceptual (relational) ideas – and that they are restricted to the domain of perceptual ones.

Is *perceptual* intelligence sufficient for elementary language? Researchers have shown that it is. For example, primates have the ability to associate signs (such as those from American Sign Language) with their perceptual (picture) thoughts. However, these associations appear to have no other purpose than to name or identify specific things (such as Joe the trainer, or a banana, or a perceptual action like running or biting) to satisfy biological opportunities (such as obtaining food or shelter) or to communicate biological dangers (such as the approach of a predator). For example, a chimpanzee can be taught to use sign language to communicate a need for food or even a warning about danger, but cannot be trained to use language to say something *about* something (which would require syntactical control – the intelligible use of predicates and objects).

One of the more controlled experiments in this regard was carried out by Allen and Beatrix Gardner in 1967 (Project Washoe) in which a female chimpanzee named Washoe was raised in a very familial human environment with affection and other human bonding qualities.¹⁴¹ According to the Gardners, Washoe was able to learn 350 words of American Sign Language (which exceeds the capacity of virtually every other chimpanzee subjected to this kind of training – operative behavioral conditioning). The Gardners seemed to have achieved other successes – Washoe seemed to be able to adapt some of the learned signs for other uses, and also taught other chimpanzees some of the signs she had learned.

The Gardner's results were challenged by Herbert Terrace who indicated that the Gardners did not have a rigorous methodology to assess Washoe's use of language beyond codes or naming associated with biological opportunities and dangers. Furthermore, there was no real attempt to carry out Chomsky's syntactical control test in a rigorous way.¹⁴²

Terrace decided to conduct a more controlled test of the Gardner's claims at Columbia University in 1974, because he believed that many of their claims were based on misinformation from the chimp. So Terrace designed experiments that would test specifically for syntactical

¹⁴¹ Gardner, Gardner, and Cantfort 1989.

¹⁴² H.S. Terrace, Petitto, Sanders, and Bever 1979, pp. 891-902.

control and understanding within a chimp's use of sign language.¹⁴³ Terrace used a famous chimpanzee named Nim Chimpsky (playing off the name of Noam Chomsky) in a much more controlled behavioral environment, which yielded more modest results than the Gardners. Though Nim was able to master 125 signs (significantly less than the Gardners' claims about Washoe), and could be trained to use those signs precisely as his trainer indicated, there was no evidence that Nim had any syntactical awareness, understanding, or control over the use of his signs. Terrace, et al, summarized their results as follows:

...[U]nless alternative explanations of an ape's combinations of signs are eliminated, in particular the habit of partially imitating teachers' recent utterances, there is no reason to regard an ape's multisign utterance as a sentence. ... For the moment, our detailed investigation suggests that an ape's language learning is severely restricted. Apes can learn many isolated symbols (as can dogs, horses, and other nonhuman species), but they show no unequivocal evidence of mastering the conversational, semantic, or syntactic organization of language.¹⁴⁴

Though the Gardners claimed that Nim could have learned more signs had he been brought up in a more familial environment, no subsequent experiment with higher primate language has been able to pass Chomsky's syntactical test. And so it seems that Chomsky's claims about exclusively human syntactical control over language remains unrefuted.

Inasmuch as syntactical understanding and control is foundational for all higher uses of language (such as using subjects, predicates, and objects to say something *about* something, as well as to formulate mathematical, scientific, or other theoretical expressions), it seems that human beings are the only species of animals having the creative use of language (to create and understand expressions that they have not been trained specifically to use or understand). This further implies that human beings are the only species capable of higher order conceptual ideas and language (going beyond perceptual ideas and language).

Several other philosophers have developed tests to assess intelligence in animals (particularly higher primates and dolphins). The most famous of these were formulated by Donald Davidson in the 1980s and 90s – the intentionality test,¹⁴⁵ the argument from holism,¹⁴⁶ and what might be termed the "belief test."¹⁴⁷ Though these arguments are contested – including Davidson's final and main argument (the belief test) – his analysis of the link between thought and language is quite instructive, and can be used to provide a deeper insight into the differences between human and animal intelligence (beyond Chomsky's syntactical test).

¹⁴³ H.S. Terrace, Petitto, Sanders, and Bever 1979, pp. 891-902.

¹⁴⁴ H.S. Terrace, Petitto, Sanders, and Bever 1979, pp. 900-901.

¹⁴⁵ Davidson 1984, pp. 155-179.

 ¹⁴⁶ Davidson 1985.
 ¹⁴⁷ See Davidson 1997, pp. 7-17.

There are other approaches to the absence of conceptual intelligence in animals, the most important of which are forwarded by Paul Moser,¹⁴⁸ Jonathan Bennett,¹⁴⁹ John Searle,¹⁵⁰ and José Bermúdez.¹⁵¹ These confirm and extend the findings of Chomsky, Terrace, and Davidson, implying a categorical difference between human and animal intelligence. In view of this, humans seem to be the only species capable of generating conceptual ideas and therefore of having pre-experiential awareness of heuristic notions and structures. This implies that humans are the only transcendental species tacitly aware of a horizon of complete and unrestricted intelligibility. As such, they are the only species capable of genuine creativity of new ideas, of surpassing the "Gödel limit to machine intelligence," and communication through complex syntax and semantics.

Fifth Topic Free Will and Original Sin

Introduction

In the foregoing topics, we discussed the substantial evidence for our transphysical soul from the medical studies of near death experiences, the five transcendental desires, the phenomenon of self-consciousness (giving rise to Chalmer's Hard Problem of Consciousness), Gödel's Theorem, and the human capacity for syntactically meaningful language and conceptual ideas. This evidence reveals twelve capacities of the soul that are inaccessible to artificial and animal consciousness. We have already discussed eleven of these capacities as well as our capacity to survive bodily death and experience continued existence in a transphysical domain. We will now discuss the twelfth capacity – free will – in this topic area. A quick review of the twelve capacities may prove helpful:

- 1. The capacity for self-consciousness inwardness allowing us to experience and apprehend ourselves, and to create a private inner world.
- 2. The capacity for conceptual ideas allowing us to have abstract thoughts, syntactical control, and conceptual language (this capacity is quite significant for the discussion of original sin below, because of the studies of Noam Chomsky and Robert Berwick showing that this capacity is completely unique to human beings, and enigmatic in its origins 70,000 to 100,000 years ago¹⁵²).

¹⁴⁸ Moser 1983, pp. 221-226.

¹⁴⁹ Bennett 1964/1989.

¹⁵⁰ Searle 1994, pp. 206-219.

¹⁵¹ Bermúdez 2003.

There is an excellent summary of these philosophical arguments by Robert Lurz (a well-known researcher in the area of animal intelligence) which may be found in the Internet Encyclopedia of Philosophy (http://www.iep.utm.edu/ani-mind/#SH1c). ¹⁵² See Noam Chomsky and Robert Berwick, 2015 *Why Only Us: Evolution and Language* (Cambridge: MIT Press).

- 3. The desire for perfect truth enabling us to recognize all imperfections in our knowledge causing us to ask questions indefinitely until we reach perfect truth (the knowledge of everything about everything complete intelligibility).
- 4. The recognition of the spiritual-sacred-numinous-transcendent reality (God), causing fascination, worship, awe, and obedience which draws us to enter into a deeper relationship with Him -- bringing us to His transcendent, eternal, and sacred essence.
- 5. The desire for perfect home enabling us to recognize the imperfections of our worldly existence causing us to pursue the sacred and Its source until we have reached our perfect home.
- 6. The capacity for empathy which recognizes the unique goodness and lovability of the other creating the desire to care about and care for the other even to the point of self-sacrificial love.
- 7. The desire for perfect love enabling us to recognize all imperfections in love -- causing us to pursue deeper and more authentic love until we have reached perfect love.
- 8. The capacity for moral reflection, originating from conscience which is God's moral presence to our self-consciousness.
- 9. The desire for perfect justice/goodness, enabling us to recognize all imperfections in justice/goodness (in groups, organizations, and community) causing us to pursue more perfect forms of justice and the common good until we have reached perfect justice/goodness.
- 10. The capacity to appreciate and be filled by the beautiful in nature, music, art, architecture, literature, intellectual ideas, love, and goodness causing us to seek ever greater forms of beauty until we reach perfect beauty-majesty-splendor itself.
- 11. The desire for perfect beauty enabling us to recognize all imperfections in beauty causing us to pursue ever greater beauty until we reach perfect beauty itself.
- 12. The capacity for free will self-consciousness' orientation toward either *itself* or toward others and God (in goodness and love) explained below.

When these capacities are understood properly in light of the evidence presented above in the first through fourth topic areas, there can be little doubt about the truth of the proclamation in genesis that God has made us in His own image and likeness (Gen 1:27).

So how does free will operate? It arises out of a combination of several of the capacities of our transphysical soul (and God's presence to it). At the center of free will is our capacity for self-consciousness enabling us to create our own inner world – indeed to create our own moral essence. When God gave a transphysical soul to the first human beings – and to all subsequent human beings – He not only bestowed on them the capacity for self-awareness and self-definition, He also gave them the other capacities mentioned above. Key among these are empathy, conscience, and the awareness of Him (the spiritual-sacred-numinous-transcendent reality). This gave a fundamental option to human beings – to orient their thoughts and actions toward themselves -- toward their inner world (self-centeredness or egocentricity) – **or** toward Him (in worship and prayer), others (through empathy and care), and the good (through conscience). Both options have a fundamental attraction, but in many respects, they are opposed to one another. One might say that the first human beings felt a call to aggrandize and enrich themselves (to turn inward) – and a call to reverence God, respect and help their fellow human beings, and obey their conscience (to turn and contribute outwardly). The following illustration may prove helpful (insert picture box here).

As will be discussed below, the call to God, others, and virtue was much stronger than the call to serve and aggrandize ourselves. One might say that God gave a substantial advantage to the call to holiness, love, and goodness. How? By manifesting the immense beauty and lovability of His own essence – as well as His goodness and love. It was *almost* irresistible, but not completely irresistible; for God wanted human beings to choose Him and His way overagainst the possibility of choosing ourselves as our primary orientation. Let's call this "the original state of human beings." In this state human beings were free to choose God and others as a primary orientation or to choose themselves – but the beauty and lovability of the first option was much stronger than that of the egocentric option.

With this brief introduction, we may now discuss the following three topics:

- 1. The fall and original sin (Section I)
- 2. What happened to human nature and free will after the fall? (Section II)
- 3. The science and the biblical account of original sin. (Section III)

I. The Fall and Original Sin

The biblical account of original sin in Genesis 3 indicates three important points about free will and the human condition that help us understand ourselves and the need for redemption by Jesus Christ:

- 1. The first sin of the original parents of humanity¹⁵³ (Section I).
- 2. The effects of this first sin upon human nature and free will (Section II.A).
- 3. The effects of this first sin upon our relationship with God, others, and the world (Section II.B).

Let us now proceed to the fall and the first sin. The story of Adam and Eve is so psychologically deep and theologically insightful, it is difficult to imagine that it could have been written in 500 B.C. without the direct inspiration of the biblical author by God Himself. The context of the story is that God has created human beings in His own image and likeness, and has withheld nothing from them.¹⁵⁴ As noted above, God created humanity with free will, but made the attraction to Him (and His goodness and sacredness) significantly stronger than the attraction to self. He gave human beings a commandment – presumably through a strong sense of conscience – not to seek for themselves the wisdom and power that belongs to Him alone. At first, the couple seems to effortlessly comply with this commandment, allowing themselves to be subordinated to and dependent on Him.

¹⁵³ For an account of how the idea of first parents squares with the scientific viewpoint, see Section III of this Fifth Topic.

¹⁵⁴ In the contemporary viewpoint, God created human beings with the above-mentioned twelve capacities as well as the capacity to survive bodily death. Our transcendental capacities are so great that we can be satisfied only by Him – who is perfect truth, love, justice/goodness, beauty, and home. As Augustine noted at the beginning of the *Confessions* – "For thou hast made us for thyself, and our hearts are restless until they rest in thee" (*Confessions* Book One, Chap One).

Genesis 3 begins with the serpent – representing the evil spirit¹⁵⁵ who appears on the scene and makes several suggestions that both tempt and deceive the couple. The dialogue between the serpent and the couple is worth considering in detail:

Now the serpent was more crafty than any other wild animal that the LORD God had made. He said to the woman, "Did God say, 'You shall not eat from any tree in the garden'?" The woman said to the serpent, "We may eat of the fruit of the trees in the garden; but God said, 'You shall not eat of the fruit of the tree that is in the middle of the garden, nor shall you touch it, or you shall die." But the serpent said to the woman, "You will not die; for God knows that when you eat of it your eyes will be opened, and you will be like God, knowing good and evil." So when the woman saw that the tree was good for food, and that it was a delight to the eyes, and that the tree was to be desired to make one wise, she took of its fruit and ate; and she also gave some to her husband, who was with her, and he ate. Then the eyes of both were opened, and they knew that they were naked; and they sewed fig leaves together and made loincloths for themselves. They heard the sound of the LORD God walking in the garden at the time of the evening breeze, and the man and his wife hid themselves from the presence of the LORD God among the trees of the garden (Gen3: 1-11).

Notice the tactics of the evil spirit. First, he suggests to the couple that God has withheld something from them – something that would be good for them, and to which they are entitled. This is a lie – because God has made them in His very image and likeness with the twelve capacities mentioned above. In addition to this, He has satisfied their desires for everything. The only thing they lack – is that they cannot satisfy their desires *by themselves* – they are dependent on Him.

The evil spirit is aware that the couple has free will, and is also aware that the couple must be dependent on God, because they cannot become God themselves – for as explained above, there can be only one unrestricted uncaused reality which is absolutely simple – and therefore only one reality that can be perfect truth, love, justice/goodness, beauty and home. The couple does not know this, and so they do not recognize the serpent's lie. They believe that if they disobey Him, they could get the wisdom and power that God had withheld from them – to which they were entitled.

From a contemporary standpoint, we might say that the first couple would have known through their conscience and sense of the sacred that they were not gods and that self-worship is not only a denial of their creature-hood, but a rejection of the Creator. Everything inside them –

¹⁵⁵ The evil spirit does not appear frequently in the Old Testament, but is a key figure in the New Testament – particularly in the life and ministry of Jesus (in all four gospels). Nevertheless in this remarkable narrative, the serpent plays a key role which closely resembles the role that Jesus attributes to him 500 years later. We will examine the reality of evil today – along with the tactics used by the evil spirit in Chapter 13 of this book.

from their conscience and their sense of the holy – would have been shouting "danger!" They would have felt a deep sense of alienation, emptiness, and darkness from the mere consideration of this suggestion from the evil spirit; yet the suggestion seemed right – God really was withholding something from them to which they were entitled – to be precisely like Him. The sin of the couple was to grow envious of their Creator – to resent their subordination to Him – and reject the need to depend on Him and give praise to Him – and so they entered – through the suggestion of the evil spirit – into the world of darkness – through a gateway of envy, presumption, anger, and resentment. They refused to give praise to the Sacred One – so that they might have His authority and praiseworthiness for themselves.

Is it conceivable that the first human beings (living perhaps 200 thousand years ago – see below Section III) could have had a special awareness of the beauty, lovability and sacredness of the transcendent – and could have wanted this for themselves – to prioritize themselves above the Sacred One – to be envious of and resent the Sacred One? Could primitive human beings – veritable cave dwellers – have felt something like this? If they had the above 12 capacities – even in a completely undeveloped state – then they could have acted against their conscience and their awareness of the Sacred "Wholly Other."

Was the evil spirit interested in deceiving a primitive couple 200 thousand years ago? Absolutely, the moment God gave the first human beings a transphysical soul with the above twelve capacities – including free will – the evil spirit was interested in fomenting their envy, anger, presumption, and rebellion. The evil spirit wanted to be their master – and so he convinces them that they can be their own master – and after they cut themselves off from God, he readily accepted his new position. God does not abandon the couple to him, but He does give the couple some of what they want – a partial separation from Him. If He had given them everything they wanted – a full separation from Him – they would have been subjugated to the evil spirit immediately. Nevertheless, when the couple *chose* to separate themselves from God, they weakened the influence of God upon them – their awareness of His beauty, goodness, and sacredness – and so allowed themselves to come under greater sway from the evil one. Though God's influence was still stronger than that of the evil one, it was diminished because of the first couple's choice to separate themselves from Him (and His goodness and love). This had a myriad of consequences.

II.

The Consequences of Original Sin

There are two major consequences of original sin – the fall of our first parents:

- 1. Interior consequences decreased awareness of God and concupiscence.
- 2. Exterior consequences increased antipathy between each person and God and between each person and others as well as loss of the exemption from death.

II.A

The Interior Consequences of Original Sin

When our first parents committed the first sin, and a partial separation from God occurred, they lost the self-control that came from their strong sense of God's presence,

sacredness, and goodness. The weakening of their awareness of God led to an increased sensitivity to their sensual desires and passions. These sensual desires combined with egocentric desires, leading to a strong interest in power, material possessions, sexual indulgence, and self-assertion (concupiscence).

This increased interest in sensual and egotistical desires did not eliminate free will – or lead to a complete fall (corruption) of human nature. Human beings remain free to choose between sensual-ego desires and sacred-moral-empathetic desires. Though the beauty, holiness, and lovability of God's strong presence had diminished (allowing sensual and egotistical desires to grow more prominent to consciousness), God did not completely withdraw His presence from human beings. His numinous and sacred presence were still influential – and His influence through conscience and empathy could still be felt. Indeed these influences still had more prominence than sensual and egotistical desires – though they were significantly weakened. So, one might roughly say, human nature was still at least "51% good – and free will was still oriented at least 51% toward God and the good."

The outcome of the fall did not pertain to the first parents alone. The consequences of their sin continued to affect their progeny – generation after generation. This had two additional effects:

- 1. Our interior life was more subject to influence by the evil spirit who, after the first sin, was able to deceive and tempt us more easily.
- 2. The interior state of human beings became like that of a battleground where we had to exert effort and concentration and even fight to resist temptation and stay on the pathway to God and virtue.

Prior to the time of Jesus, the influence of the evil spirit had become so prominent that the vast majority of humanity was pressed into servitude and slavery, and the vision of the goodness of every human being was almost completely eclipsed. There was a callous disregard for the sacredness and goodness of human life, and the mentality of the Roman Coliseum – where people delighted in the shedding of innocent blood – became commonplace. As Jesus put it, "Satan had become the prince of this world."

Jesus saw his mission as driving out Satan from his place of prominence. He had a plan to do this – to give His life of unconditionally loving self-sacrifice, to give his teaching about his Father and the primacy of love, and to give His Holy Spirit to influence and encourage us interiorly and exteriorly:

Now is the time for judgment on this world; now the prince of this world will be driven out. And I, when I am lifted up from the earth, will draw all people to myself (Jn. 12: 31-32).

The sacrament of baptism – Christian initiation -- would have two incredible effects. First, it would incorporate us into the Church – the very mystical body of Christ – which would not only guide us through its teaching authority and the example of its saints, but would allow the salvific intention and virtue of all of its members to course through the spiritual veins of one another. Secondly, it would give us the Holy Spirit with all of His gifts to inspire, guide and protect us – and to strengthen us interiorly to resist the temptation and deceit of the evil spirit and to help us contend with the effects of original sin.

II.B Exterior Consequences of Original Sin

Many of the exterior consequences of original sin follow from the interior ones. Thus we might expect that concupiscence, our weakened nature and the influence of the evil spirit, would create antipathy between us and God, us and one another, and even us and nature. As Rudolf Otto noted (see the Third Topic above), the first pole of the numinous – emphasizing the fearful and overpowering nature of the "Wholly Other" was dominant for centuries. Furthermore, the enmity between human beings gave rise to a culture of slavery and callous disrespect for human life (as noted immediately above). Finally, our relationship to nature was filled with superstition and a pervasive sense that the material world was evil.

God's gradual revelation of himself to Israel – and His complete revelation of Himself through the words and actions of His Son – redeemed these corrupted external relationships. Only a few decades after the resurrection of Jesus, the Christian Church would initiate public welfare, public education, and public healthcare on an ever growing scale. As a result, larger numbers of slaves – educated by Christians – began to have influence within the Roman bureaucracy – as Christianity swept over the Roman Empire. By the time Constantine I issued the Edict of Milan (in 313) – stopping the persecution of Christians, giving them legal status, and in some sense preferential status – many of the Christian Church's practices with respect to education, healthcare, and public welfare had softened the cruelties of Roman culture and weakened the institution of slavery.

Jesus had not only given humanity the means to contend with the *interior* effects of original sin but also its exterior effects as well. To the extent that Christian evangelization is successful, and that the Christian Church remains faithful to the teaching of Jesus and His call to holiness, the interior and exterior effects of original sin will never rise to its former prominence. So it is incumbent upon us to use the gifts of our baptism, to deepen our faith, and to share that faith with as many as possible. For as the mystical body of Christ increases, the influence of our weakened nature and the evil spirit (who works through it) will decrease.

There is one more external effect of original sin that must be considered – the loss of our exemption from death. God created the first human beings by infusing in them a unique transphysical soul which was meant to be eternal by its very nature.¹⁵⁶ Our bodies – which evolved over a long period of time – was significantly influenced by the presence of this transphysical soul – developing an ever more refined cerebral cortex to mediate the soul's 12 capacities to our material embodiment. When God infused a soul into the first human being, the body took its lead from the soul – not vice versa – and so human beings were exempt from death. However, the first man and woman gave credence to the suggestions of the evil spirit, and so committed the first sin by wishing to be separated from God – so as to do things on his own as a "little god." When this occurred the first man and woman lost their natural exemption from death

¹⁵⁶ See the medical studies of near death experiences above in the first topic of this chapter. See also Chapter 3 on the resurrection of Jesus and its effect upon us.

– and their souls no longer exerted incorruptibility over their bodies. Their souls remained incorruptible, but their bodies would die – being corrupted by the same sin that ushered in concupiscence and the increased influence of the evil spirit. Jesus' redemptive self-sacrifice did not overcome the necessity for the body to die – but it did much more. If we remain faithful to Him, He will glorify our bodies – divinizing, transforming, and spiritualizing them so that they resemble His own risen body. Once again, the effects of original sin would be overcome by the redemptive act of Jesus and our faithful following of his teaching and way.

It is important to note that Jesus' redemptive act is not reserved only for professed Christians – its effects for negating original sin and bestowing the resurrection extend to all human beings who "seek God with a sincere heart, and, moved by grace, try in their actions to do his will as they know it through the dictates of their conscience – those too may achieve eternal salvation."¹⁵⁷ In its Pastoral Constitution of the Church – the Second Vatican Council describes how the actions of Jesus help us contend with the lasting effects of original sin – and how his saving work extends to all people who seek God with good will:

The Christian is certainly bound both by need and by duty to struggle with evil through many afflictions and to suffer death; but, as one who has been made a partner in the paschal mystery, and as one who has been configured to the death of Christ, he will go forward, strengthened by hope, to the resurrection. All this holds true not for the Christian only but also for all men of good will in whose hearts grace is active invisibly. For since *Christ died for all*, and since all men are in fact called to one and the same destiny, which is divine, we must hold that the Holy Spirit offers to all the possibility of being made partners, in a way known to God, in the paschal mystery.¹⁵⁸

III.

Reconciling Contemporary Science and the Doctrine of Original Sin

Much has been made about a conflict between the perspective of the natural sciences and the Church's teaching on original sin. There are no doubt challenges to contend with, but these are by no means overwhelming. The most pronounced challenges are as follows:

- 1. Who are our first parents?
- 2. Monogenism versus polygenism.
- 3. Was there suffering and death before the fall?

We will consider each in turn.

III.A Who are our first parents?

The name "Adam" means "red earth," and the name "Eve" means "life" in Hebrew. These names are obviously symbolic – "formed from the earth" and "giver of life." Catholics can believe that the first man and woman evolved from previous species – from *Homo*

¹⁵⁷ Flannery 1975, p. 376; *Lumen Gentium*, Chapter II (section 16). This quote comes from *Lumen Gentium* The Dogmatic Constitution of the Catholic Church – which enjoys the highest degree of magisterial authority.

¹⁵⁸ Flannery 1975, pp. 923-24; *Gaudium et Spes*, Chapter I (section 22). Italics mine.

erectus/Homo ergaster and then *Homo heidelbergensis* and then *Homo neanderthalensis* to the first species of *Homo sapiens*, and then to the second species of *Homo sapiens* (*Homo sapiens sapiens*). It would be reasonable to assume that our first parents are connected with the initial emergence of *homo sapiens sapiens* 200,000 years ago, but the only definitive criterion for their emergence is that they are the first to receive a unique transphysical soul from God, making them in His image and likeness, and giving them the above twelve capacities (including free will).

Must our first parents be associated with the second generation of *Homo sapiens* (*Homo sapiens sapiens*) or could they have been in the first generation of *Homo sapiens* – from which a subspecies (*Homo sapiens Neanderthalensis* -- who interbred with Neanderthals) also emerged? This is possible because the only defining criterion for the first man and woman is that they are the first to have received a unique transphysical soul from God – and that they had progeny giving rise to the rest of humanity whose defining characteristic is the presence of that transphysical soul from God.

There is also established evidence that the whole of humanity today has one common female ancestor – named "Mitochondrial Eve" whose mitochondrial DNA is integral to the genome of every human being around the world (without exception). Mitochondrial DNA is transmitted through mothers, but all human beings possess it. We also have a common male ancestor – named "Y chromosome Adam" – who is the origin of the male "Y" chromosome. Mitochondrial Eve and Y chromosome Adam probably lived around the same time (200,000 years ago) and came from a similar region (southwestern coastal Africa – around the border between Angola and Namibia near the Atlantic Ocean).

Were these our first parents? Though it may be tempting to think so, we should not jump to this conclusion because Mitochondrial Eve may never have known Y chromosome Adam and they may have come from different areas of the southwest African coastal region. Again, the only criterion we have for the emergence of our first parents is the infusion of a unique transphysical soul by God.

Recent studies by the famous linguistic philosopher, Noam Chomsky, and the MIT scientist and engineer, Robert Berwick may give us pause about associating our first parents with Mitochondrial Eve and Y chromosome Adam, because the infusion of a transphysical soul may well have occurred 130,000 years later – to a man and woman of the same lineage as Mitochondrial Eve and Y chromosome Adam. Why so? Recall that the infusion of a transphysical soul in an evolved *homo sapien* is the definitive marker of a human being (as distinct from a pre-human hominid). The infusion of this soul need not be coincident with the origin of our common genetic heritage (Mitochondrial Eve and Y chromosome Adam). Chomsky and Berwick give us some clues that the first infusion of a soul (though they would not phrase it this way) occurred 70,000 – 100,000 years ago.

In two well founded studies,¹⁵⁹ Chomsky and Berwick show that human language (defined by the criterion of the classical hierarchy of syntax) is completely unique to humans,

¹⁵⁹ See Noam Chomsky and Robert Berwick, 2015 *Why Only Us: Evolution and Language* (Cambridge: MIT Press), see also Noam Chomsky, R. Berwick, J. Bolhuis, and I. Tattersall, 2014 "How Could Language Have Evolved?" in

and that the emergence of language very probably occurred around 70,000 to 100,000 years ago. They note that the origin of language in human beings at this time is completely enigmatic (i.e. unexplained by any known genetic, biological, or physical cause). When we piece together these discoveries, they have all the required signs for indicating a possible origin of a transphysical soul.

Recall from the Fourth Topic above that conceptual language requires heuristic notions that cannot be explained by either physical processes or by the processing of experiential data. This suggests that they are innate and expressed through some kind of *transphysical* medium. The Nobel Prize winning physiologist, Sir John Eccles, and his many colleagues in physics have argued that this transphysical medium is a soul which is mediated to the brain through quantum fields.¹⁶⁰

This forms an interesting coincidence with the discoveries of Chomsky and Berwick. Perhaps the reason that the origin of language is completely enigmatic (unexplained by any known genetic biological or physical process) is because language *cannot* in principle be so explained. If Eccles, Beck, and others are correct in asserting that the heuristic notions – underlying conceptual ideas and the use of syntax – must occur through a transphysical medium, then the only point at which syntax (and syntactical language) could occur is when such a medium (i.e. a soul) occurs in evolutionary history. This would explain why (as Chomsky and Berwick show) language is unique to human beings and its origins are enigmatic. If Chomsky and Berwick are correct in asserting that this completely original event (the origin of language in evolutionary history) occurred 70,000 to 100,000 years ago, we might infer that this is the point at which a transphysical soul (presumably of our first parents) originated in evolutionary history.

So what might we conclude about our first parents? In addition to the fact that both of them had a unique transphysical soul (giving them the above twelve capacities – including the capacity for syntactical language), it seems likely that they lived about 70,000 to 100,000 years ago in Africa. Since migration of modern humans out of Africa occurred around 60,000 years ago, it seems likely that the "huge non-evolutionary (non-biological and non-physical) leap" giving rise to linguistic and conceptually capable human beings may have incited their rapid and successful migration throughout the rest of the world.

They first migrated to India, the Middle East, southeastern Asia, and then to Central and Northern Asia, and then to Central and Northern Europe. Approximately 20,000 years ago

American Society for Microbiology: Microbe

http://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.1001934

 ¹⁶⁰ See Friedrich Beck and J.C. Eccles, John C. 1992, "Quantum Aspects of Brain Activity and the Role of Consciousness," *Proceedings of the National Academy of Sciences – USA*. Vol. 89, pp. 11357-11361.

^{See also John Eccles 1970. Facing Reality: Philosophical Adventures by a Brain Scientist (Heidelberg: Heidelberg Science Library). See also Eccles 1983. Mind and Brain: The Many-Faceted Problems. (St. Paul Minnesota: Paragon Books). See also Eccles 1989. Evolution of the Brain: Creation of the Self (London, UK: Routledge). See also 1990. "A Unitary Hypothesis of Mind—Brain Interaction in the Cerebral Cortex" in Proceedings of the Royal Society – Biological Sciences B 240, pp. 433-451.}

during the last glacial maximum (when there was a land bridge connecting northern Siberia to Alaska due to precipitous drops in ocean levels), our ancestors made it over to the Americas – and within 1,000 years, made it to the southernmost tip of South America. After that time, the agricultural revolution led to an explosion of population which has continued ever since.

III.B

Monogenism versus Polygenism

"Monogenism" refers to the view that the first generation of human beings was *one* couple – a first man and a first woman. "Polygenism" refers to the view that the first generation of humans had more than one couple – which might be as many as thousands. In the same encyclical in which Pope Pius XII allowed Catholics to believe in evolution, he seems to have proscribed belief in polygenism with these words:

When there is a question of another conjectural opinion, namely, of polygenism so-called, then the sons of the Church in no way enjoy such freedom. For the faithful in Christ cannot accept this view, which holds that either after Adam there existed men on this earth, who did not receive their origin by natural generation from him, the first parent of all; or that Adam signifies some kind of multitude of first parents; for it is by no means apparent how such an opinion can be reconciled with what the sources of revealed truth and the acts of the magisterium of the Church teaches about original sin, which proceeds from a sin truly committed by one Adam, and which is transmitted to all by generation, and exists in each one as his own.¹⁶¹

Pope Pius XII seems to have hedged the definitiveness of his declaration against polygenism by stating, "*it is in no way apparent* how such an opinion [polygenism] can *be reconciled* with that which the sources of revealed truth...." Does this mean that if polygenism *can* be reconciled with the sources of revealed truth about original sin, then polygenism would be doctrinally acceptable? Though there is debate on this issue, theologians today believe that Pope Pius XII left the door open to this possibility if the condition in his declaration could be met.

Whatever the case, Monogenism is compatible with the evolutionary picture of the emergence of the first syntactically capable hominids (from which we infer the presence of a transphysical soul). These first hominids were of the lineage of Mitochondrial Eve and Y chromosome Adam. It is not necessary to postulate the existence of more than two human beings with transphysical souls at this originative moment. All that is required, if Chomsky's and Berwick's discoveries are correct, is one couple who could have propagated progeny over hundreds of generations to give rise to 10,000 or more human beings before their migration out of Africa. Inasmuch as God must be the source of such a transphysical soul (since a physical cause cannot generate a transphysical effect), we must further assume that God infused a unique transphysical soul within all subsequent generations of the first parents' progeny.

¹⁶¹ *Humani Generis* par 36-37.

According to scripture and church doctrine, our first parents committed the first sin which weakened their nature. As a result, they lost their exemption from death and felt the effects of concupiscence because the presence of God to their souls was weakened, making them more easily tempted and deceived by their sensual passions and the evil spirit. Though these effects are present today, they are mitigated by the redemptive act of Jesus, the presence of His Church, and the presence of the Holy Spirit.

III.C Was there suffering and death before the fall?

Scientific evidence indicates that there was death and physical pain before the fall (approximately 70,000 to 100,000 years ago). We have evidence of microbial death dating back 3.5 billion years, and there were certainly vertebrates with a central nervous system (capable of feeling pain) during the Jurassic period 230 million years ago. Recall what was said above by Pope Pius XII in *Divino Afflante Spiritu* about the purpose of the bible – to give sacred truths necessary for salvation, but *not* necessarily to give accurate scientific descriptions and explanations of our physical universe. How does this affect the idea that death and suffering came into the world because of the sin of Adam? We cannot interpret it in a way that will contradict the clear fossil evidence showing that death and physical pain was present on the earth prior to 70,000 to 100,000 years ago. Indeed there is no need to do so.

As noted above, all microbial, plant, and animal life – including that of higher primates, and the progenitors of *Homo sapiens* – experienced physical death before the arrival of our first parents (70,000 to 100,000 years ago). The arrival of our first parents coincides with the infusion of a transphysical soul within them, giving them an exemption from bodily death. Since their transphysical soul was the dominant form of their body, they had this exemption for a little while prior to the fall. However, when they sinned against God by desiring autonomy and separation from Him, they lost that exemption – and their bodies would suffer the same corruption as their progenitors (though their souls would live on after bodily death).

What about suffering? There are two kinds of suffering:

- 1. The feeling of physical pain and some kinds of emotional pain (which some animals share in common with human beings), and
- 2. Reflective Suffering which comes from awareness that "I" am the one who is suffering. Humans alone have this experience because of their self-reflective transphysical soul.

Dogs experience physical and some kinds of emotional pain, but human beings can grow *depressed* thinking about the ongoing nature of that pain – or the seeming meaninglessness of that pain – or the potential for that pain to increase, etc. Self-reflectivity also heightens *emotional* pain. A dog can feel sad (and whimper) when his master leaves the home, but human beings can reflect upon the pain of abandonment or loss, and feel depressed because of it. Thus we see that self-reflectivity engenders a whole new height – or perhaps better, depth -- of both physical and emotional pain.

Human beings also have a further kind of reflective suffering arising out of their capacity for conceptual ideas. We can anticipate future pain – which is beyond the scope of higher

primates – and above all – anticipate death. Even those with great faith must face this most challenging form of what might be called "reflective conceptual suffering." Heidegger called it "being toward death" which he believed to be the entire context through which we live.

So what is the point here? As the old cliché goes – "There is suffering – and then there is *suffering!*" There is the physical and emotional pain of animals, which is no doubt quite real, but then there is the very significantly heightened physical, emotional, and conceptual pain of self-reflective human beings – which is *categorically* different from that of animals. By now it will be clear that this kind of suffering has its origins in self-consciousness, which in turn, has its origins in our transphysical soul (see the rationale for this in the fourth topic above—human versus artificial and animal intelligence). When God infused a transphysical soul into our first parents, he gave them *potential* to suffer *reflectively*—to combine their powers of anticipation, self-awareness, and the above twelve capacities with physical and emotional pain.

Why only the *potential* for this categorically different suffering? When human beings were closely united to God in their inner experience and they enjoyed an exemption from death (before original sin) their self-reflective acts on physical pain would have been interpreted in the light of God's presence—along with the meaning and trust coming from Him. Further, there would be no death to anticipate because their sense of eternal life would have been quite palpable in light of God's presence.

By separating themselves from God in the first sin (obeying the evil spirit's suggestion that they could be gods and that God had unjustly withheld this from them), the light and grace of His presence was partially withdrawn—and without it the reflection process focused on the bodily death they would surely experience, the sense of emptiness, alienation, and loneliness coming from His absence, and the absence of meaning and light to guide and fill their reflection process. If God had withdrawn completely they would have collapsed into a total abyss of emptiness, loneliness, alienation, death anxiety, guilt and intellectual darkness—a reflective emotional and conceptual nightmare. But God did not do this—He gave them what they wanted—*only* insofar as it would not destroy their free will, emotional stability, rational capacity, capacity for love and capacity for moral reflection. At this point their suffering would be intensified by their reflectivity and conceptual capacity, but it would not be utterly daunting and vexing. And so we might say a new kind of suffering came into the world with original sin— a categorically different heightened kind of suffering produced by self-reflectivity not fully illumined by the wisdom, presence and grace of God.